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Article

Thriving after crisis: Mixed-method research of teacher resilience after COVID-19

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Abstract

The aftermath of COVID-19 continues to significantly affect K-12 educators, resulting in heightened workloads and diminished commitment, well-being, and health. School leaders are still grappling with persistent concerns regarding post-pandemic teacher burnout and attrition. To address these challenges, some researchers advocate fostering resilience to help teachers. This paper delves into the post-pandemic resilience of K-12 teachers in Alberta, Canada. Using an explanatory sequential mixed-method research design, Wagnild's Resilience Survey and Resilience Supporting Questionnaires yielded quantitative data (*N*=71) for descriptive statistical analysis, followed by in-person semi-structured interviews (*N*=6), providing qualitative insights into correlated teacher behaviors. For example, resilient teachers regularly use their time and skills to help and encourage others, learn new things, and take their responsibilities seriously. Findings revealed that highly resilient teachers emphasized maintaining balance, engaging meaningfully with others, and taking personal responsibility, suggesting that resilience emerged from coping strategies and purpose-driven behaviors. This study concludes that resilience is a multifaceted process, and fostering it requires coordinated efforts between individual practices and systemic administrative support. The results offer insights and recommendations to guide administrative decisions that strengthen personal and programmatic support, encouraging behavior that fortifies resilience and increases teacher commitment and well-being.

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Introduction

The COVID-19 pandemic caused unprecedented disruption to education systems globally, reshaping the professional realities of teachers. As the situation evolved, teachers faced mounting pressures, adapting to shifting public health protocols and navigating ongoing uncertainty around school operations (Buttler et al., 2021). The profound experience educators endured during the pandemic and the heavy workload led to a decline in commitment, well-being, and health among teachers (Agyapong et al., 2022; Răducu & Stănculescu, 2022; Voinea & Şiţoiu, 2021). As a result, hiring and retention challenges intensified (Amato, 2022), amplifying long-standing concerns about the sustainability of the teaching workforce. Zamarro et al. (2022) also documented a 6% rise in educators expressing a desire to leave the profession post-pandemic, adding to the pressure on the education system.

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Amid these widespread stressors, teacher resilience has emerged as a central concern in educational inquiry and policy development (Zhang & Yuo, 2023). Defined broadly, teacher resilience refers to an educator's capacity to maintain commitment, effectiveness, and well-being in the face of adversity (Beltman, 2020). Some educational researchers focus on resilience to combat the negative impact on teachers (Beltman, 2020; Chen & Chi-Kin Lee, 2022; Fernandes et al., 2019; Kutsyuruba et al., 2019; Ngui & Lay, 2020) as post-COVID teacher resilience is a concern for the profession worldwide (Kaveri et al., 2024; Levkovich et al., 2023).

Examining how educators experienced, adapted to, and recovered from the prolonged challenges of the COVID-19 era is important in light of these issues. This study aims to investigate the impact of the COVID-19 pandemic on teacher resilience, exploring the coping mechanisms teachers employed, the institutional supports they received, and the strategies that proved most effective in sustaining their professional engagement. This study seeks to identify paths forward by centering on teachers' lived experiences, thereby informing strategies to fortify resilience within the profession and ensure long-term educational stability.

Overview of Related Literature

Conceptions of Resilience

Researchers exploring resilience adopt diverse approaches to the concept; thus, defining resilience is notoriously tricky. Although the term originates from the Latin verb *resilire*, meaning bounce back or "leap back" (Fletcher & Sarkar, 2013), resilience differs when viewed from divergent perspectives. Within psychology, resilience researchers first attempted to understand how individuals coped with the effects of traumatic or high-risk environments to foster favorable psychological outcomes (Masten et al., 1990) by examining the high-risk groups themselves (Benard, 1999). This original focus on high-risk groups shifted to examining the environmental characteristics and protective factors that reduce the adverse impact of stressful events, situations, or conditions on non-high-risk groups and individuals (Henderson & Milstein, 2003; Mansfield et al., 2012).

Mansfield et al. (2012) further broadened the resilience research lens by examining the dimensions of an individual's response to challenges: emotional, motivational, profession-related, and social. Other scholars, including Mansfield et al. (2015), then shifted their resilience research focus from personal characteristics to the strategies used by resilient people. In reviewing research on resilience and resilience-building interventions, Beltman (2020) contends that resilience is now conceptualized through multiple perspectives: Person-focused, Process-Focused, Context-Focused, and System-Focused. When Beltman (2020) presented these perspectives, she argued that no one stance is the proper perspective and that considering multiple perspectives leads to a better understanding of resilience.

Although a consensus for the definition of resilience has yet to develop, most scholars agree that resilience is a multifaceted and ever-changing process embedded in a complex web of social relationships and interactions (Baatz & Wirzberger, 2025; Beltman, 2020; Day, 2019; Vella & Pai, 2019). Thus, resilience is a personal attribute, but it is also a dynamic process impacted by internal and external factors (Salvo-Garrido et al., 2025)

Teacher Resilience

Pre- and post-pandemic educational researchers have directed their attention toward exploring teacher resilience. Recent studies indicate a positive correlation between resilience and teachers' well-being (Chen & Chi-Kin Lee, 2022; Fernandes et al., 2019; Kutsyuruba et al., 2019; Ngui & Lay, 2020), highlighting its facilitative role in enabling teachers to tolerate distress and manage the pressures of their profession (Schussler et al., 2018). Resilience, nurtured through the ongoing relationship between individuals and their environment, allows teachers to continue experiencing positive outcomes despite losses or potentially traumatic events (Beltman & Mansfield, 2018).

Post-pandemic, teacher resilience has become a more significant global concern for the profession (Peel et al., 2023), for resilience is critical in enhancing teacher well-being and reducing attrition rates (Mansfield et al., 2012; Tait, 2008). Consequently, fostering resilience among educators is paramount to upholding their well-being, sustaining their commitment to the teaching profession, and maintaining the overall quality of educational environments (Day et al., 2007). Fortunately, teacher resilience can be nurtured through ongoing professional development opportunities (Ledger, 2020).

Theoretical Perspective and Framework

This study took a positivist-interpretivist approach, blending qualitative and quantitative methodologies. The positivist paradigm prioritized the pursuit of objective facts and causal relationships, allowing for the development of broad conclusions through statistical analyses. Additionally, by actively seeking and examining individuals' experiences and perceptions, the interpretivist paradigm enabled an exploration of the depth and complexities of a specific social context.

Research exclusively relying on qualitative or quantitative approaches exhibits inherent strengths and limitations. However, a viable alternative exists in Mixed Method Research (MMR), which endeavors to capitalize on the advantages offered by both approaches. Pragmatism is the predominant paradigmatic stance within MMR literature (Alise & Teddlie, 2010). Similarly, this paper adopts a pragmatic perspective, as evidenced by the concluding sections that underscore the practical implications and real-world applications of the study's findings.

The pragmatic stance brought the author to Wagnild's (2021) framework. Wagnild (2014) has developed a resilience framework that has gained widespread recognition (Pardeller et al., 2020; Reinwarth et al., 2024) and has proven effective across diverse age groups and contexts (Fernandes et al., 2018; Las Hayas et al., 2014; Surzykiewicz et al., 2019). While the Connor-Davidson Resilience Scale (Connor & Davidson, 2003) was initially considered for this study, Wagnild's approach offered a distinct advantage. In addition to her primary Resilience Scale (RS-25), Wagnild provides a supplementary questionnaire to identify behaviors contributing to resilience. This comprehensive pairing of instruments aligned well with the objectives of the present study, ultimately leading to the selection of Wagnild's pair of questionnaires as the most suitable choice.

To bring about positive changes in the lives of individuals, Wagnild (2009, 2014) identified five crucial attributes of resilience (sense of purpose, authenticity, perseverance, self-reliance,

and equanimity) and five supportive behaviors to enhance resilience (stress management, caring for your health, connecting with others, living with balance, and staying engaged in life). These essential lifestyle practices bolster or undermine the strength of an individual's Resilience Core. The Resilience Model proposed by Wagnild (2009) underscores the relationship between these resilience-support practices, an individual's Resilience Core score, and their capacity to adapt to adversity.

Wagnild (2021) created two questionnaires (RS-25 and Resilience Supports) with 25 statements each. Respondents indicate their level of agreement using a seven-point Likert-type scale (Scores range from 25 to 175). Wagnild argues that the RS-25's total scores describe an individual's overall resilience, categorized as Taking Root (30-45), Emerging (46-74), Developing (75-100), Growing (101-126), Flourishing (127-141), and Thriving (142-175). The RS-25 also examines five Resilience Core categories essential for resilience, noted above. Finally, the Resilience Support questionnaire examines five lifestyle practice categories, mentioned earlier.

Key to the current research is that resilience is closely linked to teacher retention (Ersig, 2024; McKim et al., 2017; Solomonson & Retallick, 2018) and the assertion that resilience can grow or decline over time. Thus, a close examination of teacher resilience post-pandemic is essential as we encourage teachers to develop resilience for possible disruptions in the future.

Purpose of the Study

This study aims to investigate the post-pandemic resilience of K-12 educators, with particular attention to the psychological traits and behavioral strategies that contributed to their capacity to adapt and flourish amidst the sustained stressors of the COVID-19 pandemic. While teacher burnout and attrition initially drew the author's attention to this issue, the broader impact of post-pandemic resilience extends beyond these specific concerns. Indeed, fostering resilience among educators in the wake of the pandemic has emerged as a global priority for the education sector, given its far-reaching implications for the well-being and retention of teachers worldwide. Consequently, several scholars are investigating effective strategies for enhancing teacher resilience (Duan et al., 2023; Journell, 2023).

Psychological resilience entails the inherent ability to flourish and exhibit constructive adaptation in the face of stressors, such as the impact of the COVID-19 pandemic. The present paper examines the phenomenon of post-pandemic resilience of K-12 teachers. In doing so, it aims to address a noted gap in the empirical literature on teacher resilience post-crisis and to contribute insights that provide practical guidance for school leaders, policymakers, and teacher educators aiming to build more resilient and responsive educational environments in anticipation of future crises.

Research Questions

1. To what degree did K-12 teachers exhibit resilience after the COVID-19 pandemic?
2. What specific psychological traits or behavioral strategies played a role in fortifying their resilience during this crisis?

The hypothesis that the researcher entered this study with is that K–12 teachers who demonstrate higher levels of internal protective factors (such as meaningful engagement, persistence, independence, and composure) and who report access to external supports (such

as peer collaboration, faculty support systems, and supportive administration) will exhibit stronger post-pandemic resilience, characterized by adaptive coping behaviors, reduced burnout symptoms, and sustained engagement in the teaching profession.

Method

This descriptive study employed an MMR design. Although many MMR designs are available, the explanatory sequential design (Creswell & Plano Clark, 2018) suited the research questions. The 2-phase MMR model (Creswell & Plano Clark, 2018) utilizes two strands of data from quantitative and qualitative studies. Integration, the process of merging the data strands, is crucial within the framework of MMR (Uprichard & Dawney, 2019) as researchers collect, integrate, or mix quantitative and qualitative data to address inherent weaknesses associated with each data type (Poth, 2018). Consequently, the final data analysis involves examining data strands from both datasets in a side-by-side joint data display diagram (Guetterman et al., 2015), facilitating analysis and discussion.

The initial data strand was obtained by gathering data from a diverse group of teachers (N=71) to assess their resilience and resilience-supporting behaviors. The RS-25 is widely recognized as a reliable tool for measuring resilience (Pardeller et al., 2020; Surzykiewicz et al., 2019) and has been successfully utilized across various age groups and contexts (Fernandes et al., 2018; Las Hayas et al., 2014; Surzykiewicz et al., 2019). Gonçalves and Camarneiro (2018) report that the strength of the RS-25 is its high internal consistency in any setting. The RS-25 examines what Wagnild (2014) describes as an individual's Resilience Core - five essential characteristics of resilience (discussed below).

After statistical analysis of the questionnaire data, the study's author examined the participating K-12 teachers' experiences through semi-structured interviews. The second strand of data was then analyzed using NVivo 12. Finally, a comprehensive depiction of post-pandemic teacher resilience in the participant group was generated by integrating the numerical data with the narratives provided by the teachers in a side-by-side joint data display diagram.

Setting and Participants

The study was conducted in the spring of 2023 in a Western Canadian school district of 11 small schools. After obtaining approval from the university's Institutional Review Board and obtaining consent from respondents, 71 K-12 teachers completed two closed-ended questionnaires. Among the respondents, 69% identified as female, while the remaining 31% identified as male. Their ages spanned a wide range, with the youngest participant being 22 and the oldest being 66. The teachers identified predominantly as white or black ethnicities. Following the convenience sampling of teachers, the final response rate was 58%. The online survey response rate in education-related fields is 44% (Wu et al., 2022). Thus, a response of 58% is relatively high. Six teachers consented to be interviewed, two females and four males, aged 29 to 54. Five of the interviewees identified as white, while one identified as black.

Data Collection Process

Application of the online Resilience Survey (RS-25) and Resilience Support questionnaires was facilitated by The Resilience Center (https://www.resiliencecenter.com), which then supplied

the raw data to the author of this paper. All teachers in one school district in Western Canada were emailed the link to the questionnaires.

A convenience sampling method was also employed to select teachers for interviews. All teachers from the two schools nearest the author's research site were contacted via email. Of the 30 teachers invited, six voluntarily consented to participate in interviews to gain a deeper understanding of the behaviors exhibited by resilient teachers during the post-pandemic period. These interviews, which lasted approximately 15 minutes, took place within the teachers' respective schools, affording them the flexibility to select a preferred space for the discussion.

During the semi-structured interviews, the teachers were presented with Table 2 (behavior items correlated with the resilience scores). They were prompted with open-ended questions, encouraging them to critically assess the study's preliminary outcomes and determine whether the associated behavioral statements aligned with their own experiences. The initial query was, "Do any of these (resilience support behaviors) resonate with you?" Next, the researcher asked questions that led the teachers to describe their behaviors, which deepened the examination of each resilience support category. Again, these more specific probes began with an open-ended question. For example, "Can you walk me through a typical day and what you prioritize?" or "Can you describe a time recently when you felt your role as a teacher was especially important? These questions invited participants to reflect on meaningful experiences, allowing insights into their sense of responsibility, without explicitly prompting them to speak about how seriously they take it (See statement #1, Table 3).

Creswell and Plano Clark (2018) argue that MMR requires a convergent design; thus, in this study, the creation of the interview questions is the initial integration point. The deductive coding and the side-by-side joint data display diagram are additional points of convergence. The following research design and procedural representation chart (see Figure 1) summarizes how the study was conducted.

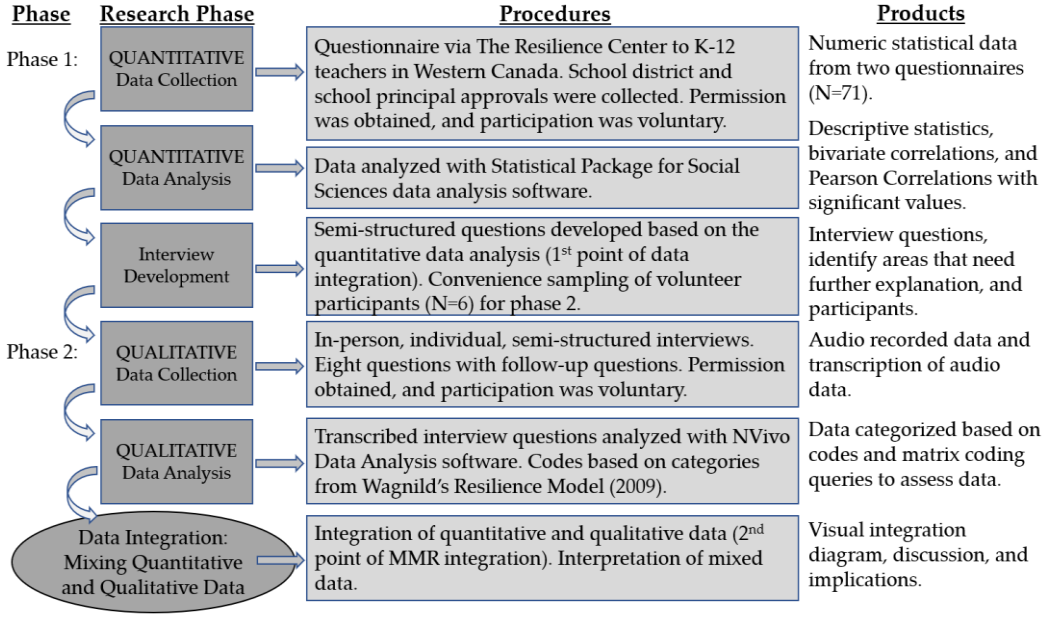

Figure 1. Research design and procedural representation

Data Analysis

The quantitative phase employed IBM's Statistical Package for the Social Sciences (SPSS) version 29.0.2.0. The first step involved assessing internal reliability through the calculation of Cronbach's alpha. According to George and Mallery (2020), alpha values above 0.7 are considered acceptable, values between 0.8 and 0.9 reflect good reliability, and values exceeding 0.9 indicate excellent reliability.

Subsequently, independent samples t-tests were conducted to explore potential differences based on gender. The final stage of the quantitative analysis aimed to identify the specific behaviors that significantly influenced the resilience levels reported by participating teachers. Questionnaire data were analyzed using one-tailed Pearson correlations. Statistical significance was determined using *p*-values, which indicate the probability that the observed relationships occurred by chance (George & Mallery, 2020).

The qualitative data analysis was conducted using NVivo 12 software, which supported the systematic organization and interpretation of the interview transcripts. A deductive coding approach, as outlined by Fife and Gossner (2024), was employed to guide the analysis. This method allowed for a structured examination of the meanings, processes, and narratives emerging from participants' experiences in relation to the key phenomena identified in the quantitative phase. The use of deductive coding enabled the application of a predefined framework, with Wagnild's (2009) resilience supports serving as the overarching coding categories.

Findings

Phase 1: Quantitative Data Strand

Initially, the response values for the RS-25 and the scores for each item of the Resilience Supports questionnaire were aggregated to generate composite scores. Table 1 presents the results. For the questionnaire data, see Appendix A for the results of the RS-25 and Appendix B for the results of the Resilience Support questionnaire.

Table 1. RS-25 and Resilience Support results

	Combined Mean	**Combined SD**	**Male (*n*=22) Mean/SD**	**Female (*n*=49) Mean/SD**	**Min-Max**	**Possible score**
Total Resilience Core	147.1	12.75	150.6/6.67	145.5/14.28	105-166	25-175
-Sense of Purpose	6.05	0.46	6.20/0.49	5.98/0.46	2-7	1-7
-Authenticity	5.97	0.35	6.16/0.31	5.88/0.43	1-7	1-7
-Equanimity	5.73	0.35	5.89/0.48	5.65/0.31	1-7	1-7
-Perseverance	5.98	0.27	6.04/0.33	5.95/0.29	2-7	1-7
-Self-Reliance	5.70	0.16	5.84/0.30	5.63/0.20	2-7	1-7
Total Resilience Supports	143.7	9.45	149.8/7.08	140.9/9.12	121-162	25-175
-Managing stress	5.20	0.28	5.61/0.34	5.01/0.32	1-7	1-7
-Caring for your health	5.59	0.90	5.86/0.60	5.47/1.07	1-7	1-7
-Connecting with others	6.06	0.29	6.16/0.34	6.01/0.28	2-7	1-7
-Living with balance	5.67	0.46	5.96/0.45	5.53/0.49	2-7	1-7
-Staying engaged in life	6.14	0.18	6.31/0.20	6.07/0.18	2-7	1-7

Note. SD = Standard deviation. The Total Resilience Core and Total Resilience Supports scores are recorded from 25 to 175. Averages for each category of essential resilience characteristics and resilience lifestyle practice support are from respondents' selection of Likert-like options.

Next, the analysis of scale reliability (internal consistency) for the questionnaire items was conducted. The data sets for the questionnaires revealed significantly different alphas. The RS-25's alpha of 0.901 is excellent, whereas the Resilience Support result of 0.747 is acceptable.

T-tests were conducted to examine the potential impact of gender. The two-tailed test indicated that most resilience items did not differ significantly between males and females. However, the analysis revealed that males scored significantly higher on four resilience items while females scored higher on one. These findings suggest that overall resilience responses did not differ much between genders, for most of the items noted as significant were slightly significant (p <.05). The exception is males ranked higher than females for the item "I stay true to myself even when I'm afraid to do so" (p <.001).

When considering resilience support behavior responses on the two-tailed T-test, males scored higher on eight items than their female counterparts. The variations were again only p <.05. The remarkably high scoring items for males were, "I can let go of things beyond my control" (p =.001) and "I maintain a healthy body weight" (p = .002).

Next, the questionnaire data were analyzed to uncover bivariate correlations, specifically one-tailed Pearson Correlation. Pearson Correlations were scored on a scale from -1 to +1. For analysis, the positive tail of this data is presented in Table 2.

Table 2. Correlations between core resilience and resilience supports

Variable (Resilience Support item)	Pearson Correlation	Significance (p-values)	Resilience Support Lifestyle Practice Category
I take my responsibilities seriously	.701**	<.001	Living with balance
I use my time and skills on a regular basis to help and encourage others.	.678**	<.001	Connecting with others
I keep interested in life around me	.481**	<.001	Staying engaged in life
I like to learn new things	.455**	<.001	Staying engaged in life
I balance my personal time and my responsibilities	.435**	<.001	Living with balance
I do something fun at least once a week	.398**	<.001	Living with balance
I enjoy my life	.384**	<.001	Staying engaged in life
My boundaries are clear, and I say 'no' when I need to.	.374**	<.001	Managing stress
I like a challenge	.288**	.008	Staying engaged in life
I carefully prepare for things that I know may be stressful for me	.260*	.015	Managing stress
I eat balanced and nutritious meals every day	.223*	.032	Caring for your health
I take time for myself every day	.214*	.037	Living with balance

Note. Table 2 presents the correlation between Total Resilience Core and Resilience Supports (Male and female data are combined). The resilience support lifestyle practices category is also noted. *Correlation is significant at the p <.05 level (1-tailed), and **correlation is significant at the p <.01 level (1-tailed).

Eight resilience-supporting items revealed a significant correlation (at p <.001) to the teachers' overall resilience. These correlations provided information for developing the study's interview questions and Phase 2.

Phase 2: Qualitative Data Strand

All participants reported a strong commitment to their students and schools. Each had recently helped someone and, except for one, remained actively engaged with the world around them. Four participants began new hobbies or learning activities during the pandemic. While remote teaching was initially engaging, it became tiring over time. Several noted the need to balance school responsibilities with family life. All described weekly activities they found enjoyable and shared ways they experienced joy. Three participants emphasized the importance of setting and modeling boundaries.

Table 3 displays a side-by-side joint data display diagram that integrates quantitative data (resilience supports behavior that significantly correlates with their resilience) and qualitative data (interview responses) that highlight the relationship between resilience and resilience-supportive factors.

Table 3. Data integration: Side-by-side joint data display diagram

Quantitative Results Significant Correlation and p = <.001	**Qualitative Results**	**Analysis**
I take my responsibilities seriously.	All of the participants indicated a high level of commitment to their students and school. Many stated, "My students" or "My school" when explaining their experiences.	Based on the correlation of the dependent variable and composite variables, teachers who sustained elevated levels of resilience post-pandemic actively recognized and cherished their responsibilities. Each teacher described experiences where these responsibilities profoundly influenced their students and facilitated avenues for support and encouragement. The interviewed teachers also engaged in extensive discussions regarding experiences during the pandemic, many centered on personal growth and self-development. A diverse range of responses emerged during the discussions of the pandemic's impact on teachers' lives. These responses ranged from
I use my time and skills regularly to help and encourage others.	All participants described incidents where they had helped someone recently. Brian stated, "Sometimes I do this more than others, but the more I help others, the more I enjoy life." Sarah also stated, "When I look outwards, it pulls me out and connects me more to the things around us. There's more to enjoy."	
I keep interested in life around me.	Except for one participant, all interviewees described how they maintained an active interest in the world around them and engaged with various aspects of life during the discussed period. For example, Sarah stated, "I find it great to be around people," while Dave said, "I felt fortunate to be a teacher. It makes life fun."	
I like to learn new things.	Four of the participants described the new things they initiated during the pandemic. Brian excitedly stated, "I got so many new hobbies," while Carl explained that he began to teach himself a new language. Although teaching via Zoom was new and interesting, Colt stated by the end of the pandemic, "I did not want another day of talking to black screens."	

I balance my personal time and my responsibilities.	Four participants discussed a correlation between learning work at "school" and spending time with family. Carl stated, "A lot of resiliency, for me at least, responds out of balance." Dave explained, "When I think about responsibilities, it is people that come to mind."	experiences of extremely cautious and stressful interactions with people to more relaxed, vacation-like lockdown experiences. Those who experienced more stress found fewer resilience support items that resonated with them. Although personal and family time was important to some resilience teachers, each participant discussed their efforts to balance personal time and professional obligations. Pursuing this balance was described as an ongoing endeavor, wherein establishing boundaries played a pivotal role.
I do something fun at least once a week.	All participants reported doing multiple things they described as fun every week. Ann referred to the art projects and gardens she worked on at home.	
I enjoy my life.	Each participant describes examples of how they enjoyed life. Sarah stated that she had "communities of people that I interact with."	
My boundaries are clear, and I say 'no' when I need to.	Three participants discussed boundaries. Colt stated that as an administrator, "I truly believe that my teachers need to have balance, and I make sure that I reflect that in speech and action."	

Discussion and Implications

In the wake of the COVID-19 pandemic, concerns surrounding teacher attrition and burnout prompted this investigation into teacher resilience to address the multifaceted challenges faced by educators in the post-pandemic era. The unprecedented global pandemic necessitated rapid pedagogical adaptations by teachers amidst uncertainty, testing their resilience during and after this period. This research endeavor was driven by the recognition that fostering resilience could potentially mitigate the adverse effects of these pressing issues and provide valuable insights into supporting the well-being and retention of teachers. This study's examination of behaviors that influenced teachers' resilience yielded results consistent with previous research expectations and revealed unanticipated insights. The results were also consistent with other professionals who work with children, such as Child Protection professionals (Priolo Filho et al., 2020; Renov et al., 2022), foster care professionals, and caregivers (Whitt-Woosley et al., 2022).

By analyzing the RS-25 responses from the respondents, we now know this group of teachers demonstrated a Thriving resilience state (Wagnild, 2021). Their questionnaire responses indicated good to strong scores in areas such as sense of purpose, authenticity, equanimity, perseverance, and self-reliance. This result surprised the author of this paper. Thus, two-tailed T-tests to tease out the impact of gender and correlations between core resilience and resilience supports were conducted before conducting the interviews.

While male scores were slightly higher than females on twelve items from the two questionnaires, both groups exhibited similar robust resilience. The difference between the genders was present but slight. Teasing out the differences between genders did not contribute to answering the research questions; thus, the data for both genders were combined to analyze the correlation between core resilience and resilience support behaviors of the entire group.

The analysis revealed a significant correlation between core resilience and resilience support behaviors for eight specific behaviors. Notably, six correlated behaviors fell under the "Living with balance" and "Staying engaged in life" categories. This result again surprised the author, as the expectation was for a stronger emphasis on stress management behaviors among resilient teachers. While one of the correlated items did reflect the "Managing stress" category, a more prominent representation of stress management strategies among the highly resilient teachers in the study had been anticipated.

As noted in the side-by-side joint display (an important MMR tool), the interviews revealed that teachers who maintained elevated resilience recognized and cherished their responsibilities. Interactions with students and colleagues profoundly influenced these teachers, as they dedicated time to supporting and encouraging others. Additionally, this group recounted experiences of personal growth and self-development during the pandemic. Personal and family time was important for these resilient teachers, and each participant acknowledged their efforts to balance personal commitments and professional obligations. Pursuing this equilibrium required persistent effort, wherein establishing clear boundaries proved crucial to maintaining a healthy work-life balance.

Although the author of this paper was surprised that this group of teachers maintained a thriving resilience post-pandemic, other researchers have found clusters of highly resilient teachers post-pandemic. Voinea and Şiţoiu (2021) noted that resilient individuals embraced optimistic perspectives while adapting to new challenges during the pandemic, and Lagat (2021) found multiple groups of highly optimistic teachers. The findings are consistent with pockets of resilient professionals interacting with children in other domains, such as Child Protective Services caseworkers and administrators, who also demonstrated resilience (Renov et al., 2022). As with the teaching context, Priolo Filho et al. (2020) found that a supportive workplace environment and personal beliefs were crucial for child protection professionals.

While the current study focuses on teachers' resiliency, it is essential to acknowledge that the educational system impacts teachers. By focusing solely on an individual's traits and actions, one may mistakenly believe that resilience is exclusively the responsibility of teachers. This tendency toward "hyper-individualisation" should be avoided (Johnson & Down, 2013, p. 81). Current literature suggests that developing teacher resiliency is a system-wide responsibility (Buttler & Engelbrecht, 2024; Johnson et al., 2016; Masten et al., 1990). Hence, the current study examines only a fragment of the teacher resilience panorama.

Despite the apparent thriving nature of this study group, it is essential to acknowledge the rising trends of teacher attrition and burnout post-pandemic. Although this group of resilient teachers found that living with balance and staying engaged in life is critical, other researchers highlight stress management (Brouwers & Tomic, 2000; Ghanizadeh & Jahedizadeh, 2015). Consequently, teachers and school administrators should actively pursue opportunities to enhance teacher resilience, which also involves stress management.

Using this group of teachers as an exemplar, administrators should focus on supporting activities or programs that promote the eight resilience-supporting behaviors identified as significant to this group. To aid in this process, school administrators could create opportunities for teachers to recognize the importance of taking their responsibilities

seriously, utilizing their time and skills to support and uplift others, and maintaining a genuine interest in the world around them, especially during challenging times like the pandemic. Administrators should also extend support to those teachers who actively seek opportunities to learn and grow, encourage them to strike a healthy balance between personal time and school responsibilities, and assist in developing their teachers' skills to set boundaries and confidently say no when necessary. These measures would be instrumental in fostering resilience among teachers for future challenging times.

When investigating teacher resilience, the focus traditionally shifts toward the well-being of individual teachers, analogous to the approach to the well-being of veterans (Skaalvik & Skaalvik, 2016). This approach necessitates school leaders to assume the role of trauma mitigators, assuming responsibility for fostering their staff's health and overall well-being. However, the results of this study suggest that an administrator's role should be akin to preventive medicine rather than trauma relief. Such a proactive approach would help foster what Day (2019) describes as "everyday resilience" among teachers. Everyday resilience "demands not only the capacity to 'bounce back' in extremely adverse circumstances but the capacity to manage, rather than 'cope' with, the everyday challenges teachers face in their work" (Day, 2019, p. 1). By adopting this preventive mindset, administrators can better equip teachers with the resilience required to navigate the routine demands of their work rather than solely focusing on reactive measures in the face of acute adversity.

This project did not examine school leadership, yet research consistently connects resilience and leadership (Nguyen et al., 2016; Tau et al., 2018). It will be critical for school leaders to address teachers' resilience if we are to slow teachers' progression toward burnout. This goal can be achieved by carefully examining and improving the balance between teaching demands and resilience supports that define our new post-pandemic reality. When considering resilience as a collective construct, all stakeholders are responsible for cultivating resilience within their personal and professional networks and in circumstances where diverse individuals establish connections.

Given the imperative for education organizations to prioritize teacher resilience, educational administrators must proactively support and safeguard teachers' health. School leaders should work to establish favorable working conditions, as well as comprehensive programs to provide teachers with opportunities to build resilience and support behaviors. This assistance was vital in past educational settings and is especially crucial now. This assistance will also prepare the profession for future significant social or health-related challenges.

Study Limitations

Although the results of this study highlight a group of resilient teachers, it is challenging to apply the findings across Canada. The unique context of this educational system could potentially influence the perspectives and experiences of the participating teachers. Also, response bias may have occurred during the data collection process, as self-reported responses are vulnerable to this type of bias. Another limitation is the lack of baseline data on the research variables before the pandemic's onset. The analysis is thus constrained by the unavailability of a relevant historical dataset to benchmark the findings. Therefore, the current study, as well as related literature, may be the basis for future research.

Future Research

Ensuring students' and teachers' health, safety, and social-emotional well-being is the highest priority in education in the post-pandemic era (Ossiannilsson, 2022). As burnout and attrition result from a long-term stress response (Brouwers & Tomic, 2000), identifying and fortifying protective factors of resilience will benefit teachers (Răducu & Stănculescu, 2022). As the Wagnild questionnaires do not directly assess the construct of burnout, a potential avenue for future research could involve the interplay among resilience support behaviors, stress coping strategies, and the level of teacher burnout. Examining the intricate relationships among these variables could yield valuable insights and contribute to a more comprehensive understanding of the factors influencing teacher well-being and resilience. For example, the Maslach Burnout Inventory (Maslach et al., 1997) may be useful in future examinations. Finally, as teacher wellness is inextricably linked to resilience, and research consistently shows a link between teacher well-being and student learning (Day & Gu, 2013; Razmjoo & Ayoobiyan, 2019), the benefits of teacher resilience reach beyond the individual.

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Appendix A: Top 20 Items that Measure the Respondents' Resilience

Items statement	*N*	min	max	Mean	Std Dev	Female Av	Male Av
I have a reason to get up in the morning.	71	4	7	6.60	.600	6.58	6.64
My life has purpose.	71	3	7	6.46	.654	6.42	6.55
My deeply held values guide my choices.	71	3	7	6.37	.730	6.29	6.55
I know what's most important to me, and this guides my life.	71	3	7	6.26	.753	6.21	6.36
I can see most situations from different points of view.	71	4	7	6.14	.687	6.04	6.36
I make decisions that are consistent with my beliefs.	71	4	7	6.11	.578	6.13	6.09
My purpose in life motivates me.	71	3	7	6.09	.728	5.96	6.36
In a time of trouble, I figure out what needs to be done.	71	4	7	6.06	.634	6.00	6.18
I am confident in my ability to get through difficulties.	71	3	7	6.03	.775	5.92	6.27
I am determined, even if the odds are against me.	71	3	7	5.91	.679	5.91	5.92
I can find something positive in whatever happens.	71	3	7	5.89	.697	5.83	6.00
Every day, I do something that is meaningful.	71	2	7	5.77	1.043	5.58	6.18
I rely on myself to do what is right for me.	71	4	7	5.77	.600	5.92	5.45
Disappointment doesn't stop me from trying again.	71	3	7	5.74	.628	5.63	6.00
If something is worth starting, I'm going to finish it.	71	2	7	5.71	1.191	5.46	6.27
Even if I don't feel like it, I do what I need to do.	71	3	7	5.69	.894	5.79	5.45
I'm honest with myself when something is wrong for me.	71	3	7	5.63	.846	5.63	5.64
I stay true to myself even when I'm afraid to do so.	71	1	7	5.49	1.209	5.17	6.18
I see an obstacle as a challenge to overcome.	71	3	7	5.43	.775	5.38	5.55
I'm not upset for too long when life doesn't go my way.	71	1	7	5.35	1.087	5.21	5.64

Note. The top 20 RS-25 results (based on Mean) are noted to save space. Rank-ordered from high to low. Questionnaire source: https://www.resiliencecenter.com.

Appendix B: Top 20 Items that Measure the Respondents' Resilience Support Behaviors

Item statement	*N*	min	max	Mean	Std Dev	Female Av	Male Av
I avoid tobacco products (smoke_chew_dip).	71	7	7	7	0.00	7.00	7.00
There is someone in my family I can depend on.	71	5	7	6.57	.550	6.54	6.64
I take my responsibilities seriously.	71	3	7	6.43	.736	6.38	6.55
I like to learn new things.	71	4	7	6.31	.671	6.21	6.55
I keep interested in life around me.	71	4	7	6.31	.578	6.21	6.55
I enjoy my life.	71	4	7	6.20	.528	6.17	6.27
I use my time and skills on a regular basis to help and encourage others.	71	2	7	6.00	.780	5.88	6.27
I do something fun at least once a week.	71	2	7	5.91	1.035	5.67	6.45
I like a challenge.	71	3	7	5.86	.578	5.75	6.09
I spend my time with people who make me feel good about myself.	71	3	7	5.80	.613	5.83	5.73
I carefully prepare for things that I know may be stressful for me.	71	3	7	5.69	.663	5.54	6.00
I take time for myself every day.	71	2	7	5.43	.912	5.25	5.73
I eat balanced and nutritious meals every day.	71	2	7	5.20	.995	5.04	5.55
I balance my personal time and my responsibilities.	71	2	7	5.11	.919	4.88	5.64
I exercise for 20 minutes or more at least three times a week.	71	1	7	5.03	1.589	4.96	5.18
I manage my stress in healthy ways, such as exercising.	71	1	7	5.00	1.212	4.96	5.09
My boundaries are clear, and I say 'no' when I need to.	71	2	7	5.00	.851	4.75	5.55
I get at least 7-8 hours of sleep almost every night.	71	1	7	4.94	1.379	4.67	5.55
I maintain a healthy body weight.	71	1	7	4.69	1.463	4.25	5.64

Note. The top 20 (based on Mean) Resilience Supports are noted here to save space. Rank-ordered from high to low. Questionnaire source: https://www.resiliencecenter.com.