

School Principals' Work Intensification and Resilience: A Call for Structural Change

Katina Pollock, Ruth Nielsen, & Shankar Singh
Western University

Abstract

Throughout the COVID-19 pandemic, principals have taken on increased responsibilities. Principals who are thriving are praised for their resilience while those who are struggling are inundated with calls to build their resilience. In this conceptual article, we problematize the overemphasis on individual responsibility that is implicit in pro-resilience narratives. We reviewed the interdisciplinary literature and used an inductive approach to examine resilience narratives across historical and disciplinary arcs, with specific attention given to the school leadership literature. We argue that, within the context of this pro-resilience movement, if attention is not given to the structural conditions of work intensification, the education system is setting K–12 principals up to experience adverse unintended consequences. These consequences can worsen existing mental health issues, such as occupational burnout, or exacerbate mental health stigma. We conclude by suggesting that structural changes could disrupt this individualization of responsibility and overreliance on the personal resiliency of school principals.

Keywords: resilience, school principals, educational leadership, COVID-19, work intensification, mental health stigma

COVID-19 has exacerbated existing issues in all aspects of life, including school leadership. School principals' work has broadened to include more active responsibility for the health and well-being of students and staff, while also managing the unprecedented switch to virtual schooling and back again (Anderson, 2020; Osmond-Johnson et al., 2020; Pollock, 2020; Ward, 2020). These responsibilities add to the existing trend of increasing work intensification and decreasing mental well-being among school principals (DeMatthews et al., 2021; Faubert et al., 2019; Pollock & Wang, 2020; Wang & Pollock, 2020). Principals who thrive in these conditions are being praised for their resilience, while those who do not are being called to cultivate resilience (Earp, 2020; Hudson et al., 2021; Kress, 2020; Kumar & Luthar, 2020). In this article we explore competing understandings of resilience across multiple disciplines and present some suggestions for structural change in light of the impact these understandings of resiliency are having on contemporary school principals. We argue that an overemphasis on individual resiliency without structural supports and system-level considerations can negatively impact school leaders. Specifically, we argue that overemphasizing resilience makes individuals responsible for adapting to adverse working conditions that are beyond their control to change, rather than considering institutional responsibility for implementing structural changes to improve working conditions. Although resilience may be a beneficial skill for individuals to overcome short-term adversity, the onus to change system-wide, long-term adverse conditions, such as work intensification, predominantly remains within the purview of institutions.

Methodology

We reviewed interdisciplinary research to examine resilience narratives across historical and disciplinary arcs, with specific attention given to the ways in which resilience is advocated for in the school leadership literature. We applied inductive qualitative coding to the literature using the broad questions, “What is resilience and how is it understood in different fields? What are the components of resilience? How is the notion of resilience applied to principals’ work?” In our analysis, we asked, “Why has there been a growing interest in resilience following the pandemic? What is driving this interest? What is not being said in the current research?” We used a date range of 1980–present so as to include the body of research from the end of the 20th century that informed the more current research from the first two decades of the 21st century. To ensure we found research from multiple disciplines while also targeting educational leadership research, we used the following research databases: Education Databases, Google Scholar, JSTOR, ProQuest, and Scopus.

We began our literature search by broadly using the keywords “resilience” and “resiliency.” After developing a literature base that detailed how resilience was defined and conceptualized in various fields, we narrowed our search to focus on school leadership by adding Boolean operators along with the keywords “school leadership,” “educational leadership,” “principal,” “headteacher,” and “administrator.” From there, we further focused our research to include the keywords “work intensification,” and “workload,” which we know from previous research affects principals’ work (Allen et al., 1999; Lee et al., 2021; Pollock et al., 2015). Having added the keywords “work intensification” and “workload,” we noted that most of the current literature advocated for principals to build their resilience amid COVID-19 and work intensification but did not problematize the notion of resilience.

To code the literature, we created a matrix from our driving questions. Our most broad headings were: “origin of the term/definitions,” “components of resilience,” and “critiques of resilience.” As we analyzed the literature, we inductively created further delineation in the matrix. For example, “components of resilience” was delineated into “resilient practices,” “building/creating resilience,” “overabundance of resilience,” “lack of resilience,” “resilient principals,” and “non-resilient principals.” After initially coding, we analyzed the matrix as a whole against our existing knowledge of resilience in the field of educational leadership.

Defining Resilience

The term *resilience* comes from the Latin *resilio*, meaning to “jump back” or “spring back” (Fleming & Ledogar, 2008; Lane et al., 2013). The term was originally used in the pure and applied sciences to describe how microorganisms would survive adverse conditions and how materials would return to their original shape after being altered (Lane et al., 2013; Luthar & Zelazo, 2003). Resilience made its way into the psychology and psychiatry literature in the 1980s, where it was used to describe either the trait or skill that enabled sufferers of abuse, significant stress, or trauma to remain well adapted (Anthony & Cohler, 1987; Fleming & Ledogar, 2008; Luthar, 2006; Rutter, 1999; Traynor, 2018; Werner, 1995). Although the psychology literature consistently defines resilience as overcoming adversity, it also contains significant debate about whether resilience is an intrinsic trait (Higgins, 1994; Werner & Smith, 2001), or a skill learned over time (Luthar & Zelazo, 2003; Martínez-Martí & Ruch, 2017; Masten, 1999; Patterson & Kelleher, 2005).

Resilience as a Trait

When resilience is considered a trait, resilient people are understood to be innately resilient to, and therefore unaffected by, stress, and people who do not have this trait innately lack resilience and therefore experience negative consequences of stress (Block & Block, 1980; Martínez-Martí & Ruch, 2017; Werner & Smith, 2001). Researchers from this camp have argued that resilient people share other traits, such as low neuroticism, openness to change, and less anxiety about the future (Block & Block, 1980; Lazaridou, 2020). In this view, the opposite trait to resilience is brittleness, which is characterized by “little adaptive flexibility, an inability to respond to the dynamic requirements of the situation [...] when encountering changed circumstances or when under stress, and a difficulty in recouping after traumatic experiences” (Block & Block, 1980, p. 48). When resilience is considered a trait, an individual’s inability to recover from stress and adversity is denigrated as a personality fault, leaving little room for improvement. Most

resilience-as-trait theorists acknowledge that some skills associated with resilience, like creative problem-solving, can be learned through mentorship, experience, or specific training (e.g., cognitive behavioral therapy) (Higgins, 1994; Werner & Smith, 2001; Windle, 2011).

Resilience as a Skill

In more contemporary literature, resilience is largely considered a skill (Barton et al., 2020; Bethune, 2020; Kelly, 2020; Korosteleva & Petrova, 2020; Luthar, 2006; Patterson & Kelleher, 2005; Runner & Marshall, 2003). According to this understanding, resilience is learned over time through successfully navigating stressful and adversarial experiences (Howard & Johnson, 2004; Lazaridou, 2020; Runner & Marshall, 2003; Windle, 2011). Here, resilience is associated with skills in problem-solving, effective time management, and self-efficacy (Jagger & Lewith, 2016; Li et al., 2017; Martínez-Martí & Ruch, 2017). Resilience is further attributed to external characteristics, such as having a strong support network, good work–life balance, and healthy self-care strategies (Baylis, 2020; Bonanno & Mancini, 2008; Howard & Johnson, 2004; Ihme & Sundstrom, 2020; Kelly, 2020; Lowe, 2020; Ozbay et al., 2013). When resilience is a skill, there is no opposite—only a lack of training. Relatedly, career resilience adds occupational specificity to the concept (Papaioannou et al., 2022). Career resilience describes a person’s ability to maintain professional well-being amid work-related adversities such as career change, stress, and difficult work environments (McCann et al., 2013; Papaioannou et al., 2022).

Resilience as Continuum

Some theorists have offered a more critical understanding of resilience. Hunter and Chandler (1999) offered one of the most widely cited critiques, arguing that resilience exists on a continuum of more and less optimum resilience, where less optimum resilience can lead to maladaptation in adults who show unhealthy responses to adversity “such as insinuation, isolation, disconnecting, denial, and aggression or [...] violence” (p. 246). With this continuum, an overemphasis on using resilience to push through stress may decrease an individual’s awareness of the negative impacts of stress, making those individuals more likely to remain in adverse conditions despite negative personal consequences (Chamorro-Premuzic & Lusk, 2017; Hunter & Chandler, 1999). Further, an overfocus on resilience may dismiss the organizational and structural deficits that make resilience necessary, placing the onus for change on the individual (Attenberg, 2020; Chamorro-Premuzic & Lusk, 2017; Olsson et al., 2015; Traynor, 2018). By overemphasizing individual resilience, the individual becomes responsible for alleviating adversities rather than the organization being responsible for improving working conditions. In understanding potential negative consequences of resilience for principals, it is important to understand the context in which principals are working. In this paper, we focus on the phenomenon of principals’ work intensification.

After considering these multiple and changing definitions, we define resilience as an adaptive and multifaceted lifelong process of developing skills to positively overcome adversity (Masten, 2007; Münch et al., 2020; Olsson et al., 2015; Shaw et al. 2016).

Principals’ Work Intensification

Principals’ work intensification is characterized by an increasing number of complex tasks that are required to be completed in shorter periods of time with fewer resources on an ongoing basis (Dulude & Milley, 2020; Pollock et al., 2015; Wang et al., 2021). Internationally, principals have reported working an average of 60 hours per week (Wang et al., 2021). Such overwork is associated with negative mental, physical, and cognitive health effects (Li et al., 2019; Pega et al., 2021; Virtanen et al., 2009). Many principals have also reported feeling a demand to be available 24 hours a day as increased technology-based communication makes the barrier between work and home permeable (Pollock & Hauseman, 2019). These overall trends can be broadly categorized under the term *work intensification* (Allan et al., 1999; Pollock et al., 2015; Pollock & Wang, 2020; Wang & Pollock, 2020). Rather than advancing suggestions for structural solutions to work intensification, recent educational leadership trends have called for individual solutions in the form of principal resilience.

Principal Resilience

Much of the existing educational leadership literature positions the development of resilience as a key skill for school principals. Professional magazines (Allison, 2012; Bethune, 2020), opinion pieces (Ainsworth & Oldfield, 2019; Ozmusul, 2017; Patterson, 2001), qualitative research (Lane et al., 2013; Lazaridou, 2020; Papaioannou et al., 2022; Patterson & Patterson, 2009; Simon & Gibson, 2019; Steward, 2014) quantitative research (Allen et al., 2018; Isaacs, 2012; Offutt, 2011), and official leadership frameworks (Ontario Institute for Educational Leadership, 2013) have all argued that school principals must develop resilience to be successful leaders and to lead successful schools. This literature posits that resilient principals are flexible, organized, and better able to inspire a shared vision in their schools (Al-Omari, 2017; Lane et al., 2013; Lowe, 2020). Resilient principals take personal responsibility for their schools, are realistically optimistic when practicing courageous decision-making, and communicate clear moral values in their leadership (Lazaridou, 2020; Lazaridou & Beka, 2015). In the face of chronic adversity and stress, resilient principals are said to remain even-tempered, rational, and focused (Gordon, 1995; Loeher & Shwartz, 2005; Patterson & Patterson, 2009). Conversely, non-resilient principals are said to lack key leadership qualities and may inspire a lack of resilience in staff, potentially creating lower job satisfaction, less productivity, and overall disorder in the workplace (Ihme & Sundstrom, 2020).

Although literature explicitly related to non-resilient principals is sparse, literature encouraging professional development (PD) for principal resilience is growing (Lantieri et al., 2016; Ontario Catholic Principals' Council, 2018; Ontario Principals' Council, 2020; Simon & Gibson, 2018; Toronto District School Board, 2020). Such PD implies that resilience is a skill that some principals lack and therefore can and should work to develop. The negative association with admitting a lack of resilience may exacerbate existing mental health issues by creating stigma around acknowledging or disclosing struggles with resilience (Bethune, 2020; Block & Block, 1980; Kelly, 2020).

Risks of Overemphasizing Resilience Without Structural Supports

Calls for principals to cultivate their resilience as a means to withstand work intensification may have negative consequences for principals in the form of poor mental health outcomes, such as burnout and the development of mental health stigma. Although much of the current discourse around resilience positions it as an inherently beneficial trait, some researchers, such as Hunter and Chandler (1999), have theorized that an overemphasis on resilience as a coping strategy may lead to maladaptive practices such as isolation and personal disconnect. In a large-scale research study from Ontario, Canada, over 40% of school principals reported feeling isolated in their role in both 2012 and 2019 (Pollock & Wang, 2020; Pollock et al., 2015). The consequences of isolation and personal disconnect are not dissimilar from the symptoms of professional burnout. Burnout is characterized by feelings of isolation, depersonalization, decreased satisfaction, physical and cognitive exhaustion, and overall lower mental health (DeMatthews et al., 2021; Friedman, 1995; Maslach & Jackson, 1985). Burnout is an increasing issue in the principalship (Beusaert et al., 2016; DeMatthews et al., 2021; Horwood et al., 2021); however, these feelings of burnout have been shown to diminish when principals have strong social support (Beusaert et al., 2016). Conversely, framing resilience as only an individualist endeavor may contribute to burnout and other mental health issues through the promotion of mental health stigma.

Mental health stigma refers to personal, social, or systemic negative associations with mental health issues that lead individuals to deny their experiences to prevent potential discrimination, prejudice, stereotypes, self-doubt, or humiliation (Ahmedani, 2011; Holder et al., 2019; Walker, 2021). Although mental health stigma can affect any individual, it can occupationally manifest for individuals in high pressure, leadership-focused careers such as social work (Ahmedani, 2011), health care (Wallace, 2010) and, crucially for our purposes, school principals (Walker, 2021). For these professionals, the consistent messaging that they must be role models of resilience (Allison, 2012; Munby, 2020; Patterson, 2001), and the pervasive conceptualization of non-resilience resulting in brittle, insufficient leadership (Block & Block, 1980; Ihme & Sundstrom, 2020), may stigmatize—and thereby lead to further—mental health issues (Walker, 2021). Moreover, mental health stigma may discourage leaders from accessing mental health supports (Ahmedani, 2011; Walker, 2021) because stigma instills a fear that admitting illness means they may be admitting fault or, in the case of principals, occupational incompetence (Ahmedani, 2011; Holder et al., 2019; Walker, 2021).

The constant messaging to principals that they must develop their resilience while structural changes are not made to address work intensification creates a culture in which seeking out support signifies non-resilience. For example, in a professional blog for principals in Ontario, Canada during March 2020—the peak of COVID-19 related chaos—educational leadership theorist Steve Munby (2020) told principals: “Even if we are struggling inside [...] the job of leaders is to be there, to get up the next morning and go back to work because nobody else can do this and it is down to us” (para. 10). The message is clear: Principals ought to use their individual resilience to mediate the shortcomings of an institution, despite any negative consequences. In the long term, this hyperfocus on resilience and stigmatization of mental health concerns may exacerbate some of the well-being issues principals were facing before the COVID-19 pandemic, such as poor mental health, exhaustion, low job satisfaction, and burnout (Beausaert et al., 2016; Pollock & Wang, 2020; Wang et al., 2018), while simultaneously hindering principals’ willingness to access mental health supports.

Efforts to disrupt what we argue is a root cause of trends toward overemphasizing resilience—work intensification—are inhibited by Education Acts, which position principals as independently responsible for school leadership. If principals are experiencing additional stress and burnout (Beausaert et al., 2016; DeMatthews et al., 2021; Horwood et al., 2021) in jurisdictions that claim there is ample support and training for them to be resilient, then there is a larger issue at play here: work intensification, which has been exacerbated during the pandemic years. As mentioned earlier, work intensification for principals occurs when they are expected to engage in a greater diversity of tasks, with higher frequency, without additional time or staff, and with no downtime (Allen et al., 1999; Pollock et al., 2015; Wang et al., 2021). Researchers who study school principals’ work intensification have made some suggestions for structural changes that may be more effective in the long term than pushing for individual resilience.

Suggestions for Legislative Changes

Work intensification cannot be mitigated without changes to policy and legislation that enable principals to distribute leadership tasks formally and legally. For the role of the principal to be manageable, we suggest that legislative changes are necessary. Deep, meaningful distribution of school leaders’ work in Canada is arguably inhibited, in part, by provincial/territorial legislation (e.g., British Columbia School Act, 1996; Ontario Education Act, 1990). Although provincial legislation allows for some delegation of tasks to vice-principals and other school staff, the principal still remains legally responsible for the enactment and outcome of delegated tasks. In other words, while legislation enables principals to delegate tasks, that delegation does not absolve their sole legal responsibility for everything that happens on the school site. For example, if a delegated responsibility is called into question and someone is held accountable, rarely is it the person carrying out the delegated role. As such, delegation does not necessarily alleviate emotional workload.

These types of legislative changes have been introduced in international contexts, opening a path for a reconceptualized school leadership team approach. Chile and England have instituted an additional formal position that moves leadership from an individual to a group endeavor. In these countries, school leadership is considered a process and decision-making does not rely on one individual in one role, but rather two individuals in two roles (Flessa, 2014). In Chile, educational administration includes *directores* (principals) who oversee managerial leadership tasks and *jefes pedagógicos* (pedagogical heads) who are responsible for administrative and instructional/pedagogical leadership (Flessa, 2014). England introduced the role of *school business leaders* in the early 2000s (Armstrong, 2021). School business leaders manage schools’ operational and financial leadership externally from the school, with the purpose of allowing school principals more time to focus on instructional leadership (Armstrong, 2021). In both contexts, policy changes reconceptualized school leadership to allow for the distribution of leadership tasks, which reduced principals’ work intensification and allowed them to focus on the skills for which they were promoted—instructional and curriculum leadership in education—while allowing other team members to focus on the administrative and/or financial aspects of the role. Rather than asking principals to develop resilience to withstand the adverse effects of work intensification, these policy changes would revise the role expectations to better support principals.

Conclusion

In this article, we presented competing notions of resilience in the existing interdisciplinary research to highlight the overemphasis on individual resilience as a response to various stressors. Specifically, over-emphasizing individual resilience without implementing structural changes and supports can lead to adverse unintended consequences such as burnout for school leaders who experience work intensification. We provided suggestions for structural and legislative changes that would help mitigate this overreliance on individual resilience and contribute to school leaders' personal and professional well-being.

References

- Ahmedani B. K. (2011). Mental health stigma: Society, individuals, and the profession. *Journal of Social Work Values and Ethics*, 8(2), 41–46.
- Ainsworth, S., & Oldfield, J. (2019). Quantifying teacher resilience: Context matters. *Teaching and Teacher Education*, 82, 117–128.
- Allan, C., O'Donnell, M., & Peetz, D. (1999). Three dimensions of labour utilisation: Job broadening, employment insecurity, and work intensification. *Current Research in Industrial Relations*, 1, 13-24.
- Allen, C. R., Birge, H. E., Angeler, D. G., Arnold, C. A., Chaffin, B. C., DeCaro, D. A., Garmestani, A. S., & Gunderson, L. (2018). Quantifying uncertainty and trade-offs in resilience assessment. *Ecology and Society*, 23(1). <https://www.jstor.org/stable/26799062>
- Allison, E. (2012). The resilient leader. *Educational Leadership*, 69(4), 79–82. <https://www.ascd.org/el/articles/the-resilient-leader>
- Al-Omari, A. A. (2017). The relationships between personal resilience and leadership practices of school principals in Jordan. *Advances in Social Sciences Research Journal*, 4(15), 149–163. <https://doi.org/10.14738/assrj.415.3536>
- Anderson, T. C. (2020). Academics, achievement gap, and nutritional health: The impact of Coronavirus on education. *The Delta Kappa Gamma Bulletin: International Journal for Professional Educators*, 87(1), 14–17. <https://pesquisa.bvsalud.org/global-literature-on-nov-el-coronavirus-2019-ncov/resource/en/covidwho-907638>
- Anthony, E. J., & Cohler, B. J. (Eds.). (1987). *The invulnerable child*. The Guilford Press.
- Armstrong, P. W. (2021). School business leaders and principal time use in England. In M. Lee, K. Pollock, & P. Tulowitzki (Eds.), *How school principals use their time* (pp. 157–170). Routledge.
- Attenberg, J. (2020, August 19). Is resilience overrated? *The New York Times*, <https://www.nytimes.com/2020/08/19/health/resilience-overrated.html>
- Barton, M. A., Christianson, M., Myers, C. G., & Sutcliffe, K. (2020). Resilience in action: Leading for resilience in response to COVID-19. *BMJ Leader*, 4, 117–119. <http://dx.doi.org/10.1136/leader-2020-000260>
- Baylis, L. (2020, April 7). Pandemic pendulum. *EdCan Network*, <https://www.edcan.ca/articles/pandemic-pendulum/>
- Beusaert, S., Froehlich, D. E., Devos, C., & Riley, P. (2016). Effects of support on stress and burnout in school principals. *Educational Research*, 58(4), 347–365. <https://doi.org/10.1080/00131881.2016.1220810>
- Bethune, A. (2020, September 16). *COVID-19: Importance of resilience and relationships*. Education Support. <https://www.educationsupport.org.uk/blogs/covid-19-importance-resilience-and-relationships>
- Block, J. H., & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behavior. In W. A. Collins (Ed.), *Development of cognition, affect, and social relations: The Minnesota symposia on child psychology* (1st ed., Vol. 13). Psychology Press. <https://doi.org/10.4324/9781315803029>
- Bonanno, A. G., & Mancini, D. A. (2008). The human capacity to thrive in the face of potential trauma. *Journal of the American Academy*, 121(2), 369–375. <https://doi.org/10.1542/peds.2007-1648>

- Chamorro-Premuzic, T., & Lusk, D. (2017, August 16). The dark side of resilience. *The Harvard Business Review*. <https://hbr.org/2017/08/the-dark-side-of-resilience>
- DeMatthews, D., Carrola, P., Reyes, P., & Knight, D. (2021). School leadership burnout and job-related stress: Recommendations for district administrators and principals. *The Clearing House: A Journal of Educational Strategies, Issues, and Ideas*, 94(4), 159–167. <https://doi.org/10.1080/00098655.2021.1894083>
- Dulude, E., & Milley, P. (2020). Institutional complexity and multiple accountability tensions: A conceptual framework for analyzing school leaders' interpretation of competing demands. *Policy Futures in Education*, 19(1), 84–96. <https://doi.org/10.1177/1478210320940134>
- Earp, J. (2020, August 12). Changing school leadership during COVID-19. *Teacher Magazine*, https://www.teachermagazine.com/au_en/articles/changing-school-leadership-during-covid-19
- Faubert, B., Pollock, K., & Hauseman, C. (2019). Superintendents' work (intensification) in a shifting policy climate: Enacting a student discipline strategy. *Canadian Journal of Educational Administration and Policy*, 190, 49–56. <https://journalhosting.ucalgary.ca/index.php/cjeap/article/view/61777>
- Fleming, J., & Ledogar, R. J. (2008). Resilience, an evolving concept: A review of literature relevant to Aboriginal research. *Pimatisiwin*, 6(2), 7–23. <https://journalindigenouwellbeing.co.nz/volume-6-2-summer-2008/resilience-an-evolving-concept-a-review-of-literature-relevant-to-aboriginal-research/>
- Flessa, J. (2014). Learning from school leadership in Chile. *Comparative and International Education / Éducation Comparée et Internationale*, 43(1). <https://doi.org/10.5206/cie-eci.v43i1.9237>
- Friedman, I. A. (1995). School principal burnout: The concept and its components. *Journal of Organizational Behaviour*, 16(2), 191–198. <https://doi.org/10.1002/job.4030160209>
- Gordon, K. A. (1995). Self-concept and motivational patterns of resilient African American high school students. *Journal of Black Psychology*, 21(3), 239–255. <https://doi.org/10.1177/009579849502130031>
- Higgins, J. M. (1994). *The management challenge* (2nd ed.). Macmillan.
- Holder, S. M., Peterson, E. R., Stephens, R., & Crandall, L. A. (2019). Stigma in mental health at the macro and micro levels: Implications for mental health consumers and professionals. *Community Mental Health Journal*, 55(3), 369–374.
- Horwood, M., Marsh, H. W., Parker, P. D., Riley, P., Guo, J., & Dicke, T. (2021). Burning passion, burning out: The passionate school principal, burnout, job satisfaction, and extending the dualistic model of passion. *Journal of Educational Psychology*, 113(8), 1668–1688. <http://dx.doi.org/10.1037/edu0000664>
- Howard, S., & Johnson, B. (2004). Resilient teachers: Resisting stress and burnout. *Social Psychology Education*, 7, 399–420. <https://doi.org/10.1007/s11218-004-0975-0>
- Hudson, L., Mahendrarajah, S., Walton, M., Pascaris, M. J., Melim, S., & Ruttenberg-Rozen, R. (2021). Leadership in education during COVID-19: Learning and growing through a crisis. *Journal of Digital Life and Learning*, 1(1), 16–33. <https://doi.org/10.51357/jdll.v1i1.113>
- Hunter, A., & Chandler, G. (1999). Adolescent resilience. *Image: Journal of Nursing Scholarship*, 31(3), 243–247. <https://doi.org/10.1111/j.1547-5069.1999.tb00488.x>
- Ihme, K. R. M., & Sundstrom, P. (2020). The mindful shield: The effects of mindfulness training on resilience and leadership in military leaders. *Perspectives in Psychiatric Care*, 57(2), 675–688. <https://doi.org/10.1111/ppc.12594>
- Isaacs, A. J. (2012). Resiliency and the individual demographics of school leaders: Making a difference in the quality of educational leadership. *Journal of Research in Education*, 22(1), 128–162.
- Jagger, O., & Lewith, G. (2016). Building resilience through leadership. *InnovAiT*, 9(6), 347–354. <https://doi.org/10.1177/1755738016634382>
- Kelly, H. (2020, September 30). Leader wellbeing amid ongoing crises. *The International Educator*. <https://www.tieonline.com/article/2779/leader-wellbeing-amid-ongoing-crisis>

- Korosteleva, E. A., & Petrova, I. (2020, April 14). Resilience is dead. Long live resilience? *Instituto Affari Internazionali Commentaries*, 20(22). <https://www.iai.it/en/pubblicazioni/resilience-dead-long-live-resilience>
- Kress, M. (2020, March 18). *Principals without a playbook: Leadership amid the pandemic*. Teach for America. <https://www.teachforamerica.org/stories/principals-without-a-playbook-leadership-amid-the-pandemic>
- Kumar, N. L., & Luthar, S. S. (2020). *Resilient schools: Survey reveals insights from students and faculty amid COVID-19*. National Association of Independent Schools. <https://www.nais.org/magazine/independent-school/fall-2020/resilient-schools-survey-reveals-insights-from-students-and-faculty-amid-covid-19/>
- Lane, K. E., McCormack, T. J., & Richardson, M. D. (2013). Resilient leaders: Essential for organizational innovation. *International Journal of Organizational Innovation*, 6(2), 7–26.
- Lantieri L., Nambiar M., Harnett S., & Kyse E. N. (2016). Cultivating inner resilience in educators and students: The Inner Resilience Program. In K. Schonert-Reichl & R. Roeser (Eds.), *Handbook of mindfulness in education: Mindfulness in behavioral health* (pp. 119–132). Springer-Verlag. https://doi.org/10.1007/978-1-4939-3506-2_8
- Lazaridou, A. (2020). Personality and resilience characteristics of preschool principals: An iterative study. *International Journal of Educational Management*, 35(1), 29–46. <https://doi.org/10.1108/IJEM-07-2020-0330>
- Lazaridou, A., & Beka, A. (2015). Personality and resilience characteristics of Greek primary school principals. *Educational Management, Administration, and Leadership*, 43(5), 772–791. <https://doi.org/10.1177/1741143214535746>
- Lee, M., Pollock, K., & Tulowitzki, P. (Eds.). (2021). *How school principals use their time*. Routledge.
- Li, Z., Dai, J., Wu, N., Jia, Y., Gao, J., & Fu, H. (2019). Effect of long working hours on depression and mental well-being among employees in shanghai: The role of having leisure hobbies. *International Journal of Environmental Research and Public Health*, 16(24), 4980. <https://doi.org/10.3390/ijerph16244980>
- Li, M., Eschenauer, R., & Persaud, V. (2017). Between avoidance and problem solving: Resilience, self-efficacy, and social support seeking. *Journal of Counseling and Development*, 96(2), 132–143. <https://doi.org/10.1002/jcad.12187>
- Locher, J., & Shwartz, T. (2005). *The power of full engagement: Managing energy, not time, is the key to high performance and personal reward*. Free Press.
- Lowe, G. (2020, April 6). *Healthy organizational responses to the coronavirus pandemic*. University of Toronto Press Blog. <https://utorontopress.com/blog/2020/04/03/healthy-organizational-responses-to-the-coronavirus-pandemic/>
- Luthar, S. S. (2006). Resilience in development: A synthesis of research across five decades. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Risk, disorder, and adaptation* (pp. 739–795). Wiley.
- Luthar, S. S., & Zelazo, L. B. (2003). Research on resilience: An integrative review. In S. S. Luthar (Ed.), *Resilience and vulnerability: Adaptation in the context of childhood adversities* (pp. 510–549). Cambridge University Press.
- Martínez-Martí, M. L., & Ruch, W. (2017). Character strengths predict resilience over and above positive affect, self-efficacy, optimism, social support, self-esteem, and life satisfaction. *The Journal of Positive Psychology*, 12(2), 110–119. <https://doi.org/10.1080/17439760.2016.1163403>
- Maslach, C., & Jackson, S. E. (1985). The role of sex and family variables in burnout. *Sex Roles*, 12, 837–851. <https://doi.org/10.1007/BF00287876>
- Masten, A. S. (1999). Commentary: The promise and perils of resilience research as a guide to preventive interventions. In M. D. Glantz & J. L. Johnson (Eds.), *Resilience and development: positive life adaptations* (pp. 251–257). Plenum Press.

- Masten, A. S. (2007). Resilience in developing systems: Progress and promise as the fourth wave rises. *Development and Psychopathology*, *19*(3), 921–930. <https://doi.org/10.1017/S0954579407000442>
- McCann, M. C., Beddoe, E., McCormick, K., Huggard, P., Kedge, S., Adamson, C., & Huggard, J. (2013). Resilience in the health professions: A review of recent literature. *International Journal of Wellbeing*, *3*(1), 60–81. <https://doi.org/10.5502/ijw.v3i1.4>
- Munby, S. (2020, March 27). *3 tips for leading a school through the COVID-19 crisis*. Ontario Institute for Education Leadership Blog. <https://www.education-leadership-ontario.ca/application/files/2915/8583/9053/Munby-Leading-COVID-19-Crisis-Mar-27-19.pdf>
- Münch, N., Mahdiani, H., Lieb, K., & Paul, N. W. (2021). Resilience beyond reductionism: Ethical and social dimensions of an emerging concept in the neurosciences. *Medicine, Health Care and Philosophy*, *24*(1), 55–63. <https://doi.org/10.1007/s11019-020-09981-0>
- Offutt, S. M. (2011). *An examination of the characteristic, resilience, and leadership practices in public school elementary principals* [EdD dissertation, West Virginia University]. <https://researchrepository.wvu.edu/etd/3039>
- Olsson, L., Jerneck, A., Thoren, H., Persson, J., & O’Byrne, D. (2015). Why resilience is unappealing to social science: Theoretical and empirical investigations of the scientific use of resilience. *Science Advances*, *1*(4), e1400217. <https://doi.org/10.1126/sciadv.1400217>
- Ontario Catholic Principals’ Council. (2018). *Being a resilient leader: Part 1 and 2*. https://cpco.on.ca/files/4215/3374/9122/PL_Brochure_2018-19.pdf
- Ontario Institute for Educational Leadership. (2013). *The Ontario Leadership Framework*. https://www.education-leadership-ontario.ca/application/files/8814/9452/4183/Ontario_Leadership_Framework_OLF.pdf
- Ontario Principals’ Council. (2020, October 8). *Building resiliency* [Workshop]. <https://calendar.principals.ca/Default/Detail/2020-10-08-1300-Building-Resiliency>
- Osmond-Johnson, P., Campbell, C., & Pollock, K. (2020, May 6). Moving forward in the COVID-19 era: Reflections for Canadian education. *EdCan Network*. <https://www.edcan.ca/articles/moving-forward-in-the-covid-19-era/>
- Ozbay, F., Johnson, D. C., Dimoulas, E., Morgan III, C., Charney, D., & Southwick, S. (2013). Social support and resilience to stress: From neurobiology to clinical practice. *Psychiatry*, *4*(5), 35–40. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2921311/>
- Ozmusul, M. (2017). We need resilient school leaders in the face of chaos and complexity. *Education Reform Journal*, *2*(2), 17–25. <https://files.eric.ed.gov/fulltext/ED581594.pdf>
- Papaioannou, A., Papavassiliou-Alexiou, I., & Moutiaga, S. (2022). Career resilience and self-efficacy of Greek primary school leaders in times of socioeconomic crisis. *International Journal of Educational Management*, *36*(2), 164–178. <https://doi.org/10.1108/IJEM-01-2021-0024>
- Patterson, J. (2001). Resilience in the face of adversity. *School Administrator*, *58*(6), 18–24.
- Patterson, J. L., & Kelleher, P. (2005). *Resilient school leaders: Strategies for turning adversity into achievement*. Association for Supervision and Curriculum Development.
- Patterson, J. L., & Patterson, J. H. (2009). Staying positive in negative times. *Educational Leadership*, *67*(2), 45–49. <https://www.ascd.org/el/articles/staying-positive-in-negative-times>
- Pega, F., Náfrádi, B., Momen, N. C., Ujita, Y., Steicher, K. N., & Prüss-Üstün, A. M. (2021). Global, regional, and national burdens of ischemic heart disease and stroke attributable to exposure to long working hours for 194 countries, 2000–2016: A systematic analysis from the WHO/ILO Joint Estimates of the Work-related Burden of Disease and Injury. *Environment International*, *154*, 106595. <https://doi.org/10.1016/j.envint.2021.106595>
- Pollock, K. (2020). School leaders’ work during the COVID-19 pandemic: A two-pronged approach. *International studies in Educational Administration*, *48*(3), 38–44. <https://www.edu.uwo.ca/faculty-profiles/docs/other/pollock/School-Leaders-Work-During-the-COVID-19-Pandemic-A-Two-Pronged-Approach.pdf>

- Pollock, K., & Hauseman, C. (2019). The use of email and principals' work: A double-edged sword. *Leadership and Policy in Schools, 18*(3), 382–393. <https://doi.org/10.1080/15700763.2017.1398338>
- Pollock, K., & Wang, F. (2020). *School principals' work and well-being in Ontario: What they say and why it matters*. <https://www.edu.uwo.ca/faculty-profiles/docs/other/pollock/July%202020%20ON%20Report%20-%20School%20Principals%20Work%20and%20Well-Being%20in%20Ontario.pdf>
- Pollock, K., Wang, F., & Hauseman, D. C. (2015). Complexity and volume: An inquiry into the factors that drive principals' work. *Societies, 5*(2), 537–565. <https://doi.org/10.3390/soc5020537>
- Runner, I. H., & Marshall, K. (2003). "Miracle survivors" promoting resilience in Indian students. *Tribal College, 14*(4), 15. <https://tribalcollegejournal.org/miracle-survivors-promoting-resilience-indian-students/>
- Rutter, M. (1999). Resilience concepts and findings: Implications for family therapy. *Journal of Family Therapy, 21*, 119–144. <https://doi.org/10.1111/1467-6427.00108>
- School Act, R.S.B.C. 1996, c. 412. <https://www2.gov.bc.ca/assets/gov/education/administration/legislation-policy/legislation/schoollaw/revisedstatutescontents.pdf>
- Shaw, J., McLean, K. C., Taylor, B., Swartout, K., & Querna, K. (2016). Beyond resilience: Why we need to look at systems too. *Psychology of Violence, 6*(1), 34–41. <https://doi.org/10.1037/vio0000020>
- Simon, S., & Gibson, M. T. (2019). Principal resilience and vitality in extremis: The scenario of involuntary occupational dissolution. *International Journal of Educational Management, 33*(4), 709–720.
- Steward, J. (2014). Sustaining emotional resilience for school leadership. *School Leadership and Management, 34*(1), 52–68. <https://doi.org/10.1080/13632434.2013.849686>
- Toronto District School Board. (2020). *#TDSBWellness for staff*. <https://www.tdsb.on.ca/In-Person-Learning/Resources-During-Covid-19/Staff-Resources/TDSBwellness>
- Traynor, M. (2018). Guest editorial: What's wrong with resilience. *Journal of Research in Nursing, 23*(1), 5–8. <https://doi.org/10.1177/1744987117751458>
- Virtanen, M., Singh-Manoux, A., Ferric, J. E., Gimeno, D., Marmot, M. G., Elovainio, M., Jokela, M., Vahtera, J., & Kivimäki, M. (2009). Long working hours and cognitive function: The Whitehall II Study. *American Journal of Epidemiology, 169*(5), 596–605. <https://doi.org/10.1093/aje/kwn382>
- Walker, A. (2021). *Jamaican secondary school principals' work and occupational well-being*. [Doctoral dissertation, University of Western Ontario]. <https://ir.lib.uwo.ca/etd/7877/>
- Wallace, J. E. (2010). Mental health and stigma in the medical profession. *Health, 16*(1), 3–18. <https://doi.org/10.1177/1363459310371080>
- Wang, F., Pollock, K. E., & Hauseman, C. (2018). School principals' job satisfaction: The effects of work intensification. *Canadian Journal of Educational Administration and Policy, 185*, 73–190. <https://journalhosting.ucalgary.ca/index.php/cjeap/article/view/43307>
- Wang, F., & Pollock, K. (2020). *School principals' work and well-being in British Columbia: What they say and why it matters*. <https://edst-educ.sites.olt.ubc.ca/files/2014/07/Understanding-School-Principals-Work-and-Well-Being-BC-Final-Report-August-6-2020.pdf>
- Wang, F., Hauseman, C., & Pollock, K. (2021). "I am here for the students": Principals' perception of accountability amid work intensification. *Educational Assessment, Evaluation, and Accountability, 34*, 33–56. <https://doi.org/10.1007/s11092-021-09368-6>
- Ward, M. (2020, March 12). Child abuse a big concern during COVID-19 outbreak. *CTV News*. <https://www.ctvnews.ca/health/coronavirus/child-abuse-a-big-concern-during-covid-19-outbreak-1.4862149>
- Werner E. (1995). Resilience in development. *Current Directions in Psychological Science, 4*(3), 81–85. <https://doi.org/10.1111/1467-8721.ep10772327>

Werner, E. E., & Smith, R. S. (2001). *Journeys from childhood to midlife: risk, resiliency and recovery*. Cornell University Press.

Windle, G. (2011). What is resilience? A review and concept analysis. *Reviews in Clinical Gerontology, 21*(2), 152–169. <https://doi.org/10.1017/S0959259810000420>