

Cultivating Resilience During the COVID-19 Pandemic: Voices from Principals in the U.S.

Rebecca Cheung 


University of California, Berkeley, USA

Meg Stomski 


University of California, Berkeley, USA

Aukeem A. Ballard* 

University of California, Berkeley, USA

Chunyan Yang 

University of Maryland, College Park, USA

Özge Hacifazlıoğlu 

University of California, Berkeley, USA

Abstract

At the height of pandemic-era procedures amidst great changes and uncertainty, school principals across the world were challenged to navigate and restructure ways to lead their schools. While leveraging crisis management leadership, principals needed to be attentive and adaptive to the emotional wellbeing and health of their employees. Today scholars are beginning to understand how school principals navigated the challenges presented by the COVID-19 pandemic and to explore the tensions principals experienced as they attempted to balance equity, excellence, and accountability while being mindful of both the wellbeing of students, families, and teachers, and their schools' outcomes. However, there is still limited research examining principal wellbeing

Article Info

Article History:

Received:

October 3, 2023

Accepted:

October 22, 2024

Keywords:

principal wellbeing,

risk & resilience,

COVID-19

Pandemic, school

leadership, ecological

system theory.

*Corresponding author

E-mail: aukeem@berkeley.edu

alongside resilience factors during the COVID-19 pandemic. In order to understand ways in which principals build resilience during the COVID-19 pandemic, this paper examines the perceptions of work-related stressors of public-school principals in the state of California and the strategies that these principals used to cultivate resilience. We employ ecological system theory to examine how principal wellbeing is influenced by the interaction of their surrounding systems. Our results indicate a complicated, synergistic web of wellbeing that converges among systems, relationships, mental health, and moral/ethical foundations that work to construct and constitute factors of resilience which nurtures their wellbeing. Implications for policy, practice, and research are discussed.

Cite as:

Cheung, R., Stomski, M., Ballard, A., Yang, C. & Hacifazlıoğlu, O. (2024). Cultivating resilience during the COVID-19 pandemic: Voices from principals in the US. *Research in Educational Administration & Leadership*, 9(4), 513-548. <https://doi.org/10.30828/real.1365814>

Introduction

The COVID-19 pandemic dramatically impacted the work of school principals and leadership practice. Over the past four and a half years, principals have been faced with the challenge of leading amidst great changes and uncertainty (Harris & Jones, 2020). Principals need not only to engage in effective communication and facilitate sensemaking amidst uncertainty, but also be attentive to the emotional wellbeing and health of their employees (McLeod & Dulsky, 2021). However, the recent pandemic crisis differs from other catastrophic events in its year-long impacts and how they unequally affected individuals and communities. Therefore, principals were put in a position not only to practice crisis leadership (Grissom & Condon, 2021) but also to lead



schools for equity—an unprecedentedly challenging role for many leaders. Furthermore, in many states in the U.S., principals also faced financial constraints, anticipated state budget reductions, and had to cope with remote instruction for the majority of the 2020-2021 school year—a set of particular challenges that arose in the state of California. In such circumstances, the responsibilities of principals have to expand to accommodate the ongoing challenges, and that can inadvertently undermine leader and principal wellbeing.

With some urgency, scholars worked to understand how principals navigated the challenges faced during the pandemic (Fernandez & Shaw, 2020; McLeod & Dulsky, 2020; Netolicky, 2020). Notably, Netolicky (2020) explored tensions that principals experienced when implementing the pandemic-era form of schooling as they adapted their leadership to balance equity, excellence, and accountability while being mindful of the well-being of students, families, and teachers and attending to school outcomes. The various demands principals faced throughout the period put them in jeopardy of high levels of stress and, ultimately, burnout. This is particularly concerning as the levels of stress and burnout magnified the already increasing rate of principals leaving the profession. For instance, according to the National Association of Secondary School Principals (NASSP; December 2021), the pandemic conditions contributed to alarming rates of principals expected to leave the profession. Specifically, they found that 4 out of 10 surveyed principals were planning to leave the profession within the subsequent three years. To minimize the already high levels of stress, burnout, and turnover of principals, it is imperative to better understand ways to support the resilience of our principals.



The purpose of this study is to examine ways in which principals cultivated resilience during the pandemic. We sought to answer to the following questions:

- What kinds of work-related stressors did school leaders encounter during the COVID-19 pandemic?
- How did school leaders cultivate resilience as they led their schools during the COVID-19 pandemic?

Our investigation was guided by the ecological systems theory and risk and resilience framework in order to best understand how principals cultivate resilience across the different levels of their surrounding ecological contexts whilst fostering their wellbeing in a period of uncertainty and crisis.

Theoretical Framework

Principals, as the heads of school communities and representatives within the district, are influenced by a synergistic web encompassing the surrounding ecological contexts in which they work. Thus, we employed the ecological system theory (Bronfenbrenner & Morris, 2006) to examine how school leader's wellbeing is influenced by the interaction of their surrounding contexts with a focus on resilience as a primary driver towards wellbeing. In our study, Bronfenbrenner's articulation of the various systems becomes particularly useful when investigating an already complex endeavor made critically complex by natural disasters and urgent situations. Additionally, we employ a risk and resilience framework to understand how principals cultivated resilience to overcome the stressors present in the COVID-19 context. These two conceptualizations work in tandem to elucidate which contextual factors might protect leaders from certain risks leading to



burnout within their role while moving to offer a framework for how principals navigate and negotiate their wellbeing as they move through and among various levels of their ecological systems.

Resilience of School Principals

Recent educational research has turned to resilience to combat the high levels of risk factors experienced by both educators and principals. Resilience, in leadership literature, can be understood as “a relative, evolving, and dynamic social construct that seeks the adaptation and positive development of individuals in the face of difficult circumstances” (Day & Gu, 2013). When examining the development of resilience in principals, the literature on leadership resilience suggests that individual factors such as academic optimism, trust, hope, and ethical purpose have been found to be qualities of resilient principals (Day, 2014). Furthermore, research on resilience among educators suggests that in addition to individual factors, the impact of contextual factors such as policies and the school climate within which they operate can impact the development of individual resilience (Harrison, 2012). Therefore, similar to educator resiliency, when making sense of principal resiliency it is important to adopt an ecological view to understand their experiences within broader social, cultural, and political arenas that either challenge or foster their resilience. Despite the growing literature on leadership resilience, there is a scarcity of research examining principal resilience as a factor in combating the stressors faced by principals during the COVID-19 pandemic. Understanding how to best support principals in the context of the pandemic through a resilience lens may help us better prepare for future extreme conditions that schools could possibly face.

In a recent turn to broaden concepts of resilience, researchers have urged inclusion of the contextual and environmental factors that shape



the experiences of resilience and risk for educators (Edwards, 2007; Moos et al., 2011). The conceptual development suggests the need to understand principal wellbeing not just by the individual's inner workings, but also by how the individual principal engages with a synergistic web of interconnected factors including stressors, contexts, interactions, and various resilience tools. Gurr and Drysdale (2007) highlight the power of networks in providing the capacity for personal growth and resilience. Whilst leaders can be introduced to new ideas for new experimentations through these different networks, they may serve as a safe zone providing stability, support, trust, and security.

Existing literature currently focuses on the individual level or conceptualizes resilience as individual characteristics or traits rather than a process situated within a broader context of interacting systems and levels that confer meaning and material conditions upon the individual. Thus, there is a lack of empirical understanding of the resilience process in an ecological framework that would render a thorough understanding of how individuals process and navigate stressors and resilience as one of the primary forms of principal wellbeing.

Ecological Systems Theory of Education

Bronfenbrenner (1979) theorized an ecological systems model for child development as a framework for understanding a broader conceptualization of human development that started with recognizing the role of the environment on development as well as implications for how researchers study development. The most recent iterations of the Ecological Systems Theory of Development (Bronfenbrenner & Morris, 2006) become particularly useful for understanding the multiple intersecting and co-constitutive forces that make up the context of any actor within the field of education. Given



the lack of attention regarding the experiences of principals during the pandemic, Bronfenbrenner (1979, 2006) offers a potent framework for understanding how an individual develops inside and in negotiation with the multiple, interacting, constitutive components of the environment around them. Additionally, the interactions between the individual and multiple aspects of their ecology become of critical importance as researchers endeavor to more fully understand and support the work of principals. For principals, the material fruition of the components differs, but the framework of how those components interact with one another to form the total development of the individual does not.

Principals do not operate within the narrow confines of their school spaces, which Bronfenbrenner conceptualizes as microsystems (Bronfenbrenner & Morris, 2006). Indeed, the nature of the principal's role requires that the individual occupying said role interacts with all actors within their immediate contexts in what Bronfenbrenner's model would conceptualize as mesosystems such as students, teachers, staff interactions while also engaging with social structures (exosystem) that are not directly interacting with the principal on a day-to-day basis but still influence their overall development and wellbeing. According to Bronfenbrenner, the manifestations of the exosystem (e.g., district apparatus, federal department of education, media, and in some cases state officials) also mediate the experience of the individual. While Bronfenbrenner constructed a framework to understand child development, the main tenets of his theory can be used to understand the multiple layers of systems that interact, resulting in any one person's development or, our use, wellbeing. Although Bronfenbrenner's ecological systems model has been mostly leveraged to understand the various interactions and linkages that



converge to give rise to a single organism's development, we employ the theory to also make sense of the individual's development around particular psychological functions such as resilience in their overall wellbeing. Based on this perspective, this study will examine the ways in which context plays a role in principals' experiences in the complex and dynamic contexts in which they are expected to adapt and take action. This leads us to relate to the notion of resilience, which lies at the "interface of person and contexts, where principals use strategies to enable them to overcome challenges and sustain their commitment and sense of wellbeing" (Volet, 1999).

To effectively situate principal resilience and stressors as one synergistic slice of their wellbeing, we bring Bronfenbrenner's ecological systems theory of development together with recent conceptualizations of resilience theory of education practitioners to honor the lived experiences of principals as they navigate their own environments and factors that might be constitutive of their wellbeing. We submit a framework that not only considers the individual and its accompanying environment, but also the interactions that individual has with their environment, and how those interactions might be part of a broader system that helps researchers consider resilience as not just a trait pertaining to the individual's capacities to respond to adverse circumstances and conditions.

The Study

This research endeavors to explore how principals cultivated resilience as they led their schools during the COVID-19 pandemic. We investigate this question by advancing a theory that sees resilience as a product of personal and professional interactions, navigating through beliefs, structure, systems, and conditions that, in turn, are influenced by factors in the micro, meso, exo, and macrosystems.



Together, these systems enable researchers to more fully honor the lived experiences of school principals in a way that sheds light on how school principals faced risk factors associated with their roles while pursuing and fashioning multiple forms of resilience.

Methods

Participants

The study is based on convergent mixed methods research design (Creswell & Creswell, 2018) in which follow-up qualitative research questions were administered in a second wave survey to find answers to questions raised in a previously analyzed survey implemented as part of the first-wave of research. Data was collected online in the fall of 2021 from 209 (67% female; $n = 141$) K–12 active school principals in California. The data used for the present paper was part of a larger research project examining principal's risk and protective factors throughout the COVID-19 pandemic. The racial/ethnic background of our participants was as follows: 5% Asian/Asian Americans, 7% Black or African American, 61% Caucasian/White, 16.5% Hispanic/Latinx, 10% Multiracial, and 1% Native American. With regards to educational background, 8% of our participants held a bachelor's degree, 77% held a master's degree, and 11% held an EdD or PhD. No specific information regarding the leaders and their school profiles is provided to ensure the privacy of the participants, and researchers followed all the ethical procedures in the data collection and analysis procedures mentioned in the remaining parts of this article.

Procedures

Our team used a snowball sampling method to recruit principals through alumni and director networks, California Department of Education listservs, social media, and e-mails from research team

members. Participants' demographic information and survey responses were collected using the university's online survey platform. All procedures were approved by the institutional review board at the author's affiliated university.

In accordance with a convergent mixed methods approach (Creswell & Creswell, 2018), data used for the current analysis were drawn from a Likert scale measure on stressors experienced by principals as well as from two open-response questions on additional stressors and principal resilience. The first open-response question followed the Likert scale measure on stressors and asked: *"Are there any other stressors you would like to share about that you have experienced in the 2021-2022 school year? Please describe."* The second open-response question appeared at the end of the survey and asked: *"We'd like to learn from your personal resilience strategies during these unusual times. Please tell us about the strategies you used to support your resilience during the pandemic and if possible, what made these strategies successful."*

Having collected the data, the research team analyzed the Likert scale stressor terms using descriptive statistics. The open-response stressor and resilience data were analyzed using a descriptive thematic analysis procedure (Braun & Clarke, 2006), comprising the following stages: *"familiarizing oneself with the data, initial code generation, identifying themes, reviewing themes, defining and naming themes"*. Two doctoral student researchers created a codebook to describe the principals' various resilience factors. They then separately coded all the open-ended responses and met to resolve inconsistencies by using a negotiated agreement approach (Campbell et al., 2013). Once the coding process was complete, the code labels were grouped to generate sub-themes of both factors using thematic analysis. One of the researchers in the project team analyzed the emergent themes in



comparison with the codes and categories developed in the final codebook. After a series of data analysis meetings, the project team finalized the analysis and labeled the themes and sub-themes in conjunction with the research questions (Braun & Clarke, 2006). During these meetings, we challenged both our thinking and our interpretation of the data (Maxwell, 1996) whilst specifically focusing on the words and phrases used in the data. With these collection and analysis procedures, any issues of bias and validity were addressed.

Positionality

While the authors of this study come from various backgrounds, it is important to note that our diversity and various social locations within the field of education constrain complete objectivity. Yet, we also note that our combined, diverse sets of identities and social locations afford a depth of insight, familiarity (Bourke, 2014), and attention to the voices and experiences of school principals—a role that some of the authors have previously occupied. As many of us are former educational leaders, we recognize that some of us have particular proclivities toward attending to issues of resilience, justice, and equity in educational leadership practice. Further, we all come to the data with a certain attention to the ways in which the systems mediate actors within the field as they engage in their roles which may work to afford a constructionist approach to a thematic analysis (Braun & Clarke, 2006). While our diverse backgrounds and experiences may signal potential biases, the range of experiences (psychologists, researchers, and former public school leaders and teachers) also affords reliable checks to potential biases. Additionally, our collective familiarity with the normative contexts of people in the roles occupied by our participants provides us with insight into how to pose certain questions, investigate certain patterns, and detect nuances in



participant responses. Finally, we note our differences in theoretical and conceptual areas of expertise. While the various differences could constrain a level of agreement in some areas, our divergent areas of expertise afford a more nuanced conceptualization and analysis than would otherwise be had with a singular theoretical approach to the data. The result is the aforementioned development of an ecological framework of resilience towards principal wellbeing. Taken together, the aforementioned factors provide conditions for a thorough and cogent analysis of the data.

Results

The findings are presented in two sections: First principals' perceptions of risk factors were revealed within the frame of work-related stressors. Then we share the strategies used by the principals by showing the ways in which they cultivate resilience during a challenging time and context. Within each section, the stressors and resilience factors at the personal, micro-, macro-, and exo-system levels are explored in order to answer the overall research question: How did school leaders cultivate resilience as they led their schools during the COVID-19 pandemic? The following model conceptualizes the risk and resilience factors that influence principal well-being mapped onto the ecological systems model. Each part of this model will be further explored in the following sections.

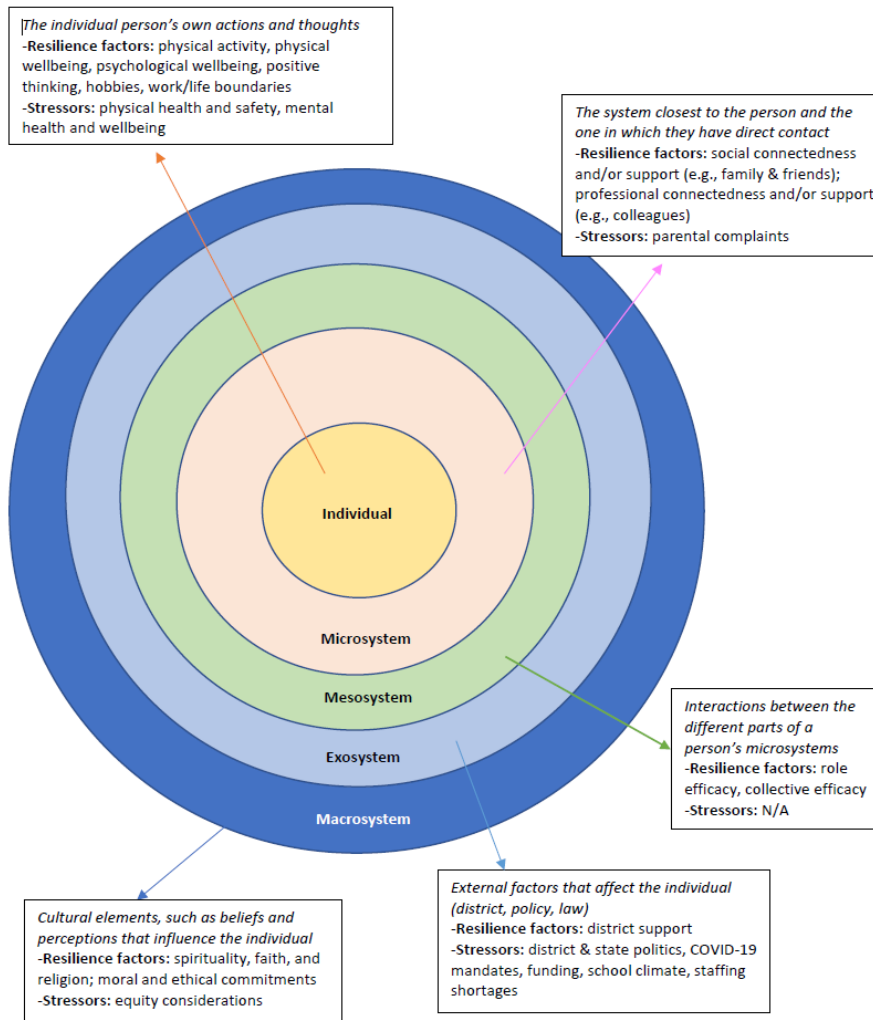


Figure 1. An Ecological Analysis of Principal Risk and Resilience

Risk Factors

Figure 1 shows the top seven stressors rated by our principals during the fall of 2021. We found that principals chose additional duties

surrounding public health mandates as the highest stressor. This was followed by staffing shortages, implementing/ communicating/ reinforcing pandemic-related policies, and meeting the needs of the school community as additional stressors, respectively. In comparison, the top stressors from the first wave survey collected in the spring of 2021 were: 1) reopening of schools as the highest stressor; 2) meeting the needs of the school community; and 3) stress related to technology-related issues. The shift in the highest-ranked stressors across a mere few months shows the evolving and expanding role of leadership across the different waves of the COVID-19 pandemic. Additionally, these findings elucidate the impact of staffing shortages across education and how it contributed to the jeopardization of principals' wellbeing.

When interpreting how the top-ranked stressors map onto the ecological systems model, it is evident that many of the leading stressors occurred at the exosystem (i.e., organizational factors that relate to the principal's work) followed by the individual level. Two of the top seven stressors, "my physical health and safety," and "my mental health and wellbeing" occurred at the individual level; these factors have a direct impact on the principal's wellbeing. Interestingly, the remaining five highest-ranked stressors (additional duties surrounding public health mandates, implementing, communicating, and or enforcing pandemic-related policies, issues related to school climate, and staffing shortages) all occurred at the exosystem level. The heavily ranked stressors at the exosystem level suggest that many of the most intense stressors experienced by principals were decisions and issues where the principal is not an active participant but were events or decisions that affect what would happen in the surrounding settings containing the principal. Given that principals may have less

direct agency in navigating risk factors that occur at the exosystem, it is important for schools and districts to understand how to mitigate these risk factors at the system level.

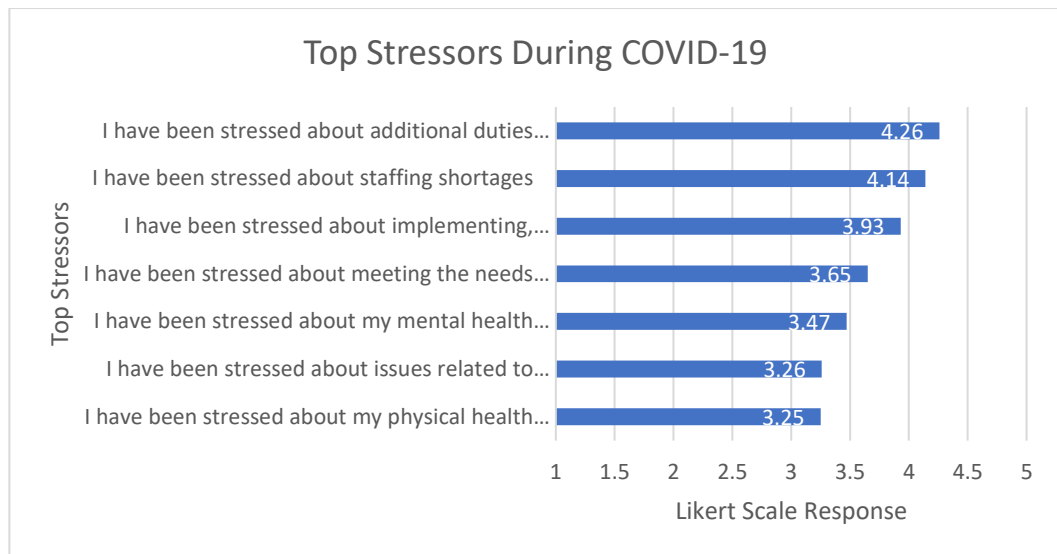


Figure 2. Top seven responses to the Likert scale items measuring principal stressors during the fall of 2021.

In addition to the Likert scale items, approximately a third of the leaders (29%) who completed the open-response question on additional stressors shared that they were stressed about district politics and organizational structures and practices. One principal shared:

The district communicates belief in principals but are relying on old dysfunctional ways some departments are run that perpetuate the same old patterns before school shut down. That is most



disheartening—when site leaders are expected to do a lot more while being held accountable, but central leadership support departments don't have consistency in their ability to deliver central support (Principal 1).

Another principal shared similar sentiments towards the district as well as the difficulties of staying in the profession:

After 22 years as a site administrator, this year is making me question how much longer I can sustain doing this work. I have never felt the sense of utter chaos and dysfunction from district and state leadership as I have this year. There is a total disconnect between the daily demands of site leadership in the pandemic and political expectations from above (Principal 2).

In the two aforementioned quotes, the respondents note, of their own volition, the stress that is caused by district practices and policies. Specifically, Principal 1 highlights the difficulty felt when their support system (i.e., district roles) does not deliver on the espoused value they see in their principals. For this respondent, like the other (29%) principals who highlighted district practices, policies, and organizational structures as major stressors, there seems to be a connection between the microsystem and the mesosystem (i.e., site-specific responsibilities) and the influence of the exosystem (i.e., policies and politics). By only examining the stressors named, we begin to see that different systems engage and converge upon the site of the individual to influence their wellbeing. It is important to note that even with stressors already listed on the Likert scale items, roughly a third of the respondents named, of their own accord, district politics and organizational structures and practices as a stressor in response to the open-ended response. This might indicate the heightened role that a



particular stressor played in the work of principals at the time of the survey.

Resilience Factors

Results from a thematic analysis of the open-ended responses on resilience show that principals find their resilience across various levels of the ecological system (see Table 1 in the Appendix). Almost half the principals (44.8%) were found to navigate resilience at the individual level of the ecological system, utilizing strategies such as physical activity, physical wellbeing (i.e., sleep, healthy eating), mental wellbeing (i.e., therapy and counseling), positive thinking, hobbies, and maintaining work-life boundaries. For example, one principal noted *“I’ve intentionally strengthened boundaries between work and home life, limiting the hours my phone is on. I’ve worked to increase my time spent on hobbies and other outside activities that give me joy, so work isn’t the only way I am fulfilled”* (Principal 3). As highlighted in this quote, many principals utilized personal-level factors that they have direct control over and set firm boundaries between their personal and professional lives to develop resilience in their work as principals.

Some principals (34%) reported using various microsystem level factors of support, or their direct support networks, to find resilience. These factors include support and connectedness from friends and family, and professional support and connectedness from colleagues and the school community. For instance, one principal shared:

There have been a few peers in my district and that are in other schools that I can reach out and talk. We share similar experiences and deal with similar issues. Finding a bit of time to call, email, laugh and joke about work and life helps bring perspective. Without these colleagues

who are going through what can only be called uncharted waters I would consider walking away (Principal 4).

Similarly, another principal shared how they gained resilience from their familial microsystem when they responded with “[I] gain strength from my immediate family. Knowing I will be home with those who love me and care for me each day after work is huge” (Principal 5). As displayed in this quote, many principals appear to lean on their interpersonal relationships, both inside and outside of the school, to foster a sense of resilience within their professional lives. In particular, the first quote elucidates the importance of the bidirectional relationship between the individual and their microsystem, and how resilience is fostered through the strength of the connection between the two systems.

A few principals (11.2%) shared that they find resilience through their mesosystem, which is conceptualized as interactions between the different parts of a person's microsystems. This level includes factors such as role efficacy, or the potential effectiveness of an individual occupying a particular role, and collective efficacy, or a group's shared belief in their capability to effectively execute and attain a course of action. For example, one principal shared: “We rely on our administration team to continue to push our school forward during this time. We have developed a shared responsibility to our goals as a school.” Similarly, another principal shared “When I get most stressed about a new law or policy that has been dumped on us, I try to do my best to take a deep breath, evaluate, and do the best we can at the moment for our students and families, that is why we exist.” These principals both shed light on how a shared responsibility at the school level or their duty as a principal contributes to how they find their resilience during these critical times. Only one principal (0.3%) mentioned finding resilience through the exosystem (i.e., district, state,



and policies that exist outside of the day-to-day), while many responses from the risk factors noted the exosystem as a factor. This particular principal shares how they utilized a tool provided by the district, in this case, an organized book club, to build a sense of shared resilience across administrators: *“Our district has organized administrators and has been working through Elena Aguilar’s book Onward. This has helped put things into perspective as well as helped our staff develop resilience” (Principal 6).*

Finally, roughly 6% of principals mentioned finding resilience in their macrosystem, which includes broader cultural beliefs and shared perceptions such as spirituality, faith, and religion, and moral and ethical commitments. For example, one principal shared, *“My faith is a firm foundation for a positive, resilient attitude” (Principal 7).* Another shared how their moral ethical commitments to society contribute to their resilience: *“I try to stay focused on beliefs about education and its role in ending the inequities and racism in our communities. I use data to ground my emotions and remain logical” (Principal 8).*

Discussion

This study sought to better understand principal wellbeing through the lens of resilience during the COVID-19 pandemic with a specific focus on work related stressors and resilience strategies employed by the principals. Building on previous literature that suggests school leader wellbeing is becoming increasingly challenging in the face of an ever-stressful job with outsized demands on the leader (King et al., 2024), we approached the investigation by examining principals’ perceptions of work-related stressors as well as strategies used to support their resilience during the pandemic with a combined ecological systems theory (Bronfenbrenner, 1979; Bronfenbrenner &



Morris, 2006) of wellbeing. Conceptualizing a framework that understands resilience as both individual and ecological—while also part of structures that work to confer certain experiences on school leaders—we analyzed principal perceptions and navigation of work stressors and strategies for resilience as reported by 209 principals through a broader survey on principal resilience and wellbeing.

Our analysis of the open-ended responses regarding stressors and resilience yielded several compelling results. Principal stress factors in our study resided predominantly in the macro- and exosystems of the ecological model pointing to stressors from the system playing an outsized role in the ecology of wellbeing when compared to the contribution of stress factors across all systems of the ecological model (i.e. individual, micro, meso, exo, and macro). Specifically, district and state politics were named by respondents of their own volition when given the chance to name any stressors without said stressors being categorized by researchers. Secondly, and consequential to an ecological systems view of wellbeing, principals consistently reported a process of negotiation and navigation of high levels of stressors from ecosystem factors that afford little to no (0.3%) resilience tools or support. Further, the leaders in this study indicated that many of their resilience tools were built and sustained through professional support at the site (micro and meso) level. Given that exosystem deals with factors that reside outside of individual control yet affect the individual, the data suggests that individuals were accruing stressors from sections of the ecological model that afford little sources of resilience. This finding highlights the importance of *“process focused perspectives in resilience”*, which underlines the complex and dynamic contexts individuals are expected to *“adapt, act, and live”* (Volet, 1999; Stomski et al., 2022). In line with this definition, principals’ experiences



show us the ways in which resilience lies at the “*interface of person and contexts*”, struggling to cultivate their wellbeing while navigating in times of uncertainty. This leads us to the “*context focused perspectives of resilience*” (Beltman et al., 2011; Johnson et al., 2014), where leaders can cultivate skills and competencies in putting protective factors into practice in order to overcome risk factors and adjust to challenging contexts.

Lastly, the vast majority of principals (78.8%) reported resilience being conferred through the system levels closest to the individual (individual actions and thought and microsystems). This becomes crucial when considering that school leaders' direct supervisors (i.e., potential sources of support) are expected to be found outside of their school as their school sites are often seen as places where they should be offering support. This finding reminds us of the importance of person focused perspectives in resilience, where individual risk and protective factors should always be taken into consideration when constructing support structures for principals. Each principal's context is unique as well as one's personal circumstances. Therefore, our findings project the interplay between these systems, guiding us in the ways in which leadership preparation programs should support leaders from diverse backgrounds with unique individual needs.

The results from the resilience factors, paired with the stressors, help to round out the ecological framework in that not only are there clear leading resilience factors (i.e., tools and processes principals used that helped buffer against the stressors), but the evidence also suggests that the principals used concretized and material processes and tools to negotiate between resilience and stress as a means to navigate and safeguard the ecology of their wellbeing. Some principals relied on factors that rest at the individual level of the ecological system (i.e.,



physical activity, self-care, positive thinking, etc.), while others tended to rely on the microsystem (i.e., family, colleagues, and school communities). This new learning suggests the critical role school leaders play in academic improvement (Leithwood et al., 2004), which needs more nuanced attention to the ways individuals develop their sense of wellbeing which in turn affects their efficacy (Sogunro, 2012).

Contributions to Research, Practice, and Policy Implications

Principals continue to be crucial cornerstones of school success yet faced incredible challenges during the height of the COVID-19 pandemic (Harris & Jones, 2020). The results of this study build upon the research (Fernandez & Shaw, 2020; McLeod & Dulsky, 2021; Netolicky, 2020) that explores the intricacies of how principals continue to navigate the effects the pandemic has had (and continue to have) on their schools. In endeavoring to determine what constituted principal wellbeing and how it was negotiated during the COVID-19 pandemic, with a specific focus on the stressors and resilience strategies the principals employed, the research here implicates a host of considerations for research, practice, and policies regarding principal wellbeing—a factor crucial to the success of the schools which are entrusted to them.

Contributions to the Field of Education Research

While research continues to make sense of the correlations between various factors associated with the duties and experiences of principals, research can further support substantive and rich understandings of how principals process, navigate, manage, and function within and between those factors, not only as singular psychological functions but as subjects in an ecology of wellbeing. The results of this study open new doors to understanding the



interconnectedness of resilience tools among various systems and structures that constitute the public-school leaders' professional apparatus and efficacy. Yet, the evidence suggests a need to interrogate previously accepted notions of school principal resilience towards wellbeing that are predominantly associated with factors that are either under individual control or external material resources (Cherkowski & Walker, 2016; Kutsyuruba et al., 2024). Further, inquiry into the intimate duality and interaction of stressors and resilience tools is warranted to accurately and precisely explain the complicated, inter-enmeshed nature of principals' experience and processing as professional subjects in an ecological tapestry of psychological wellbeing. In doing so, researchers might investigate the decision-making and navigation web of principals as they respond to intensely demanding and challenging times that are, unfortunately, likely to resurface in a different form. The results of this study suggest that wellbeing through resilience could be more deeply understood as a multi-directional, multi-level nexus of professional and personal subjectivity. That is, the results of this study expand the field's current capacity to fully ascertain the constitutive forces that index principal wellbeing during times of duress and extreme difficulty. The investigation of such decision-making and navigation could help elucidate the ways in which educational research might cultivate inquiry that is as complex as the constructs addressed in this study. In bringing together the multi-level and multi-directional sensibilities of an ecological model of wellbeing, research can illuminate not just the individual leader's mind in the social, but also the way the mind and the social intimately refract off one another.

Further, the results from this study indicate a connected web of resilience factors that show how principals pull from a variety of

spaces, resources, tools, and strategies that at times are simultaneously located in singular levels of the ecological framework. While the data in this study indicates that only 5.7% of principals directly associated their resilience with the macro system, an understanding of the ways specific levels are interconnected in their structures and material realities could benefit from more research that might yield insight into the various levels of constructed, contested, (re)produced, and imagined experiences. In doing so, researchers might investigate connections both at the site of the individual as well as the ethos and mores found at the chronosystem (the COVID-19 pandemic context itself) and the macro system, which is comprised of spirituality, faith, moral and ethical commitments, and equity considerations—the levels that were not explored in-depth in this study. In developing such a study researchers might ask ‘Do certain systems in the ecological systems theory operate as conditioners for how the individual experiences the other systems?’

While there are potential implications for research, there are some limitations to a study of this nature. First, our study did not perform in-depth interviews which might provide more understanding of how principals make sense of the phenomena presented in this study. Certainly, our participants noted very compelling explanations of their processes, tools, and broad reflections. However, more understanding of principal sensemaking, of how they negotiate and navigate the various levels, as well as the challenges that underpin the unique tie between the social and the individual apparatus, might usher more viable solutions to sustaining school principals towards flourishing (Kutsyuruba, Kharyati, and Arghash, 2024).



Implications for Policy and Practice

While research can continue to support our understanding of principals, there are implications from this research for how public schools as an apparatus and system might buffer the effects the pandemic is having on principals as well as their role in general. A major finding of this study sheds light on how principals experienced stressors at the singular level of the mesosystem (district policies, politics, new mandates, state policies, etc.) and yet few of their tools for resilience were located or experienced at that level. What is the role of school systems in supporting the resilience of its principals? School districts can provide coaching and support at the district level or institute a peer support and community-of-practice program where principals get time away from their school sites. The need for crisis leadership will likely continue beyond the COVID-19 pandemic. Additionally, we ask: How can systems anticipate the need to support principals through additional crises? States and districts can ensure that their mandates are aligned with the needs of schools as a whole without overlooking the specific consequences those mandates might have on principals. Districts and states should seek the perspectives of principals to inform emergency response task forces and crisis advisory boards that plan future emergency response protocols. The resilience of leaders should be considered as a major consideration when creating new emergency response policies. Taken together, these implications further reinforce a call to revise the ways in which structures can be established to support principals in accomplishing the difficult goals and charges set forth by their authorizers. We submit that a multifaceted approach to understanding principal resilience that is more inclusive of total wellbeing can afford new tools with which principals can achieve educational excellence for all students in their charge. Our study serves as a call for incorporating a multidisciplinary



approach to conceptual and theoretical perspectives on school leadership, which could open pathways to discover models to support the signature practices in leader preparation whilst moving the field of educational leadership forward both theoretically and in practice.

Principal resilience needs to be reframed as more than a case of individual fortitude or determination. Rather, principal resilience is highly influenced by the context of the role. Thus, if the system can be redesigned to prioritize principal resilience, more principals will experience higher levels of resilience. Yet, the results of this study indicate that the majority of school principals find their hope and resilience in contexts and factors that exist at the site of the individual actor as well as the microsystem that immediately surrounds them. Such a finding indicates that resilience factors are continuously being negotiated alongside the experience of principals. Policies that decenter uniform regulations and center instead a flexible, personalized approach could help buffer the strains reported by principals. One such policy could be mandating that districts give principals resources to spend more time with their school sites in generative and uplifting ways by providing much more district support for school operations, finance, and logistics. In times of crises, districts could activate their office personnel who were former school admin to coach other district staff in taking on creating verbiage for messages from schools to families; handling the coordination of attendance records and follow-ups with truancy; running the meal programs for students; etc. Additionally, district policies might benefit from having designated emergency response teams where certain district staff have 'on duty' shifts where they can answer questions principals have in times of unpredicted chaos and intensity. To support principals in fulfilling their roles rather than the idealized



‘superhero narrative’, researchers, practitioners, and policymakers can benefit from listening to principals as the system reacts and reels from a devastating pandemic.

Conclusion

Schools, principals, district, and state education departments are continually faced with a lack of resources and yet an increased set of expectations (Oskolkoff, 2019) to deliver on America’s promise of an education that is free at the point of entry, open to all, and is the cornerstone of the great equalizing variable in the American dream (Robinson, 2010). The results of this study indicate that principals are not only faced with feeling an immense weight in delivering America’s promise in a way that supports the superhero trope (Sutton & Gong, 2021), but affirm previous research that finds school principals experience continual stress (Kuing, Harris, and Vales, 2024) from the expectations and navigation of their role. The data here suggests that various factors of wellbeing exist in and outside of principal’s immediate day-to-day interactions while prompting principals to enlist their same day-to-day material conditions as the primary resources for resilience. Due to the complex interconnectedness of our data regarding stress and resilience, we leveraged an ecological systems theory of development to conceptualize an ecological model that might account for factors both within the individual as well as interactional with societal factors (Christensen, 2016). In heading the call of previous researchers, our inquiry provides new inroads into a nuanced understanding of “the individual’s role and behavior in relation to the context surrounding them on different levels” (Christensen, 2016). While Bronfenbrenner’s original framework (1976) still provides a cogent analysis of different levels that mediate the individual’s development, our results demonstrate a need to



expand the ecological model to account for more than resilience (Christensen, 2016), while not assuming the individual is the sole source of the development and maintenance of wellbeing.

Accordingly, our results show how school principals navigate in times of uncertainty and crisis as “risk-takers, who actively seek out new opportunities, experiences, and challenges for their schools to learn and achieve” (Day, 2014). Their ability to develop resilience enables them to cultivate their capacities to lead as well as opening pathways for their teachers and staff to build resilience. However, as was emphasized by Sablo and Gong (2021), “resilience alone does not necessarily lead to change. School leaders who are committed to change must also engage in a critical analysis of the unjust systems that shape inequitable outcomes at their sites in order to sharpen their equity lens and sustain themselves in the work of social justice leadership.” Our results take note of Sablo and Gong’s assertion and further indicate that change will require the leaders of state, county, and district public school institutions to engage in an equally vital and potent critical analysis of the very unjust systems that education institutions steward. Lastly, the results presented here highlight the need for action-oriented research studies that might be implemented in collaboration with public school districts as well as education leadership programs at universities as a means for creating networks of support among school leaders—ultimately leading principals to develop individual and collective resilience whilst providing opportunities for research-informed practices of change in school contexts. Californian leaders’ experiences in this study are also expected to bring insights to the international scholarship and practice as to how leadership can be cultivated in challenging times no matter how hard the conditions are.



Acknowledgement:

This project is based on the “21st Century California Leadership Academy Principal Resilience Project” with the grant received from California Department of Education(006376). The authors also thank school leaders who took time out of their incredibly demanding roles to participate in this study.

References

- Bautista, V. & Gretchen, O. (2024). *Building a school leader’s personal well-being plan*. B. Carpenter, J. Mahfouz & K. Robinson (Eds.). *Supporting leaders for school improvement through self-care and wellbeing* (53-71). Information Age Publishing.
- Beltman, S. & Mansfield, C. A. (2011) Price Thriving not just surviving: A review of research on teacher resilience. *Educational Research Review*, 6, 185-207.
- Bourke, B. (2014). Positionality: Reflecting on the Research Process. *Qualitative Report*, 19(33), 1–9. <https://doi.org/10.46743/2160-3715/2014.1026>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3 (2), 77–101.
- Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology: Theoretical models of human development* (pp. 793-828). John Wiley & Sons.



- Bronfenbrenner. (1979). *The ecology of human development: experiments by nature and design*. Harvard University Press.
- Campbell, J. L., Quincy, C., Osserman, J. & Pedersen, O. K. (2013). Coding in-depth semi structured interviews: problems of unitization and intercoder reliability and agreement. *Sociological Methods & Research*. 42 (3), 294-320.
- Campbell, J. L., Quincy, C., Osserman, J. & Pedersen, O. K. (2013). Coding in-depth semi structured interviews: problems of unitization and intercoder reliability and agreement. *Sociological Methods & Research*. 42 (3), 294-320.
- Christensen, J. (2016). A critical reflection of Bronfenbrenner's development ecology model. *Problems of Education in the 21st Century* 69.1 22–28.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: qualitative, quantitative, and mixed methods approaches / John W. Creswell, Department of Family Medicine, University of Michigan, J. David Creswell, Department of Psychology, Carnegie Mellon University*. (Fifth edition.). SAGE Publications, Inc.
- Day, C. (2014). Resilient principals in challenging schools: the courage and costs of conviction. *Teachers & Teaching* 20(5), 638–654.
- Day, C., & Gurr, D. (2013). *Leading schools successfully: Stories from the field*. London: Routledge.
- Edwards, A. (2007). Working collaboratively to build resilience: A CHAT approach. *Social Policy and Society*, 6, 255–265.
- Fernandez, & Shaw, G. P. (2020). Academic Leadership in a Time of Crisis: The Coronavirus and COVID-19. *Journal of Leadership Studies* (Hoboken, N.J.), 14(1), 39–45.



- Grissom, J. & Cordon, L. (2021). Leading Schools and Districts in Times of Crisis. *Educational Researcher*, 50 (5), 315-324.
- Gu, & Day, C. (2013). Challenges to teacher resilience: conditions count. *British Educational Research Journal*, 39(1), 22–44.
- Harris, & Jones, M. (2020). COVID 19 - School leadership in disruptive times. *School Leadership & Management*, 40 (4), 243–247.
- Harrison, E. (2012). Bouncing back? Recession, resilience and everyday lives. *Critical Social Policy*. 1-17.
- King, K. B., Harris, A. & Vales, A. (2024). exploring the landscape of educational leader Wellness. B. Carpenter, J. Mahfouz & K. Robinson (Eds.). *Supporting leaders for school improvement through self-care and wellbeing*. Information Age Publishing.
- Leithwood, K., Louis, K.S., Anderson, S., & Wakhstrom, K. (2004). *Executive summary: How leadership influences student learning*. Wallace Foundation.
- Maxwell, J. A. (1996). *Qualitative research design*. Sage Pub.
- McLeod, & Dulsky, S. (2021). Resilience, Reorientation, and Reinvention: School Leadership During the Early Months of the COVID-19 Pandemic. *Frontiers in Education* (Lausanne), 6. <https://doi.org/10.3389/educ.2021.637075>
- Moos, L., Johansson, O., & Day, C. (Eds.). (2011). *How school principals sustain success over time*. Dordrecht: Springer.
- National Association of Secondary School Principals (2021). "NASSP Survey Signals a Looming Mass Exodus of Principals from Schools," News Release, Chicago, December 8.
- Netolicky. (2020). School leadership during a pandemic: navigating tensions. *Journal of Professional Capital and Community*, 5(3/4), 391–395.



- R. Lerner (Ed.) *Handbook of Child Psychology: Theoretical Models of Human Development*, Vol. 1. Hoboken, NJ.: Wiley & Sons, Inc.
- Rethinking the “Superhero” Principal Narrative. (n.d.). ASCD. Retrieved November 2, 2022, from <https://www.ascd.org/el/articles/rethinking-the-superhero-principal-narrative>.
- Sir Ken Robinson. (2010). Changing education paradigms. Ted.com; TED Talks. https://www.ted.com/talks/sir_ken_robinson_changing_education_paradigms.
- Sogunro, O.A. (2012). Stress in school administration: coping tips for principals. *Journal of School Leadership*, 22, 664-700.
- Stomski, M., Ballard, A., Yang, C., Cheung, R. & Hacifazlıoğlu, Ö. (2022). Risk and Resilience During the COVID-19 Pandemic: Voices from Principals. *University Council for Educational Administrators (UCEA) Annual Convention*, Seattle, November 16-19.
- Volet, S. (1999). Motivation within and across cultural-educational contexts: A multi-dimensional perspective. In T. Urdan (Ed.). *Advances in motivation and achievement*, T. Urdan (ed.) (pp. 185–231). Stanford, JAI Press.

Appendix

Table 1.
Resilience Factors by each level of the Ecological System

System	Resilience sub-themes	Examples of Quotes from Principal Participants	Percent
<p>Individual</p> <p><i>the individual person's own actions and thoughts</i></p>	<ul style="list-style-type: none"> -physical activity -physical wellbeing -mental wellbeing -positive thinking -hobbies -work/life boundaries 	<p><i>"I've intentionally strengthened boundaries between work and home life, limiting the hours my phone is on. I've worked to increase my time spent on hobbies and other outside activities that give me joy so work isn't the only way I am fulfilled."</i></p>	44.8
<p>Microsystem</p> <p><i>the system closest to the person and the one in which they have direct contact.</i></p>	<ul style="list-style-type: none"> -social connectedness <ul style="list-style-type: none"> • friends and family -social support <ul style="list-style-type: none"> • friends and family professional connectedness <ul style="list-style-type: none"> • colleagues and school community professional support <ul style="list-style-type: none"> • colleagues and school community 	<p><i>"There have been a few peers in my district and that are in other schools that I can reach out and talk. We share similar experiences and deal with similar issues. Finding a bit of time to call, email, laugh and joke about work and life helps bring perspective. Without these colleagues who are going through what can only be called uncharted waters I would consider walking away"</i></p> <p><i>"Gain strength from my immediate family. Knowing I will be home with those who love me and care for me each day after work is huge."</i></p>	34



<p>Mesosystem</p> <p><i>interactions between the different parts of a person's microsystem</i></p>	<p>-role efficacy</p> <p>-collective efficacy</p>	<p><i>"We rely on our administration team to continue to push our school forward during this time. We have developed a shared responsibility to our goals as a school".</i></p> <p><i>"When I get most stressed about a new law or policy that has been dumped on us, I try to do my best to take a deep breath, evaluate, and do the best we can at the moment for our students and families, that is why we exist."</i></p>	<p>11.2</p>
<p>Exosystem</p> <p><i>external factors beyond the daily interactions that affects them (e.g., district, policy, law)</i></p>	<p>-district support</p>	<p><i>"Our district has organized administrators and has been working through Elena Aguilar's book "Onward". This has helped put things into perspective and well as helped our staff develop resilience."</i></p>	<p>0.3</p>
<p>Macrosystem</p> <p><i>cultural elements such as beliefs and perceptions that influence the individual</i></p>	<p>-spirituality, faith, and religion</p> <p>-moral and ethical commitments</p>	<p><i>"My faith is a firm foundation for a positive, resilient attitude."</i></p> <p><i>"I try to stay focused on beliefs about education and its role in ending the inequities and racism in our communities. I use data to ground my emotions and remain logical and committed to outcomes."</i></p>	<p>5.7</p>



About the authors:

Rebecca Cheung is the Assistant Dean of Leadership Development programs at the UC Berkeley School of Education as well as the PI and Director of the 21st Century School Leadership Academy for the state of California.

E-mail: rcheung@berkeley.edu

Authorship credit details: Conceptualization, funding acquisition, investigation, methodology, project administration, resources, supervision, and writing review & editing.

Meg Stomski is a PhD candidate in the School Psychology at UC Berkeley where she focuses on quantitative analyses for the Principal Resilience projects. Her research interests are in improving school-based mental health practices and bullying victimization prevention and intervention.

E-mail: meg.stomski@berkeley.edu

Authorship credit details: Data curation, formal analysis, investigation, methodology, validation, visualization, writing original draft, writing review & editing.

Aukeem A. Ballard is a PhD Candidate at the Berkeley School of Education with a focus in Critical Studies of Race, Class, and Gender. Aukeem's current research focuses on the gendered and racialized educational experiences, conditions, and practices that constitute (and are shaped by) phenomena such as love, hope, healing, and courage.



E-mail: aukeem@berkeley.edu

Authorship credit details: Data curation, formal analysis, methodology, validation, visualization, writing original draft, and writing review & editing.

Chunyan Yang is an Associate Professor at the College of Education at University of Maryland, College Park. Dr. Yang's research interests focus on understanding risk and resilience, bullying and school violence, school-wide social and emotional learning (school-wide SEL), educator well-being, and youth development.

E-mail: yangcy@umd.edu

Authorship credit details: Conceptualization, methodology, project administration, and writing review & editing.

Özge Hacifazlıoğlu is an adjunct professor in the Leadership Programs at the Berkeley School of Education. She serves as a leader-scholar on leadership programs as well as the School Psychology PhD program. Dr. Hacifazlıoğlu's research focuses on higher education leadership; teacher education; school principal preparation; communities of practice; marginalized and underrepresented populations; and doctoral education.

E-mail: ofazlioglu@berkeley.edu

Authorship credit details: Conceptualization, methodology, and writing review & editing.