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School Administrators' Priorities for Legal Literacy Training

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Abstract

Legally astute educational leaders are essential to carry out any school's mission. This article relays their priorities and preferences concerning legal literacy training approaches. Their collective input offers clear support for real-life focused, contextually grounded legal preparation. Remarkably, only ten percent of the participants reported receiving the training approach the group so strongly recommended. Administrator-recommended instructional priorities consistent with problem-based learning (PBL) would emphasize contexts leaders are engaged in, inspire confidence in candidates, and complement the development of their professional sensemaking responsibilities.

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Introduction

Public education has increasingly been subject to a “changing policy universe where there are many competing demands and political pressures” (Orfield & Frankenberg, 2014, p. 718). During escalating challenges, school leaders regularly provide the first line of defense for legal concerns and other conflicts (Decker et al., 2019; Ghaffar & Naz, 2012; Salina et al., 2017; Stapleford, 2007). The literature on legal training has forecasted dire implications for ineffective local legal leadership, which amplifies the importance of continuously improving approaches to administrator legal preparation (Decker & Brady, 2016; Decker et al., 2019; Militello et al., 2009; Tie, 2014; Umpstead et al., 2016).

The legal reality American school leaders face is daunting. Even 25 years ago it was described as compliance-inspiring by Bull and McCarthy (1995 p.615), who offered how “the law is seen as prescriptive, placing limits on professional autonomy rather than creating a framework for expressing public values and decisions.” Even as predicted provocations intensify (Cunningham et al., 2019; Hughes, 2014; Hughes, 2019; Miller, 2018), uniformity with national training standards (NPBEA, 2015) and accreditation requirements generate more influence than legal training research (Grissom et al., 2019). Recognizing that standards and accreditation offer little beyond a call to action (Decker et al., 2019), multiple scholars (Bull & McCarthy, 1995; Decker & Brady, 2016; Decker et al., 2019; Militello et al., 2009; Schimmel & Militello, 2008; Schneider, 2020; Tie, 2014) have championed the systematic study of legal training to promote improved legal literacy among school personnel.

In an early effort to impact dispositions and spur professional growth, Bull and McCarthy (1995, p. 614) labeled it “professionally



inappropriate” for administrators to default to a “boundary-setting” mentality where they routinely shifted responsibility away from themselves and onto mandates deemed as beyond their control. The authors were critical that “school leaders do not feel ownership for the law” (Bull & McCarthy, 1995, p. 620) and advocated more active involvement, particularly while working through legal happenings, instead of merely acquiescing to the status quo. The publication of their positions contributed to increased dialogue and inquiry surrounding legal literacy through the “Knowledge Base Project” initiated by the University Council for Educational Administration (UCEA).”

At the time, Van Geel (1995, p. 640) foreshadowed the article’s transformational standing when offering: “It is a rare occurrence in the history of educational administration that we are provided simultaneously with a new view of the practice of administration and a new conception of administrator preparation.” As acknowledged by Cunningham et al. (2019, p. 75) UCEA has sustained this transformational direction in its call to push beyond the “traditional ‘reading and discussing’ approach to leadership preparation” which they labeled informational learning. This study sought to embrace the transformational learning emphasis foreshadowed by Van Geel (1995) and reinforced by Cunningham et al. (2019). This approach is vital to scholars such as Young (2015), who advocated focusing administrator training on the complexities of the 21st century.

As a former leader in special education, then district administration, and now a university trainer responsible for legal preparation, it has always been clear that effective legal leadership is not passive. Working collaboratively with others to collectively make sense of today’s unique challenges and local contexts has consistently proven vital to my success and that of those I have worked with. It has been



essential to efforts to establish and sustain a forward-thinking direction. While sensemaking is not a familiar term across the legal literacy literature, commentary within the literature has alluded to it, and experience has confirmed that it is the act that sets administrators apart from everyone else. Since the narrative surrounding legal literacy and the insights into effective training inform each other, they are referenced together throughout this article.

Legal Literacy

Legal literacy is a top training priority for educational leaders (Militello et al., 2009). While the literature lacks a universally accepted definition for its application to school administrators, there has been sufficient agreement over time to offer a working definition for this article. At its core, legal literacy has historically represented the compilation of educationally applicable legal knowledge combined with individually held insights into how legalities are processed within our institutions and across society.

These core descriptors were affirmed over 25 years ago by Bull and McCarthy (1995), who used the terms *legal product* to describe legal knowledge or content and *legal process* to depict the application of that knowledge. These core elements have long been supported by contemporary scholarship (Decker, 2014; Decker & Brady, 2014; Decker & Pazey, 2017; Decker et al., 2019; Schneider, 2020; Taylor, 2001). Although there is more work to be done, in the two-part legal product and legal process description articulated by Bull and McCarthy (1995) represents the accepted unofficial definition of legal literacy.

Of note, decades of shifting demands across society coupled with expanding expectations facing school administrators (Cunningham et



al., 2019; Fullan & Kirtman, 2019; Gilbert, 2017; Hughes, 2014; Hughes, 2019; Miller, 2018; Petty, 2016; Young, 2015) have effectively reshaped the role of a successful leader from a delegator to a facilitator. It no longer works for an administrator to bank on standalone policies, positions, or decisions. Constituents are far more likely to engage, question, and even challenge system leaders. Bull and McCarthy may not have predicted these developments. However, they did perceive both a need and a reluctance among administrators to personally engage stakeholders in the contextual realities described within the literature.

Changes in social norms coupled with the increased complexity administrators face continue to fuel the evolution of legal literacy. Legal literacy will always feature legal products and legal process, which have traditionally been addressed through a procedural lens that may not encourage administrators to engage others at an interpersonal level. The calling to facilitate legally impacting issues with a public increasingly disinclined to accept authority at face value is a challenge many leaders lack training for. As will be detailed later in this article, a sensemaking and conflict resolution responsibility has been taking shape. However, these interpersonal leadership strands still need to be added to an updated definition of legal literacy and also become a more prominent part of leadership training.

Legal Literacy Training

Solid empirical evidence supports the need for legal training (Militello et al., 2009) and champions the benefits of quality training (Decker et al., 2019). The literature on preparation has also become more focused on context's prominence in legally oriented situations (Decker & Brady, 2016; Decker et al., 2019; Militello et al., 2009; Schneider, 2020). Experience matters, however aspiring leaders typically hail from



teaching backgrounds and frequently lack exposure to the conflicts and issues that provide the early context for their future legal leadership efforts (Decker & Brady, 2016; Decker et al., 2019; Militello et al., 2009; Schneider, 2020). Legal literacy development is a complex and vital undertaking. In order to move beyond tradition and toward instructional innovation (Young, 2015), additional research is needed to help identify the most appropriate focus for legal literacy preparation and to determine the best approaches for future training. The primary insights from the literature are organized into three areas: 1. The importance of training, 2. The broadening focus of legal literacy, and finally, 3. A look at instructional methods.

Importance of Training

Fourteen years after Bull and McCarthy's article, Militello et al. (2009) published a comprehensive study completed in cooperation with the National Association of Secondary School Principals (NASSP). Confirming Bull and McCarthy (1995) before them, it was concluded that school administrators could better address many of the situations they faced if they had completed a comprehensive legal aspects course, kept current with legal updates, and received ongoing access to the district's legal counsel. Eight years later, Gilbert (2017, p.14) reported results from 43 participants who completed a modified version of the Principals' Education Law Survey (Militello et al., 2009) and concluded that a real-life approach such as "immersive simulation adds a layer of complexity and richness to traditional learning models."

Two years later, Decker et al. (2019) validated the perceived value of a quality legal aspects course for aspiring administrators. The study specifically targeted whether participants believed their training had given them greater confidence and empowered them to resolve legal challenges more successfully. The authors concluded that legal



training changed participants' attitudes and orientations toward approaching legal situations. Schneider (2020) interviewed ten K-12 principals and ten school law faculty members who drew attention to the need to overcome common weaknesses in most administrative candidates' classroom-oriented backgrounds. The readiness gaps Schneider (2020) identified only add credence to the importance of legal training and efforts to improve it through research.

Broadening Focus

Bull and McCarthy (1995) and Taylor (2001) presented early perspectives concerning potential over-emphasis on legal content and products. Bull and McCarthy considered it necessary to broaden the scope of legal literacy practices and, therefore, the overall focus of training to more thoroughly include legal process. While that position certainly included process viewed in a procedural sense, repeated reference to their preferred legal literacy outcomes demonstrated the authors were also envisioning process as entailing people skills, including problem-solving, conflict resolution, and demonstrating empathy toward others. This position was advocated at least in part because they foresaw a need to shift away from widespread compliance more towards a future where administrators stood to help shape legal realities (Bull & McCarthy, 1995).

Investigators have continued to focus on managing context and conflict in effective legal literacy (Decker, 2014; Decker & Brady, 2016) and acknowledged that administrators are generally more deeply engaged in local school realities than attorneys. In concert with the two-part *product* and *process* paradigm referenced here, researchers have also stressed the need to enhance critical thinking and problem-solving abilities (Bull & McCarthy, 1995; Decker, 2014; Militello et al., 2009). These skills are increasingly being recognized across the



literature as complementary to the traditional legal content that Cunningham et al. (2019) would label as “informational” and typically lacking transformational learning opportunities.

Beyond facing today’s challenges, Young (2015) contended that preparing leaders for a challenging future is vital. Not only could interpersonal processing skills better equip administrators to interpret local contexts, respond to challenging situations, and shape local policy (Bull & McCarthy, 1995), but they could also help school leaders embrace their calling to legal leadership instead of fearing it (Decker, 2014). Incorporating an active processing orientation to instruction seems especially worthwhile in light of how frequently educational administrators are drawn into competing rights situations between individuals and organizations. Many of these are interpersonally challenging as they may be culturally sensitive or equity-oriented and intricately woven throughout American society and educational jurisprudence.

Situations like these are frequently brimming with personal sentiments (Bull & McCarthy, 1995), including fears and frustrations that call for an administrator’s sense of empathy. Administrators who can capitalize on their connection with others as part of their approach to legal leadership would seem well-positioned to advocate and help diminish the isolation and stress related to potential loss or damage often experienced by the disenfranchised (Decker, 2014). Affirming the leanings described here, McCarthy (2016) herself advanced a calling for administrators to be advocates who make personal connections and investments in their surroundings and situations. Social justice advocates frequently promote these supportive attitudes (Capper & Young, 2014; Lewis & Kern, 2018; McKenzie et al., 2008; Orfield & Frankenberg, 2014; Theoharis, 2008). However, according to O’Malley



and Capper (2015), traditional administrator training does not provide sufficient attention to sensitive issues such as equity and gender-specific concerns, including sexual identity.

Instructional Methods

Numerous authors (Decker, 2014; Decker et al., 2019; Pazey & Cole, 2013; Umpstead et al., 2016) have advocated enhancing training practices. Decker et al. (2019, p.165) referenced the potential use of “debates, mock trials [and] group discussions” to help students better “apply legal principles” during their training. Pauken (2012) referred to using reflective practice to nurture processing abilities that arguably could address both procedural review and interpersonal considerations. Gilbert (2017) examined the benefits of a scenario-based training approach. More recently, Decker and Pazey (2017) and Schneider (2020) identified the value of delivering case-focused instruction that could embrace context and improve critical thinking. Acknowledging the importance of legal literacy, this study investigated the instructional priorities of school leaders. Namely, its focus included the intended purpose of legal preparation. It also pursued insights concerning ways to address those instructional needs. The conceptual connection between the literature and the focus of this study follows.

Conceptual Background

Legal content, or what was termed *product* by Bull and McCarthy (1995), has long served as the cornerstone of legal literacy and subsequent administrator training. When the authors infused their vision of principals' engagement with *process* into the established legal literacy dialogue, Van Geel (1995) forecasted seismic challenges resulting from the mere suggestion of said expectations. In the years



following, the educational legal literacy construct has successfully evolved without suffering Van Geel's predicted need to develop an entirely new leadership discipline. Instead, multiple scholarly works (Decker, 2014; Decker & Brady, 2014; Decker & Pazey, 2017; Decker et al., 2019; Schneider, 2020; Taylor, 2001) have highlighted context's critical role in processing complex local realities. While this thinking has not been actively adopted as a defined part of the legal literacy definition, yet, documented efforts to integrate *process* more directly into training have begun.

During nationwide culture wars targeting public education, and an added awareness of the need for administrator advocacy (McCarthy, 2016), navigating surrounding contexts has increasingly emerged as a recognized expectation for school leaders (Decker et al. (2019). In a myriad of ways, these essential responsibilities parallel those depicted within the sensemaking framework Karl Weick introduced in 1995. Sensemaking is "a key leadership capability for the complex and dynamic world we live in today." Sensemaking closely correlates with processing, as referenced within this review, in that it involves "how we structure the unknown so as to be able to act in it" (Ancona, 2012, p.3). This construct is not specific to education nor directly linked to legal literacy. Further, it is not new either as Van Geel (1995, p. 641) was prescient when offering, "few would doubt that administrators need to make sense of hard-to-make-sense-of situations that entail conflict and the necessity to make choices."

Almost 20 years later, Spillane and Lee (2014, p.437) referenced how educational administrators are regularly drawn into concerns inundated with "discrepancy, ambiguity, and uncertainty" that "prompt people to extract puzzling clues from their environment in an effort to reconstruct their understanding of their situation." Tie (2014)



similarly described administrators' legal role as balancing risks and competing rights with the practical implications of their efforts needing to become their immediate focus. Legal content, or *product*, will always be the cornerstone of legal literacy and, subsequently, literacy training. However, literature tied to general leadership and affiliated with legal literacy has reinforced the essential nature of McCarthy's (2016) stance on increasing administrator advocacy.

To that end, there is an ongoing call for more interpersonal *process-oriented* expectations, including empathy, advocacy, and sensemaking skills. However, prior to this point the sensemaking or real-life preparatory aspect of legal literacy development has not been supported by empirical evidence nor tied directly to other training priorities. Working with a sample of front-line educators who have collectively persevered through various legalities, this investigation sought to bring their legal literacy training insights and priorities to light to address this gap across the literature. The following three research questions guided the focus of this study:

- What should be the primary purpose of legal literacy training?
- What instructional approach would practitioners recommend?
- What instructional delivery modalities are most highly recommended by practitioners?

Method

Design

This study employed a quantitative research design consistent with prior efforts addressing the training topic. It incorporated a structured survey to address three research questions identifying preferred methods for developing legal literacy. This study also included an open-ended *final thought* prompt. The methodology emphasized



descriptive analysis because the collective literature has yet to reach a point that justifies inferential steps. Further, significance testing is primarily a measure of chance (McLean & Ernest, 1997, p.3) and “provides no information about the meaningfulness” of data. Creswell (2009) has relayed that the approach chosen here enhances meaning within research and subsequently across the literature. Adopting this structured design is also consistent with Fowler’s (2014) view that information is more accurately reported in these self-administered modes.

Participants

Prior studies regularly drew participants from their graduate programs. Similarly, this project initially sought a sample of 12 years of past graduates. As Trotter II (2012, p. 399) shared, “The ideal standard is to recruit the entire expert group to provide a saturation level of information about the targeted research topic.” When competing priorities appeared internally, the Arizona School Administrators Association (ASA) emerged as a collaborator able to provide access to its entire membership. This shift allowed for targeted sampling (Asimah et al., 2017; Fowler, 2014; Trotter II, 2012) and indirectly included past graduates who comprise a considerable portion of ASA’s membership. There were unintended benefits to this outcome as the initially intended sample would also have included graduates who never assumed administrative positions. The ASA sample drew exclusively from experienced leaders whose insights are more directly comparable to leaders in other settings. This alignment also limited the potential for systemic differences and bias or sampling error (Creswell & Guetterman, 2019; Fowler, 2014).

The collaboration with ASA allowed for direct canvassing of their entire targeted body of experienced educational leadership members



(Asimah et al., 2017; Fowler, 2014; Trotter II, 2012). This resulted in 193 completed surveys out of 1,078 possible contributors, yielding a 17.9% return rate. That return rate exceeded the 6.2% (n=493) response Militello et al. (2009) obtained. Decker et al. (2019) achieved a 41% return rate. However, the total return (n=123) obtained over a more extended period represented a lower net response than this study. This study also exceeded the 43 total responses yielded by Gilbert's (2017) study and the 20 Schneider (2020) worked with. The targeted sampling approach benefitted from the highly inclusive fact that the Arizona School Administrators Association unites school leaders from both the district and building levels. Of the 193 received responses, 55 came from superintendents, 53 came from district-level leadership, 69 came from building-level leadership, and retired administrators offered eight replies.

Data Collection Procedures

The ASA Director publicized the upcoming study, referenced its professional significance, and detailed the ASA's intended survey distribution. Each ASA member was provided an equal opportunity to participate in the study, contributing to the overall vitality of the sampling process (Creswell & Guetterman, 2019; Fowler, 2014). This outreach was completed within the regularly emailed monthly newsletter. The structured survey instrument was imported into the *Alchemer* online survey software platform. Survey links were embedded into the solicitation script sent to each ASA member directly through their organization's email account.

The study relied on informed consent and did not require returned documentation. The emailed script included participant rights, potential risks and benefits, and confirmation that involvement was voluntary. The message also outlined study objectives and timeline



descriptors. The research prompt was only emailed once to avoid burdening busy practitioners. It was followed up with weekly ASA reminders encouraging members to complete the study within the allotted six-week response window. ASA members confirmed the benefits of these extra efforts during informal voluntary debriefing opportunities the ASA director scheduled during the first association meeting after completing data collection.

Survey Instrument

The survey design utilized structured questions with closed answers, as Fowler (2014) advocated. Local terminology and practices helped construct the response options for prompts concerning instructional priorities and training approaches. A survey development specialist helped enhance the instrument format. A write-in portion for *Other* yielded only four responses where participants attempted to choose all available prompts. To reduce random error, eight former Arizona school administrators and five administratively trained faculty members completed a critical review to detect common flaws (Creswell, 2009; Fowler, 2014). As Fowler (2014) recommended, pretesting was also completed by ten in-state non-ASA administrators plus 11 public school administrators from Wisconsin. These piloting steps helped confirm the instrument's face validity and consistency (Creswell, 2009) and phrasing clarity. Finally, an expert panel of former administrators reviewed the final survey, ensuring that directions and questions were understandable (Fowler, 2014).

Data Analysis

Analysis of data was completed through descriptive statistical approaches. *Alchemer* online software provided analysis and summary support. Data summaries were also examined for potential response



differences according to length of service, organization size, and location, but did not yield reportable differences among participants. Fowler (2014) indicated that debriefing can provide valuable insights into research design and implementation vitality. Feedback from participants from the ASA debriefing conveyed how meaningful the research was and how precise and efficient the survey was. A second indicator of study vitality was drawn from the comparison of 61 comments from the survey's open-ended prompt. The attitudes and insights shared within the qualitative narrative consistently confirmed the reported data.

Results

Information gathered through this study provides a data-driven perspective contributing to the dialogue Bull and McCarthy introduced over 25 years ago. Practitioners' ownership of their sensemaking role is evident in their responses and closely aligns with the research concerning context's place within legal literacy. Narrative summaries plus visual representations are included for each of the research questions in the following order:

- Preferred Purpose of Training
- Preferred Instructional Focus
- Preferred Instructional Delivery
- Optional General feedback

Primary Purpose

A total of 193 administrators responded to the question: "What do you think the primary purpose of an initial Legal Aspects course should be?" Results appear in Table 1. Of the options for participants to select, 72% (n=138) focused on instruction tied to the challenges new administrators can expect to face. A distant second choice, with 10%



(n=20) selecting it, was to offer a wide-ranging survey of general legal and governing concepts. Only 9% (n=18) picked instruction through a specific lens such as standards, social justice, or special education. This was followed by 6% (n= 11) who favored a primary emphasis on legal processes and case/court outcomes. Then came *Other* at 2% (n=4). The final selection was approaching instruction by examining personal areas of interest 1% (n=2). The focus on expected challenges (72%) was selected seven times more frequently than the second-place response supporting a more general survey focus (10%). That difference suggests a practical level of significance even with descriptive analysis. A lack of deviation across subgroups further strengthened this distinction.

Table 1
Primary Purpose of Legal Training in Leadership Programs

Training Should Provide	N	%
Instruction tied to likely administrator challenges	138	71.5
Survey of legal and governing concepts	20	10.4
Instruction through a lens such as special education or social justice	18	9.3
Introduction to legal process and case/court outcomes	11	5.7
Other – write-in	4	2.1
Opportunity to examine personal areas of interest	2	1

Instructional Focus

Administrators responded to the following question: “Which would you utilize for the primary design of a Legal Aspects course?” Results appear in Table 2. The school leaders responding to the survey had a clear vision for instructional approaches, with 76% (n=146)



overwhelmingly recommending emphasis on the practical application of legalities to real-life situations. A case outcomes style of instruction was selected by 18% (n=35) of the participants. The remaining 6% of the choices made were closely divided between the three options of policy at 3% (n=6) or, personal interest at 1% (n=2), or *Other* at 2% (n=4).

Table 2
Design of Law Course

	Recommended Instructional Approach		Approach Participants Received	
	N	%	N	%
Practical application of legalities to real-life situations	146	75.6	19	9.8
Heavily focused on cases and legal outcomes	35	18.1	86	44.6
Survey of legal and governing concepts	-	-	55	28.5
Primarily a policy focus	6	3.1	12	6.2
Other –write-in	4	2.1	8	4.2
Pursue personal interest	2	1.1	1	0.5
Did not complete this course	-	-	12	6.2

Participants were also prompted to report on their own training experiences. In retrospect, only 10% (n=19) of respondents reported receiving the type of practical preparation collectively recommended by this sample. Instead, a course drawing heavily from case outcomes was the most common type of instruction administrators reported receiving at 45% (n=86). The second most common course approach administrators reported experiencing at 28% (n=55) was a wide-ranging survey. Of note, not one single participant recommended the



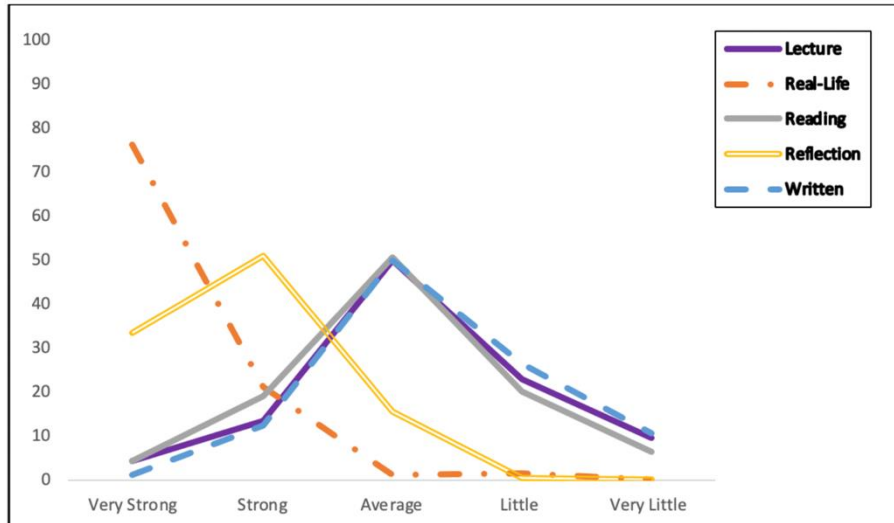
more global survey approach as a preferred option for future instruction.

The majority of survey completers indicated a preference for future instruction that was grounded in an everyday context. Their desire for a more grounded approach was further reinforced by the satisfaction ratings participants provided for the non-grounded preparation they reported completing. A total of 32% (n=35) were either satisfied or very satisfied with their training. A total of 5% (n=10) never completed a defined legal aspects course. This minimal positive response means that the remaining 63% were less than satisfied with the legal preparation they received and would largely not recommend.

Direct Instructional Delivery

Figure 1. summarizes the third question tied to identifying preferred direct instructional modalities. Options offered through the survey ranged from real-life-oriented activities such as case studies to traditional practices such as reading, written work, and lectures. Feedback from the expert panel supporting survey refinement was very specific for this question based on the first pilot run. It was strongly recommended that contributors be prompted to rank their top choices for direct instructional methods against each other instead of individualizing options within identically formatted Likert questions. For this summary, the vertical axis represents the percent response from respondents, whereas the horizontal axis reports their ratings of instructional value for each listed approach.

Figure 1
Direct Instructional Approach (Emphasis by Percent)



As summarized in Figure 1., the contextually-framed activities building upon a real-life emphasis and reflection were most highly valued. Use of a real-life approach was rated as deserving a Very Strong Emphasis by 76% of the participants, with another 21% classifying it as deserving a Strong Emphasis. Netting 33% of the Very Strong Emphasis ranking and 51% of the Strong Emphasis response was reflection likely encouraged through guided discussion. A commonality shared by both approaches would be the ability for students to assess challenges and envision practical solutions relying on various content and contexts. These contextually framed direct instructional delivery options could differ significantly from options including a lecture format or reading assignments. These more passive considerations were rated as Average by 50% of the contributing administrators.



General Feedback

Of the 193 responses, 61 participants shared their open-ended final thoughts on legal literacy preparation. The need to teach aspiring administrators what to expect in their intended work setting stood out the most. This was referenced 24 times and frequently included statements such as “My class was about the law as it related to the shaping of education today. It was not a guide or practical use class. It was informative but not necessarily useful for the position.” Another theme brought up ten times was the need for more than one dedicated course. Some feedback singled out the importance of focusing solely on special education, whereas others would prefer a course on case outcomes and a separate course on conflict resolution skills.

The remaining comments included the importance of ongoing professional development, appearing eight times, as did utilizing an applied training approach. Finally, there was a tie between involving an attorney in instruction and five mentions of specific skills that needed to be emphasized. One administrator emphasized capacity-building with this response, “working together, similar to how administrators must work with their legal team, is a better way of preparing new administrators for thinking through legal problems.” Along the same lines of specifying skills, another offered a sensemaking perspective which held that “there is a pattern to figuring these things out. They can’t know everything all the time but they can know a process that will protect all parties involved.”

Discussion

Bull and McCarthy (1995) anchored UCEA’s effort to spur inquiry and promote scholarly dialogue concerning legal literacy. Their message clearly affirmed the unquestionable importance of legal *products*.

Further, the authors clearly envisioned and advocated for an increased emphasis on legal *process* both in a procedural sense and arguably also as it pertains to administrator sensemaking responsibilities referenced within this article. Neither the law nor related scholarship has been static during the past 25 years. Contextual realities are increasingly entangled with expanding challenges (Cunningham et al., 2019; Fullan & Kirtman, 2019; Ghaffar & Naz, 2012; Gilbert, 2017; Hughes, 2014; Hughes, 2019; Miller, 2018; Petty, 2016; Salina et al., 2017; Stapleford, 2007; Young, 2015). The referenced stressors have only heightened efforts to first define legal literacy and second to that to also determine the best pathways for instilling it within school leaders (Redfield, 2003; Tie, 2014).

The results from this study contribute to both efforts. In identifying training priorities that overwhelmingly emphasize context, the participants have also offered defining insights concerning *sensemaking's* place that cannot help but shape our overall conceptualization of legal literacy. Training that is geared toward meeting future needs (Young, 2015) cannot afford to ignore the ratings and the commentary from these responding administrators. They empirically and explicitly acknowledged their agreement with and their ownership of the interpersonal processing expectations advanced by Bull and McCarthy. In doing so, they endorsed and prioritized the importance of legal literacy being grounded in real-life sensemaking awareness and able to integrate practical conflict resolution skills. Their statement presents considerable training implications, which are examined next.

School leaders understand that policies, legislation, and case outcomes frame many of the issues they will encounter. However, they are keenly aware that they are presented with local situations at work, not



federal legal cases to review. Whether considering the purpose of instruction or addressing specific learning activities, survey responses and commentary alike affirmed that participants expect training based on real-life responsibilities and activities in which they find themselves engaged. One very telling statement about a traditional instructional approach read: “After taking classes and starting as an administrator, I was amazed at what I didn’t know.” This same administrator detailed multiple practical matters they felt ill-prepared to face. Comments from several other respondents were closely aligned with a peer who indicated that “practical application is the most important but highly lacking area” of legal instruction. While administrator preparation has its critics in general (Boylund et al., 2015; Grissom et al., 2019; Hallinger & Bridges, 2017; Perrone & Tucker, 2019), the stakes are even more significant for legal training, as has already been shared.

Administrators function under complex conditions, regularly immersed in competing demands and other peoples’ conflicts (Orfield & Frankenberg, 2014). Attorneys typically hold a crucial advisory role, while administrators are directly on-site, rarely attaining any separation from the mistrust or interpersonal costs that frequently result from serious challenges. It is not difficult to understand why Decker et al. (2019) stressed the importance of confidence, and Tie (2014, p.192) observed that many school leaders “tend to approach the law with a certain degree of fear and anxiety.” Therein, the findings from this study offered resounding practitioner support for grounding legal preparation in a real-life context that develops capacities they need daily.

Established well-defined and empirically supported training practices capable of delivering a contextually-based instructional approach already exist. The problem-based learning approach (PBL) described



by Hallinger and Bridges (2017) was not designed specifically for legal instruction, though the law can be effectively substituted for place theory holds in the approach. Key considerations within the framework include using real-life problems or scenarios to introduce and frame instruction and allowing students to resolve situations often while working in teams (Hallinger & Bridges, 2017). The PBL framework also allows for countless combinations of topics and instructional activities that can be expanded indefinitely.

The literature has referenced guided discussion, cooperatively addressing scenarios, role-plays, and other interactive exercises. Each of these could work effectively within a PBK model. That said, these activities could also be improved to foster greater ownership through more personalized learning. Local experience has confirmed that beginning a course by building on whatever it is that students may already know about legal issues is a decisive sensemaking opportunity that helps to strengthen familiarity and increase confidence. Having students review their personal reactions to situations, is not a likely priority for the technical side of legal literacy. However, it has consistently proven itself to be a highly positive building block for expanding diverse insights and promoting personal ownership in local instruction. Finally, challenging aspiring leaders to focus on the viewpoints, needs, and motivations of other stakeholders deepens their understanding of an issue, helps engender empathy, and stands to improve their conflict resolution successes.

Implications

Young (2015), as well as Cunningham et al. (2019), addressed the necessity of directing training toward future leadership needs. Already engaged in a rapidly changing world, an overwhelming majority of practitioners' responses aligned with this transformational



approach when they emphasized the focus on real-life contexts and conflicts consistent with Bull and McCarthy's updated vision of legal literacy. Repeated administrator statements like "my legal education felt very far removed from the realities I faced on the job as a principal reinforced the importance of emphasizing context and a sensemaking approach to the process." This point of view has long made sense, as much as the law is fluid, and situations administrators encounter include extra uncertainty tied to the shifting perceptions and motivations of the people they engage (Bull & McCarthy, 1995).

Considering the practitioner's real-life prioritization and the growing turmoil school leaders address (Cunningham et al., 2019; Hughes, 2014; Hughes, 2019; Miller, 2018; Redfield, 2003; Tie, 2014), it is both reasonable and responsible to consider the future direction (Young, 2015) and definition of legal literacy. That should certainly include what Bull and McCarthy termed the *product* side of the definition. However, there is increasing instability there. For years, the public has been showing increasing concern with the judicial system, including the Supreme Court, which has engaged in reversing established legal precedents impacting high-stakes societal questions (Jones, 2022). These types of trends force school leaders to make sense of inconsistent legal interpretations and force them to defend locally questioned practices that can increasingly lose support in the public's minds. Does continuing to focus instruction primarily on legal content counteract these types of challenges?

Recently, Donnelly (2022) reported how a small group of parents who disagreed with their school's field trip protocols during the pandemic entered a school and attempted to arrest the school administrator. COVID-19 did not create the discord described; it merely precipitated it. Disagreement will likely continue to be further exposed, expand,



and fuel complications for the foreseeable future. Equity, inclusion, and social justice are considered critical objectives for educators (Capper & Young, 2014; Lewis & Kern, 2018; McKenzie et al., 2008; Theoharis, 2008). Although Capper (2015) offered that school leadership was not actively or directly drawn into Critical Race Theory, it has become just another hot topic for public education. How are administrators being trained to communicate about issues like these with their constituents?

Context is essential to legal literacy. It will likely take even more legal sensemaking and improved conflict resolution skills to better contend with the blurring statutory interpretations and differing political motivations held by an increasingly divided, emboldened, and motivated citizenry. This study produced clear and compelling empirical evidence establishing the need to emphasize interpersonal legal processing in literacy training through real-life preparation grounded in context-based instruction. Van Geel (1995, p. 647) believed attempts to integrate legal knowledge with legal process and other contexts could be “a useful and appropriate approach to administrator preparation.” Utilization of a PBL framework that builds from what aspiring leaders already know and actively acknowledges the perceptions, priorities, and motivations of others can develop valuable professional capacity without the complication Van Geel envisioned 25 years ago.

While it may not be an everyday focus for those who specialize in law, such an updated vision for enhanced legal processing is not without precedent for educators. Similar concepts and priorities, including the importance of reframing areas of discord and inspiring empathy in leadership, have been widely described across the leadership literature (Bolman & Deal, 2013; Darling-Hammond & McLaughlin, 1995;



Hanford & Leithwood, 2013; Tschannen-Moran, 2014; Wellner, 2012). Unfortunately, this research confirms that to this point, these sensemaking skills have not been a part of the standards-based preparation students have received. Well short of needing to initiate a new discipline of educational administration (Van Geel, 1995), proven problem-based approaches are already available to deliver the type of instruction strongly endorsed by participants (Hallinger & Bridges, 2017).

Addressing the daily tension, disagreement, and general interpersonal struggle tied to today's complex legal realities is the educational leader's role, not their attorney's. Bull and McCarthy (1995) recognized the need and perceived the disinclination of administrators to engage in matters like these. Administrators' consistent responses demonstrate they recognized the same need, even without the benefit of personally receiving the real-life training they recommended. Future generations would benefit from the acknowledgment of practitioner insights and the utilization of their recommendations. Doing so really amounts to implementing refinements, not wholesale change. Legal product still needs to serve as the cornerstone of legal literacy and legal training. The most significant difference is that legal processing and sensemaking need to inform as well as guide future-focused instruction (Young, 2015) instead of remaining an afterthought, as was repeatedly referenced by participants.

To that end, current administrator inputs strongly endorse utilizing context-based training approaches that would align with the PBL approach. Even if they have minimal experience to draw from (Schneider, 2020), aspiring leaders could be advantaged through such an approach by introducing legal aspects training from contexts students are already familiar with. Allowing students to tap into



familiar issues and gain confidence from the beginning of their training stands to help reassure them that they can learn vital legal literacy skills instead of feeling overwhelmed upon first seeing the size and small print of the law textbook they have likely purchased.

Further, a more relatable introduction to legal training that encourages ownership and empathy could help ground understanding while helping to overcome the panic that many novice leaders experience as they size up the entirety of the job they are preparing to take on (Spillane & Lee, 2014). It would also prove valuable to commit outside-of-class activities, job shadowing commitments, or internship-type hours to students' core legal aspects training. These activities should provide aspiring leaders with meaningful, practical connections to real-life challenges many never experienced but will almost certainly encounter daily during their active leadership service.

Finally, reaching forward rather than looking to the past (Young, 2015), legal literacy's very definition and future training refinements must be guided by up-to-date research that draws directly from and addresses the unique conditions and demands frontline administrators encounter. No one understands legal sensemaking challenges to the extent that these educational leaders do. Their voices are vital contributors to understanding legal literacy and developing relevant and practical instruction, and their lived experiences would prove useful for conceptualizing future research.

As was offered at the outset of this article, efforts to define legal literacy and the study of legal training inform each other. Scholarship efforts to this point have done well to validate existing practice, whereas this study engaged educational leaders to solicit their views on what needs to be done moving forward. This emphasis is consistent with Young's (2015) vision of promoting instruction that can address future needs.



Based on the findings from this study, the following research recommendations are offered.

First, legal literacy research should remain mindful of changing societal conditions and focus on updating trainers' understanding of the needs experienced by practicing administrators. While many appreciate the challenges administrators face, fewer have lived insights that would prove useful for framing future studies.

Second, acknowledging the lack of a definition for legal literacy, it would be worthwhile to engage administrators and other stakeholders involved with legal challenges in a collaborative effort to determine an updated core descriptor for the concept. Doing so could offer multiple benefits, including improved instruction as well as contributing to the advocacy efforts for required legal aspects training in all states (McCarthy, 2016).

References

- Ancona, D. (2012). Sensemaking: Framing and acting in the unknown. In S. Snook, N. Nohria, & R. Khurana (Eds.), *The Handbook for Teaching Leadership*. (pp. 3-17). SAGE.
- Asimah, T., Mensah, H.K., & Oteng-Abayie, E. (2017). General, target, and accessible population: Demystifying the concepts for effective sampling. *The Qualitative Report*, 22(6), 1607-1621. <https://doi.org/10.46743/2160-3715/2017.2674>.
- Bolman, L., & Deal, T. (2013). *Reframing organizations*, 5th Edition. Jossey-Bass.
- Boyland, L., Lehman, L., & Sriver, S. (2015). How effective are Indiana's new principals? Implications for preparation and



practice. *Journal of Leadership Education*, 14(11), 72-91.
<https://doi.org/10.12806/V14/I1/R5>.

Bull, B., & McCarthy, M. (1995). Reflections on the knowledge base in law and ethics for educational leaders. *Educational Administration Quarterly*, 31(4), 613-631.

Capper, C. (2015). The 20TH-year anniversary of critical race theory in education: Implications for leading to eliminate racism. *Educational Administration Quarterly*, 51(5), 791-833.
<https://doi.org/10.1177/0013161X15607616>.

Capper, C., & Young, M. (2014). Ironies and limitations of educational leadership for social justice: A call to social justice educators. *Theory Into Practice*, 53(2), 158-164.
<https://doi.org/10.1080/00405841.2014.885814>.

Creswell, J. (2009). *Research design: Qualitative & quantitative approaches*, 3rd Edition. SAGE.

Creswell, J., & Guetterman, T. (2019). *Educational research: Planning, conducting and evaluating quantitative and qualitative research*. Pearson.

Cunningham, K., VanGroningen, B., Tucker, P., & Young, M. (2019). Using powerful learning experiences to prepare school leaders. *Journal of Research on Leadership Education*, 14(1), 74-97.
<https://doi.org/10.1177/1942775118819672>.

Darling-Hammond, L., & McLaughlin, M. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan*, 76(8), 597-604.

- Decker, J. (2014). Legal literacy in education: An ideal time to increase research, advocacy, and action. *Education Law Reporter*, 304(1), 679-696.
- Decker, J., & Brady, K. (2015). Increasing school employees' special education legal literacy. *Journal of School Public Relations*, 36(3), 231.
https://link.gale.com/apps/doc/A467747409/AONE?u=azstateli&sid=googleScholar&xid=1afbb3cb_
- Decker, J., & Pazey, B. (2017). Case-based instruction to teach educators about the legal parameters surrounding the discipline of students with disabilities. *Action In Teacher Education*, 39(3), 255-273.
<https://doi.org/10.1080/01626620.2017.1292160>.
- Decker, J., Ober, P., & Schimmel, D. (2019) The Attitudinal and behavioral impact of school law courses. *Journal of Research on Leadership Education*, 14(2) 160-185.
<https://doi.org/10.1177/1942775117742647>.
- Donnelly, J. (2022). Man involved in zip-tie incident at Tucson-area school found guilty. Tucson.com.
https://tucson.com/news/local/crime-and-courts/man-involved-in-zip-tie-incident-at-tucson-area-school-found-guilty/article_dd01048e-5635-11ed-baf4-af1beb7db8b6.html_
- Fowler, F. (2014). *Survey research methods*. SAGE.
- Fullan, M., & Kirtman, L. (2019). *Coherent school leadership: Forging clarity from complexity*. ASCD.
- Ghaffar, A., & Naz, A. (2012). A comparative study of conflict management styles of public and private schools' principals. *Bulletin of Education and Research*, 34(2), 59–70.

- Gilbert, K. (2017). Innovative leadership preparation: Enhancing legal literacy to create 21st Century ready principals. *Academy of Educational Leadership Journal*, 21(1), 1-17.
- Grissom, J., Mitani, H., & Woo, D. (2019). Principal preparation programs and principal outcomes. *Educational Administration Quarterly*, 55(1), 73-115.
<https://doi.org/10.1177/0013161X18785865>
- Hallinger, P., & Bridges, E. (2017). A systemic review of research on the use of problem-based learning in the preparation and development of school leaders. *Educational Administration Quarterly*, 53(2), 255-288.
<https://doi.org/10.1177/0013161X16659347>.
- Handford, V., & Leithwood, K. (2013). Why teachers trust school leaders. *Journal of Educational Administration*, 51(2), 194–212.
<https://doi.org/10.1108/09578231311304706>.
- Hughes, T. (2014). Hiring at risk: Time to ensure hiring really is the most important thing we do. *International Journal of Educational Leadership Preparation*, 8 (1), 90-102.
- Hughes, T. (2019). Mentoring school leaders through cultural conflict. *Research in Educational Administration & Leadership*, 4(3), 591-622. doi:10.30828/real/2019.3.6.
- Jones, J. (2022). Confidence in U.S. Supreme Court sinks to historic low.
<https://news.gallup.com/poll/394103/confidence-supreme-court-sinks-historic-low.aspx>.
- Justice, B., & Stanley, J. (2016). Teaching in the time of Trump. *Social Education*, 80(1), 36-41.

- Lewis, M., & Kern, S. (2018). Using education law as a tool to empower social justice leaders to promote LGBTQ inclusion. *Educational Administration Quarterly*, 54(5) 723-746. <https://doi.org/10.1177/0013161X18769045>.
- McCarthy, M. (2016). The marginalization of school law research: Missed opportunities for educators. *Education Law Reporter*, 331, 565-584.
- McKenzie, K., Christman, D., Hernandez, F., Fierro, E., Capper, C., Dantley, M., Gonzalez, M., Cambron-McCabe, N., & Sheurich, J. (2008). From the field: A proposal for educating leaders of social justice. *Educational Administration Quarterly*, 44(1), 111-138. <https://doi.org/10.1177/0013161X07309470>.
- McLean, J., & Ernest, J. (1997). Has testing for statistical significance outlived its usefulness? Annual Meeting for the Mid-South Educational Research Association. <https://files.eric.ed.gov/fulltext/ED415265.pdf>
- Militello, M., Schimmel, D., & Eberwein, H. (2009). If they knew, they would change: How legal knowledge impacts principals' practice. *NASSP Bulletin*, 93(1), 27-52. <https://doi.org/10.1177/0192636509332691>.
- Miller, P. (2018). *The nature of school leadership: Global practice perspectives*. Palgrave Macmillan.
- National Policy Board for Educational Administration. (2015). *Professional standards for educational leaders*. https://www.npbea.org/wp-content/uploads/2017/06/Professional-Standards-for-Educational-Leaders_2015.pdf.



- O'Malley, M., & Capper, C. (2015). A measure of the quality of educational leadership programs for social justice: Integrating LGBTIQ identities into principal preparation. *Educational Administration Quarterly*, 51, 290-330.
<https://doi.org/10.1177/0013161X14532468>.
- Orfield, G., & Frankenberg, E. (2014). Increasingly segregated and unequal schools as courts reverse policy. *Educational Administration Quarterly*, 50(5), 718-734.
<https://doi.org/10.1177/0013161X14548942>.
- Pauken, P. (2012). "Are you prepared to defend the decisions you've made?" Reflective equilibrium, situational appreciation, and the legal and moral decisions of school leaders. *Journal of School Leadership*, 22(2), 350-384.
<https://doi.org/10.1177/105268461202200206>.
- Pazey, B., & Cole, H. (2013). The role of special education training in the development of socially just leaders: Building an equity consciousness in educational leadership programs. *Educational Administration Quarterly*, 49, 243-271.
<https://doi.org/10.1177/0013161X12463934>.
- Perrone, F., & Tucker, P. (2019). Shifting profile of leadership preparation programs in the 21st Century. *Educational Administration Quarterly*, 55(2), 253-295.
<https://doi.org/10.1177/0013161X18799473>.
- Petty, T. (2016). The significance of principal preparation and education law: Principals' perception of students' rights. *National Teacher Education Journal*, 9(1), 25-38.
- Redfield, S. (2003). The convergence of education and law: A new class of educators and lawyers. *Indiana Law Review*, 36, 609-643.

- Salina, C., Girtz, S., & Eppinga, J. (2017). A turnaround success story. *Educational Leadership*, 74, 67–71.
- Schimmel, D., & Militello, M. (2008). Legal literacy for teachers. *Principal Leadership*, 9(4), 54–58.
- Schneider, T. (2020). A social constructivist grounded theory of school principal legal learning. *Journal of Research on Leadership Education*, 1 (17), 1-17.
<https://doi.org/10.1177/1942775120902191>.
- Spillane, J., & Lee, L. (2014). Novice school principal's sense of ultimate responsibility: Problems of practice in transitioning to the principal's office. *Educational Administration Quarterly*, 50(03), 431-465. <https://doi.org/10.1177/0013161X13505290>.
- Stapleford, T. (2007). *In dispute: Conflict resolution for school leaders*. Author House.
- Taylor, K. (2001). Legal literacy 101. *Principal Leadership*, 11(3), 8-10.
- Theoharis, G. (2008). At every turn: The resistance that principals face in their pursuit of equity and justice. *Journal of School Leadership*, (18), 303-333.
- Tie, F. (2014). A study on the legal literacy of urban public school administrators. *Education and Urban Society*, 46(2), 192-208.
<https://doi.org/10.1177/0013124512446220>.
- Trotter, R.T. (2012). Qualitative research sample design and sample size: Resolving and unresolved issues and inferential imperatives. *Preventative Medicine*, 55 (2012), 398-400.
- Tschannen-Moran, M. (2014). *Trust matters: Leadership for successful schools* (2nd Ed.). Jossey-Bass.
- Umpstead, R., Militello, M., & Eckes, S. (2016). Legal Literacy: Tools to avoid litigation in your school. *Principal Leadership*, 56-58.



Van Geel, T. (1995). Response to "Reflections on the knowledge base in law and ethics for educational leaders." *Educational Administration Quarterly*, 31(4), 640-647.

Wellner, L. (2012). Building parent trust in the special education setting. *Leadership*, 41(4), 16-19.

Young, M. (2015). Effective leadership preparation: We know what it looks like and what it can do. *Journal of Research on Leadership Education* 10(1), 3-10. doi:10.1177/1942775115569419.

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Leadership Styles of Mid-level Educational Leaders Perceived by Academic Members: An Exploratory Study among Chinese Universities

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Abstract

Purpose: The challenges faced by universities in China have presented opportunities to enhance the leadership of educational leaders in universities. Little has been written about the leadership styles of mid-level educational leaders in Chinese higher education (HE). The objective of this study is to provide an authentic understanding of 1) the leadership styles of mid-level educational leaders as experienced by academic members, 2) experienced contextual factors related to the leadership styles of mid-level educational leaders.

Design: Qualitative research was conducted, and the perceptions of 13 academic members from nine universities in China were explored.

Findings: This study revealed authoritarian leadership style was the most reported leadership style of the mid-level educational leaders, followed by transformational and transactional leadership styles. Participants suggested to minimise the adoption of authoritarian leadership style and to encourage the application of transformational leadership style. Regarding the factors that shape leadership style of mid-level educational leaders, this research supports the

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following factors: culture, organizational policies & administration, discipline, and incentive mechanism.

Originality: *We gained a deep understanding of the leadership styles of mid-level educational leaders and the contextual factors that shape the leadership styles in this study. The results can be conducive to future leadership training and to the mid-level educational leaders to create environments that facilitate the application of educational leadership practices.*

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Introduction

In recent years, there has been a significant focus on leadership in the compulsory education sector, while discourse in higher education has mainly centered around managing and leading universities at senior levels (Inman, 2011). Key challenges identified in this context include growing mobility and university leadership (Zomer & Benneworth, 2011). As a result, there has been a pressing need for leadership development, which has been emphasized in a number of studies highlighting the critical importance of leadership development for leaders and staff in university settings (Jooste et al., 2018; Zhu & Zayim-Kurtay, 2019; Cheng & Zhu, 2021; Cheng et al., 2023). This has led to an increased focus not only on senior leaders but also on appropriate leadership styles for mid-level educational leaders. In Higher Educational Institutions (HEIs), mid-level leaders are generally defined as being in the role of being deans/vice deans of faculties,

heads of departments, and directors of academic offices, etc. (Pham et al., 2019; Butler, 2020). Often their leadership functions can be related to research, education, student affairs, etc. In the current study, a specific focus is set on mid-level leaders responsible for education in universities, for examples vice-deans responsible for education, and departments chairs responsible for education. In practising their roles, mid-level educational leaders' decisions are influenced by managerial mechanisms, relationships with others and different budgetary systems (Kohtamäki, 2019). In addition, there has been a growing interest within the academic community regarding the connection between leadership and culture. Studies analyzing cross-cultural leadership theory have argued that leadership behaviour and practice are closely linked to culture (Alves et al., 2006).

In the past decades, there have been various studies conducted examining the experiences of mid-level educational leaders in higher education (e.g., Johnsrud et al., 2000; Mather et al., 2009; Rosser, 2004; Sermersheim & Keim, 2005; Bodine Al-Sharif et al., 2021). Research shows that the mid-level leaders could influence their departmental vision as long as they tailored their leadership style to match existing levels of faculty competence, commitment and consensus (Mercer & Pogolian, 2013), highlighting the significance of leadership style in relation to faculty performance. Analyzing leadership styles allows mid-level educational leaders to recognize that their positional identity is formative and dialogic, Zhou and Deneen (2020) suggest that leadership development for mid-level educational leaders should begin with deeper reflection on the influence of peers, followers, and reform history within institutions. However, there is limited research on mid-level educational leaders (Bodine Al-Sharif et al., 2021), let alone leadership styles of mid-level educational leaders. Hence, the



purpose of this study is to further explore the leadership styles of mid-level educational leaders as experienced by academic members in Chinese universities and to gain a better understanding of the associated factors.

Theoretical Background

Mid-Level Educational Leaders in Chinese HE

Leadership of educational leaders at HEIs is important as it has a significant impact on students, researchers, and fellow educators through activities such as mentoring, sharing knowledge, disseminating scholarship, fostering innovation, creating social support networks, and providing social services (Cheng & Zhu, 2021). Educational leadership in higher education is part of academic leadership while educational leadership focuses more on leadership in teaching and learning aspects in higher education (Cheng & Zhu, 2021).

Regarding leadership roles of mid-level educational leaders in Chinese HEIs, there are mainly three leadership functions, namely vice-dean in charge of education, head of department in charge of education, and head of Jiaoyanshi (teaching and research office often related to a certain discipline, subject or sub-subject) in charge of education (Pham et al., 2019; Butler, 2020).

In higher education, educational leaders are expected to generate new knowledge, disseminate it quickly, and leverage their connections and resources in society for this purpose, according to Hannah and Lesterm (2009). Cheng and Zhu (2021) suggest that in Chinese universities, educational leaders have a significant impact on students, scholars, and other teachers by providing mentorship, disseminating

scholarship, sharing knowledge, building support networks, fostering innovation, and contributing to social services. However, in Chinese higher education, educational leader is typically characterized by top-down decision-making and appointments, and there is less emphasis on the impact of leadership on academics' personal lives from a critical perspective. If we aim to develop educational leaders to enhance teaching and guiding cultures, communities, and practices, we need to have a deeper understanding of the characteristics of educational leaders as emphasized by Fields et al. (2019).

In China, mid-level educational leaders connect university leaders and subordinates at Chinese colleges and universities, and their overall quality contributes directly to the quality of education in colleges and universities (Lin et al., 2013). What's more, mid-level leaders in higher education play a pivotal role in change management, and it is essential to understand and develop their agency and identity in the face of a complex innovation focus (Zhou & Deneen, 2020). While these leaders have good technical knowledge in their areas of expertise, they do not receive sufficient support to develop their intangible competencies, which is especially true in the context of China's Confucian tradition (Zhou & Deneen, 2020). It is worth noting that our understanding of work organization leadership comes mainly from Western research, in contrast, similar studies are rare in developing countries, such as China (Zhou & Deneen, 2020), where the institutions and cultural systems are different from those in the West. This situation raises concerns about the transferability of leadership structures and concepts from the West to the East (Akanji et al., 2020). To the best of our knowledge, research studies on mid-level leadership, especially mid-level leadership styles, among Chinese HEIs are significantly underdeveloped.



Leadership styles of Mid-level educational leaders

Lewin's framework of leadership styles (1939) identified three core styles of leadership, which are authoritarian leadership, democratic leadership, and laissez-faire leadership, and sketched out the impact of each style on fellow team members. His research also suggests that leaders who approach leading their teams differently get different results. This theoretical framework on leadership styles has in no uncertain terms influenced many of today's leadership theories and practices, including transformational leadership (which we believe is often the most effective leadership style to apply). The current study about leadership styles is thus under the Lewin's Framework of Leadership Styles (1939).

Within Lewin's framework of Leadership Styles (1939), authoritarian and democratic types of leadership are at opposing ends of the spectrum, in other words, the majority of leaders are in a certain position on this scale, ranging from the degree to which followers are allowed to participate or the level of dominance the leader exerts on decision-making (Schoel et al., 2011). Authoritarian leadership (Bass, 1990) concentrate authority, power, and decision-making (De Hoog et al., 2015). Leaders who adopt it also see subordinates "as either contributors or obstacles to the effort to achieve their goals" (De Luque et al., 2008). Transformational leadership can be introduced as elements that soften perceived rigidity of authoritarian leaders. It helps provide clear expectations while fostering a sense of personal responsibility among employees to achieve higher quality work output (Mustafa, 2020). Democratic leaders assign responsibilities, delegate authority to subordinates, and incorporate them into the decision-making process (Gastil, 1994). Aspects of the transformation style can be adopted for democratic leaders who value the decision-making

process involving all group members, so as to further enhance this inclusivity and making every member feel more engaged (Avolio & Bass, 2002). Given Lewin's classification of leadership styles, transactional leadership might oscillate in between autocratic and democratic leadership. As transactional leaders emphasize the interactivity and exchanges between leaders and the followers (Bass, 1996), which characterizes the incentives for the followers to meet the requirements, and vice versa is punishment (Avolio & Bass, 2002), and conditionally support their followers (Bass, 1999). A more authoritarian transactional leader would dictate precise methods, whereas a democratic leader would allow employees to autonomously in achieving set goals.

If organisations want to enhance its performing, leadership styles and their factors should be analysed and adapted to new demands (Popa, 2012). Study showed the choice of positional leadership styles by some participants was rooted in a culture where hierarchy and managerialism are deeply ingrained (Gennard & Judge, 2011; Akanji et al., 2020). Culture with Confucian values found in several Asian countries where academic members as overly compliant and subservient to their superiors, combined with a high-power distance culture, contributes to an authoritarian leadership style in this context (Akanji et al, 2020; Lee, 2001). In addition, several studies have identified associations between leadership style and mindset and demographic variables, such as openness to experience (Noordin, et al., 2011), age (Nwafor, 2012), and work experience (Cara, 2012). Age is a factor can be explained with reference to the creation process model, whereby human creativity declines after early adulthood (30 to 35 years) (Lehman, 1953). In China, the diverse social and relational experience of mid-level leaders in prior reforms proved play a role in



influencing their participation in and outcomes of the university initiatives in a powerful way (Zhou & Deneen, 2020). Based on the aforementioned literature review, this study attempts to context specifically explore the diverse types of leadership styles in Chinese universities as experienced by academic members in order to contemplate how educational leadership styles in the workplace are shaped.

Method

Design and sample

This study employs a qualitative approach within a phenomenological methodology to deeply explore the sensations, perceptions, observations, and reflections related to a particular phenomenon. This type of qualitative research method is well-suited to this type of exploration (Creswell, 2009) and can lead to a descriptive account of co-experiences (Moustakas, 1994). This study is an exploratory study on the experiences of academic staff in Chinese universities. Currently very little has been written about educational leadership in Chinese universities in Chinese, let alone in English (notwithstanding some excellent articles in CNKI = China National Knowledge Infrastructure). Consequently, an exploratory study can be of value to other scholars researching this area. These findings may be relevant to other particular context (Stake 1995) and can provide some useful insights for the contexts of other Chinese universities (Mercer & Pogonian, 2013).

The researchers provided respondents with copies of their transcripts to review and modify any information they found imprecise. The data was stored in a private database, and respondents had the option to stop the recorder or interview at any time or not answer questions.

These measures allowed participants to express themselves openly and provided the researchers with rich narratives in lieu of mere quantitative data. To this end, we conducted a descriptive study of 13 participants who were academic members at Chinese universities, nine universities were selected from different regions of China to exemplify the diversity and inclusiveness of the sample. Guest et al. (2006) found that in homogeneous studies using purposive sampling, such as many qualitative studies, 12 interviews could be sufficient to reach data saturation. In this study, despite of the age, university, and academic title, all the participants are from Chinese public universities, thus, they can be considered similar for the purpose of explore the leadership styles of mid-level educational leaders as experienced by academic members at Chinese universities. Table 1 displays their demographic characteristics. Overall, the study aimed to describe the nature of the co-experience being studied.

Table 1.

Demographic characteristics of the respondents

Profile of participants	f (participants)	Profile of participants	f (participants)
University		Age	
University 1	2	30-39	5
University 2	4	40-49	5
University 3	1	50-59	3
University 4	1	Academic title	
University 5	1	Professor	3
University 6	1	Associate Professor	5
University 7	1	Lecturer	5
University 8	1	Leadership position	
University 9	1	Faculty level	2
Gender		Department level	1
Female	8	Jiaoyanshi level	10
Male	5	Total	13

Research Questions

The study aims to answer the following research questions:

1. What are the leadership styles of mid-level educational leaders as experienced by academic members at Chinese universities?
2. What are the experienced contextual and background factors related to leadership styles of mid-level educational leaders?

Data collection and procedure

The study used semi-structured interviews, as recommended by Creswell (2007), which took place over a three-week period. The goal was to obtain detailed accounts from participants about their experiences on leadership styles and experienced contextual factors related to the leadership styles of mid-level educational leaders. The interviews lasted between 45-60 minutes, and all were recorded and transcribed exactly as spoken. The researchers conducted membership checks to ensure that each participant's narrative was accurately captured, which is a crucial step in maintaining the research's rigor (Patton, 2002).

Data analysis

Once the data collection phase was finished, all interviews were recorded and transcribed word for word. The study utilized content analysis as it is a suitable method for analyzing data in written or oral form, and can be used to identify narrative themes, summarize main ideas, and draw inferences (Erlingsson & Brysiewicz, 2017). To identify codes from the data and create subsequent categories and themes, the study used an inductive approach (Merriam, 2009). After the coding process was complete, the codes were translated from Chinese, and the frequency of each code was calculated to quantify the coding.

Ethical considerations

The study ensured that all participants were aware of the importance of confidentiality, the research's purpose and design, and that their participation was voluntary. The participants were asked for their recorded audio consent before their data was released, and they were informed that they had the option to withdraw from the study at any time.

Results

Leadership styles of mid-level educational leaders (RQ1)

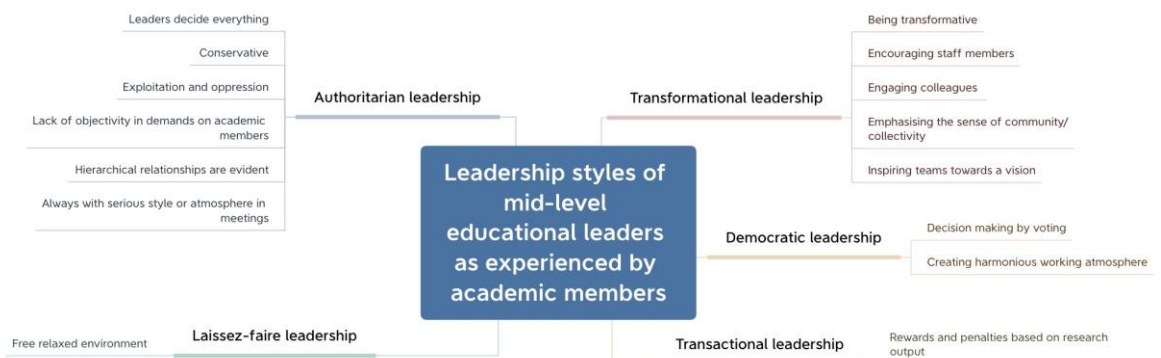


Figure 1. Leadership styles of mid-level educational leaders as experienced by academic members

Among the participants, about one third of the academic members experienced 'authoritarian leadership style' from their mid-level educational leaders (see Figure 1), as it happens, the codes under this leadership style were reported by four young academic members. The second experienced category was transformational leadership under which being transformative, encouraging, engaging people,



emphasising the sense of community/collectivity and inspiring teams towards a vision were highlighted. In addition, transactional leadership style, democratic leadership style, and laissez-faire leadership style were also identified as leadership styles for mid-level educational leaders among Chinese universities. Transactional leadership was stressed due to factors of performance evaluation system in Chinese universities, such as article publishing, rewards and punishment mechanism.

Participants also elaborated and illustrated the educational leadership practices under certain leadership styles. In this section, we highlighted these leadership practices with four quotations based on the answers from 13 participants.

First, students are the main followers for most of the educational leaders, accordingly, leadership styles of educational leaders' direct impact on educational leadership practices to students that they teach, or to the students they gave guidance on research. In terms of the application of leadership styles, it indicated that educational leaders need to be equipped with multiple leadership styles and apply them depends on the situation. Participant 2 stated:

Leadership styles may have great impacts on educational leadership practices. It's not that some academic members don't have leadership skills. It's just that their leadership may not be suitable for some aspects. (Participant 2, 43 years old, male, associate professor)

Participant 6 indicates "Good" universities often accompany educational leaders who can help young academic members apply for projects or curriculum design. The university where participants 1 and 2 are employed is one of China's leading universities, participant 1 and 2 reported faculty leaders in their university don't always serve academic members, and authoritarian leadership and transactional

leadership are dominant in some other faculties as well. As experienced by participant 6, authoritarian leaders are not regarded as good leaders, which is reflected in unequal rights and academic members are dominated to do many things, especially when there is a position gap, for example, the research or academic results of junior researchers are seized by authoritarian powers, causing demotivation to their job and lack of confidence for the future. Participant 6 stated:

Good leaders are often servant leaders who can drive the working atmosphere of the entire team... Conversely, authoritarian leadership can lead to unfair treatment or deprivation of the teaching or research results of young teachers and postgraduate students and demotivate them. (Participant 6, 33 years old, male, lecturer)

The guidelines and policies formulated by transformational leaders result in the future development positioning. This stems from the visionary nature of mid-level educational leaders who anticipate the future needs of the society, convey confidence in the organisation's vision, share risks with followers, demonstrate a sense of mission, show high standards of ethical behaviour, and emphasise a sense of achievement. This type of leader has the ability to instil beliefs in members of the organisation and promote cooperation with others. Participant 12 stated:

Our faculty develop new majors or programs according to the market and society needs, including enlarging the enrolment ratio, which has an important impact on the development of the faculty, on the employment prospects of students, faculty culture, etc., and subtly on the relationship among colleagues. (Participant 12, 38 years old, female, associate professor)



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Experienced Contextual Factors related to mid-level educational leadership styles (RQ2)

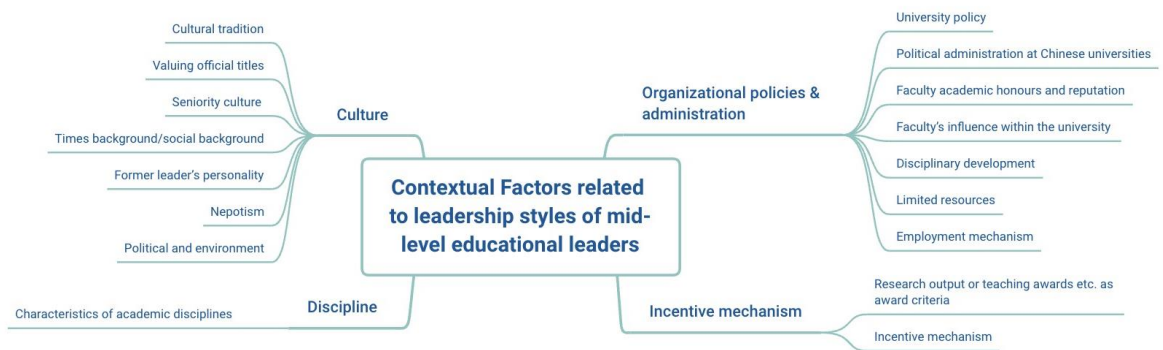


Figure 2. Experienced contextual factors related to leadership styles of mid-level educational leaders

The interviewees’ perspectives revealed that four dimensions of the factors listed in Figure 2. were associated with the leadership styles of mid-level educational leaders. The dimensions that were most frequently cited by the interviewees were culture and organizational policies & administration, categories of culture and organization policies & administration were considered highly important, in which culture tradition, valuing official titles, seniority culture, university policy, faculty academic honours, reputation, and political administration at Chinese universities are primary factors that impact



on their leadership styles. Furthermore, discipline and incentive mechanism were stressed by the respondents as well. Besides, participants also mentioned factors like leaders' age, work experience, and personal attributes, especially leaders' working experience regardless of their formal leader roles, transformational mid-level leaders give individualised consideration and show their empathy when they make decisions regarding the academic staff. Participant 3 stated:

I have been teaching for more than 20 years, I am willing to put my feet in my subordinates' shoes, consult them, and take their needs into consideration. When I make management decisions, I hope they're not just the leader's impractical personal ideas. I consider the decisions in my own practical capacity to see if these ideas can be implemented and achieve the expected effects. (Participant 3, 43 years old, female, professor/vice dean)

Discussion

In this study, the main leadership styles of the mid-level educational leaders were identified in the context of this research, including authoritarian leadership style, transformational leadership style, democratic leadership style, transactional leadership style and laissez-faire leadership style. With regard to the contextual factors related to leadership styles of mid-level educational leaders, the findings give emphasis to factors in four dimensions, including culture, organizational policies & administration, discipline and incentive mechanism.

Leadership styles of mid-level educational leaders

As per Eze's (2011) definition, leadership style refers to the general pattern of behaviours exhibited by a leader that are experienced by the

staff. Thus, the leadership styles of mid-level educational leaders as experienced by academic members in this study can possibly reflect the leadership styles of the mid-level educational leaders in the context of the participants.

Authoritarian leadership style was emphasized in the finding, the features are corroborated by De Hoog et al. (2015), as the most significant mid-level educational leadership style, interestingly, which was strictly reported by four young academic members. As in the traditional hierarchical system, the unity of leaders and staff is promoted through seniority and authority (Lu and Smith, 2020; Bush and Haiyan, 2000).

Mid-level educational leaders, falling into this category, primarily expect their staff to follow institutional policies and implement them in academic practices as a group. In accordance with Franken et al. (2015) and Zhou and Deneen (2020), leaders with this style tend to communicate through statements rather than engaging in dialogue with their staff. Staff may be reluctant to work under this atmosphere, leading to inadequate motivation, low morale, and a tendency among staff to resist established goals (Chukwusa, 2019). Therefore, the participants agreed that innovative ideas might elude organizations due to the adoption of authoritarian styles, which is to the fact that the staff cannot make contributions without consulting them (Northouse, 2015). In addition, based on the result of this study, project outputs under authoritarian leadership are usually of lower quality. On the other hand, participants also stated that authoritarian leadership can be effective at certain times, such as preventing students' plagiarism, which has a direct positive impact on leadership practice, as illustrated by Chukwusa (2019). In general, authoritarian leadership should be avoided in normal communication, as it is mostly commanding and



resulting in feelings of unappreciation and resentment among staff members and thus leading to high absenteeism and decreased motivation in faculties. However, due to the limited samples in this study, further research with a broad sample selection is needed to confirm academic members' perception of leadership styles of mid-level leaders. To address the above issues, it is recommended that academic members be given greater autonomy in their teaching and research responsibilities so that their workloads are more balanced in comparison with other staff members. What's more, it is also advisable to promote a culture of feedback and reflection, whereby mid-level leaders are encouraged to seek regularly feedback from their peers, subordinates, and superiors in order to assess the effectiveness of their leadership styles. Such feedback could guide them in making necessary adjustments.

Transformational leadership was reported as the second important educational leadership style at mid-level. Being consistent with those of Saenz (2011), Yukl (2013) and Ismail et al. (2010), transformational leaders formulate guidelines and policies that impact significantly on faculty development, the organizational culture will become optimistic, and TL fosters subordinates' commitment and results in a significant increase in work output (Yukl, 2013); after the TL determining the relevant faculty positioning, majors and programs can be developed according to the market and society needs. Thus, the importance of mid-level leaders' commitment is crucial to the faculty development (Williams, 2013), as it determines the capacity building of the faculty for the long term.

In addition, transactional leadership style was also stressed by the interviewees, the features are in line with the findings of Bensimon et al. (1989) and Bass and Riggio (2006), the nature of transaction

leadership is reflected as establishing expectations, monitoring and rewarding adherence and progress, and correcting or punishing deviations (Adserias et al., 2017). Interestingly, transactional leadership was stressed due to factors of performance evaluation system at Chinese universities, such as article publishing, rewards and punishment mechanism, which was reflected by Cheng and Zhu (2021). The performance evaluation system may lead to a less focus on teaching, which in turn leads to uncertainty about the teaching quality (Xin et al., 2022), and ultimately may impact on student learning outcomes (Adams et al., 2023), such as student satisfaction, and retention rates etc. Further research could explore whether transactional leadership practices, driven by these mechanisms, have an impact on job satisfaction and commitment of academic staff and the quality of education at universities. Comparative studies between Chinese universities and universities in other countries could also be conducted for different performance assessment systems, analyzing how leadership styles and practices differ in these contexts and the resulting impact on teaching and research.

Demonstrated by Adserias et al. (2017), researchers have discovered that a combination of various leadership styles is effective and has a higher probability of being adopted by leaders. It is true indeed that every leader cannot adopt a single leadership style, they would normally possess several leadership styles at the same time. Based on the findings above, it is important to encourage mid-level leaders to develop a broader range of leadership skills while ensuring alignment with the institution's mission and values. This includes developing skills related to transformational leadership, collaborative decision-making, and participatory leadership, promoting inclusive decision-making processes that take into account the views of a wide range of

stakeholders, including teachers, students, and staff. This helps to balance the rigidity that can come with authoritarian leadership and ensures a more participatory and collaborative approach. In addition, universities could invest in leadership training and professional development programmes that expose mid-level leaders to alternative leadership styles and approaches, providing workshops, seminars, and mentoring opportunities to help them broaden their leadership toolkit. On top of that, higher education institutions could look at strategies and leadership practices that help to better balance research and teaching priorities and try to investigate whether a more balanced approach can be achieved within the current performance evaluation framework so that teaching can also be given its priorities accordingly.

Contextual factors related to leadership styles of mid-level educational leaders

The factors that shape the leadership style of mid-level educational leaders were identified in this study. This research supports the following view: culture and organization have the greatest impact on leadership style, which is consistent with the research of Lok and Crawford (2004), Furmanczyk (2010) and Akanji et al. (2020). Culture has an influence on people's attitudes towards their surrounding environment, human nature, behaviour, time and interpersonal relationships, for example, the cultural socialization of the leaders affects their beliefs, behaviours and lifestyles (Furmanczyk, 2010; Lee, 2001; Akanji et al, 2020). Hence, our study results support the idea that workplace values and leadership behaviours are profoundly influenced by culture. As a result, mid-level educational leaders and administrators in Chinese universities should pay more attention to current cultural values to overcome long-standing traditions that obstruct effective educational leadership.

Furthermore, educational leaders' age and working experience were also emphasized by the respondents, which are aligned with studies of age (Nwafor, 2012) and work experience (Cara, 2012; Zhou & Deneen, 2020). Leaders' openness to experience is positively related to leadership styles, they tend to think more critically as they get older. The combination of this with the rapid changes in China's society makes this phenomenon more obvious. Moreover, if the leaders have the experience of working with those being led, then they will generally put themselves in the shoes of other members of the academic community, rather than just talking or, worse, proposing unrealistic ideas. One could make the argument that the value placed on future development by educational leaders may be influenced by their life experiences (Zhou & Deneen, 2020), and understanding these experiences may be necessary in order to support their leadership in the future (Inman, 2011).

In addition, discipline characteristics and incentive mechanism were also presented by the respondents, of those, disciplines such as foreign studies and other humanities and social sciences are reported to be having more open-minded educational leaders. As the evaluation systems of academic members also play an important role, future transformation policies could focus on the reform of the evaluation systems too (Cheng & Zhu, 2021).

Limitations and Recommendations

There are some limitations to be noted in our research. Our findings draw on reported perceptions rather than observed behaviours, and therefore these need to be interpreted with caution and cannot be generalised to other contexts without considering the specific situations (Bassey 2007). To supplement our qualitative research,



quantitative research can be conducted to explore other critical issues related to leadership styles at the mid-level and their effects. As leadership in higher education settings is crucial for promoting teaching, mentoring, and learning communities, as well as cultural change, it is also necessary to investigate how leadership training programs can encourage, impact, and cultivate the educational leadership of mid-level leaders in higher education, especially whether and how transformational leadership can be developed as the results of the leadership trainings.

Implications and Conclusion

This study addressed a significant research gap by exploring leadership styles of mid-level educational leaders, contextual leadership practices, and their impact, as well as the factors that influence leadership styles among mid-level educational leaders in the selected Chinese universities. The findings of this study have important implications for the development of leadership training programs and can help to enhance or refine leadership styles of educational leaders in the future.

Findings of this research revealed leadership styles of mid-level educational leaders reported by academic members under which leaders conduct leadership practice. It is suggested to minimise the adoption of this authoritarian leadership style, as under which innovative ideas may elude organizations. Moreover, the reason behind transactional leadership style is likely due to the performance evaluation system in Chinese universities, the incentive mechanisms for teaching and research should be appropriately balanced. In general, these findings show where the leadership at mid-level educational leaders can be improved and serve for future studies regarding

tailored leadership training programs. The study's findings suggest that educational leaders should pay more attention to existing Chinese cultural values to overcome traditional barriers, such as overvaluing official titles, and unnecessary seniority culture at work, to achieve effective leadership. Furthermore, leadership training programs could benefit from incorporating diverse disciplinary perspectives and building communities of middle leaders to facilitate mid-level leadership development (Zhou & Deneen, 2020). Finally, the study's implications could inform the design of future leadership training programs among Chinese higher education institutions.

References

- Aboramadan, M., Dahleez, K. & Hamad, M. (2020). Servant leadership and academics' engagement in higher education: mediation analysis. *Journal of Higher Education Policy and Management*, 42(6), 617-633.
<https://doi.org/10.1080/1360080X.2020.1774036>
- Adams, B., Thomas, L., Moens, M. & Valcke, M. (2023). University teachers as versatile masters: Evaluating the effectiveness of a professional development programme on student-centred teaching competencies. *Studies in Educational Evaluation*, 77(March), 101260.
<https://doi.org/10.1016/j.stueduc.2023.101260>
- Adserias, R. P., Charleston, L. V. J. & Jackson, J. F. L. (2017). What style of leadership is best suited to direct organizational change to fuel institutional diversity in higher education? *Race Ethnicity and Education*, 20(3), 315-331.
<https://doi.org/10.1080/13613324.2016.1260233>

- Akanji, B., Mordi, C., Ituma, A., Adisa, T. A. & Ajonbadi, H. (2020). The influence of organisational culture on leadership style in higher education institutions. *Personnel Review*, 49(3), 709-732. <https://doi.org/10.1108/PR-08-2018-0280>
- Alves, J. C., Lovelace, K. J., Manz, C. C., Matsypura, D., Toyasaki, F. & Ke, K. (2006). "A cross cultural perspective of self-leadership", *Journal of Managerial Psychology*, Vol. 21 No. 5, pp. 338-359. <https://doi.org/10.1108/02683940610663123>
- Andoh, J. S. & Ghansah, B. (2019). A Study of Leadership Style on Employees' Performance in some Selected Private Universities in Ghana. *International Journal of Engineering Research in Africa*, 43, 157-167. <https://doi.org/10.4028/www.scientific.net/jera.43.157>
- Avolio, B. J. & Bass, B. M. (2002). *Developing potential across a full range of Leadership TM: Cases on transactional and transformational leadership*. London: Psychology Press.
- Bass, B. M. (1990). *Bass and Stogdill's handbook of leadership* (3rd ed.). New York, NY: The Free Press.
- Bass, B. M. (1996). *A new paradigm of leadership: An inquiry into transformational leadership*. Virginia: U.S. Army Research Institute for the Behavioral and Social Science.
- Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, 8(1), 9-32. <https://doi.org/10.1080/135943299398410>
- Bass, B. M. & Riggio, R. E. (2006). *Transformational Leadership*. 2nd ed. Mahwah, NJ: Lawrence Erlbaum Associates.

- Bensimon, E. M., Neumann, A. & Birnbaum, R. (1989). Making Sense of Administrative Leadership: The 'L' Word in Higher Education. *ASHE-ERIC Higher Education Report* 18 (1). Washington, DC: School of Education, George Washington University.
- Bodine Al-Sharif, M. A., García, H. A., & McNaughtan, J. (2021). Making Meaning of the Mid-Level Administrator Roles in International Student Service Centers. *Journal of Higher Education*, 92(1), 116–139.
<https://doi.org/10.1080/00221546.2020.1762155>
- Bolman, L. G. & Deal, T. E. (2008). *Reframing Organizations: Artistry, Choice and Leadership*. 4th ed. San Francisco, CA: Jossey-Bass.
- Bush, T., & Q. Haiyan. 2000. "Leadership and Culture in Chinese Education." *Asia Pacific Journal of Education* 20 (2): 58–67.
 doi:10.1080/02188791.2000.10600183
- Butler, J. (2020). Learning to lead: a discussion of development programs for academic leadership capability in Australian Universities. *Journal of Higher Education Policy and Management*, 42(4), 424–437. <https://doi.org/10.1080/1360080X.2019.1701855>
- Cara, P. (2012). Leading for change: How leadership style impacts teachers' experience. *ProQuest Dissertations & Theses*, No. 3508203.
- Cheng, Z. & Zhu, C. (2021). Academic Members' Perceptions of Educational Leadership and Perceived Need for Leadership Capacity Building in Chinese Higher Education Institutions, *Chinese Education & Society*, 54:5-6, 171-189. DOI: 10.1080/10611932.2021.1990621

- Cheng, Z., Caliskan, A. & Zhu, C. (2023). Academics' motivation for joining an educational leadership training programme and their perceived effectiveness: Insights from an EU- China cooperative project, *European Journal of Education*, September, pp. 1–15. <https://doi.org/10.1111/ejed.12576>
- Chukwusa, J. (2019). Autocratic leadership style: Obstacle to success in academic libraries. *Library Philosophy and Practice*, 2019 (December 2018).
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five traditions*. London: Sage.
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oak: SAGE Publications.
- Davis, M. & Fifolt, M. (2018). Exploring employee perceptions of Six Sigma as a change management program in higher education. *Journal of Higher Education Policy and Management*, 40(1), 81-93. <https://doi.org/10.1080/1360080X.2017.1377970>
- De Hoog, A. H. B., Greer, L. L. & Den Hartog, D. N. (2015). Diabolical dictators or capable commanders? An investigation of the differential effects of autocratic leadership on team performance. *The Leadership Quarterly*, 26 (5), 687-701. <https://doi.org/10.1016/j.leaqua.2015.01.001>
- De Luque, M. S., Washburn, N. T., Waldman, D. A. & House, R. J. (2008). Unrequited profit: How stakeholder and economic values relate to subordinates perception of leadership and firm performance. *Administrative Science Quarterly*, 53 (4), 626-654. <https://doi.org/10.2189/asqu.53.4.626>
- Elliott, M. (2012). Dissertation-Servant first: A multicase study exploring servant leadership in community college,

instructional administrators. Retrieved from
<http://libres.uncg.edu/ir/wcu/f/elliott2012.pdf>

- Erlingsson, C. & Brysiewicz, P. (2017). A hands-on guide to doing content analysis. *African Journal of Emergency Medicine*, 7(3), 93-99. <https://doi.org/10.1016/J.AFJEM.2017.08.001>
- Eva, N., Robin, M., Sendjaya, S., van Dierendonck, D. & Liden, R. C. (2019). Servant leadership: A systematic review and call for future research. *The Leadership Quarterly*, 30(1), 111-132. <https://doi.org/10.1016/j.leaqua.2018.07.004>
- Eze, F. O. (2011). The leadership question in local government administration: Theories issues. *ESUT Journal of Administration*, 2(2), 181-192.
- Fields, J., Kenny, N. A. & Mueller, R. A. (2019). Conceptualizing educational leadership in an academic development program. *International Journal for Academic Development*, 24(3), 218–231. <https://doi.org/10.1080/1360144X.2019.1570211>
- Franken, M., Penney, D. & Branson, C. (2015). Middle leaders' learning in a university context. *Journal of Higher Education Policy and Management*, 37(2), 190–203. doi:10.1080/1360080X.2015.1019120
- Furmanczyk, J. (2010). "The cross-cultural leadership aspect", *Journal of Intercultural Management*, Vol. 2 No. 2, pp. 67-82.
- Gastil, J. (1994). A definition and illustration of democratic leadership. *Human Relations*, 47 (8), 953-975. <https://doi.org/10.1177/001872679404700805>
- Gennard, J. & Judge, G. (2011). *Managing employment relations*, CIPD: London.



- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59-82.
<https://doi.org/10.1177/1525822X05279903>
- Guillaume, O., Honeycutt, A. & Savage-Austin, A. R. (2013). The Impact of Servant Leadership on Job Satisfaction. *Journal of Business and Economics*, 4(5), 444-448.
<https://doi.org/10.1108/LODJ-09-2018-0337>
- Hannah, S. T. & Lester, P. B. (2009). A multilevel approach to building and leading learning organizations. *The Leadership Quarterly*, 20, 34-48.
<https://doi.org/10.1016/j.leaqua.2008.11.003>
- Harris, K., Hinds, L., Manansingh, S., Rubino, M. & Morote, E. S. (2016) "What Type of Leadership in Higher Education Promotes Job Satisfaction and Increases Retention?" *Journal for Leadership and Instruction*, 27-32.
- Heck, R. H. & Hallinger, P. (2005). The study of educational leadership and management: Where does the field stand today? *Educational Management Administration Leadership*, 33(2), 229-244. <https://doi.org/10.1177/1741143205051055>
- Inman, M. (2011). The journey to leadership for academics in higher education. *Educational Management Administration and Leadership*, 39(2), 228-241.
<https://doi.org/10.1177/1741143210390055>
- Ismail, A., Mohamad, M., Mohamad, H., Rafiuddin, N. & Zhen, K. (2010). "Transformational and Transactional Leadership Styles as a Predictor of Individual Outcomes." *Theoretical and Applied Economics* 6 (547): 89-104.

- Jooste, K., Frantz, J. & Waggie, F. (2018). Challenges of academic healthcare leaders in a higher education context in South Africa. *Educational Management Administration & Leadership* 46(4): 692-708. <https://doi.org/10.1177/1741143216688468>
- Joseph, E. E. & Winston, B. E. (2005). A correlation of servant leadership, leader trust, and organizational trust. *Leadership & Organization Development Journal*, 26(1), 6-22. <https://doi.org/10.1108/01437730510575552>
- Kohtamäki, V. (2019). Academic leadership and university reform-guided management changes in Finland. *Journal of Higher Education Policy and Management*, 41(1), 70–85. <https://doi.org/10.1080/1360080X.2018.1553499>
- Lee, J. K. (2001). "Confucian thought affecting leadership and organizational culture of Korean higher education", *Radical Pedagogy*, Vol. 3 No. 3, pp. 1-11.
- Lehman, H. C. (1953). *Age and achievement*. N.J.: Princeton University Press.
- Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created "social climates." *The Journal of Social Psychology*, 10, 271-299. <https://doi.org/10.1080/00224545.1939.9713366>
- Lin, F., Lin, J., & MA, W. (2013). What Kind of Competency Should Chinese Provincial College Middle-Level Manager Have. *Proceedings of the 2013 International Conference on Advances in Social Science, Humanities, and Management*, 43(Asshm). <https://doi.org/10.2991/asshm-13.2013.152>
- Lok, P. & Crawford, J. (2004). "The effect of organisational culture and leadership style on job satisfaction and organisational

commitment: a cross-national comparison", *Journal of Management Development*, Vol. 23 No. 4, pp. 321-338.
<https://doi.org/10.1108/02621710410529785>

Lu, X. & Smith, R. (2020). Leadership in Chinese higher education and the influence of sociocultural constructs. *Compare*, 00(00), 1–19. <https://doi.org/10.1080/03057925.2020.1768827>

Mercer, J., & Pogosian, V. (2013). Higher education leadership in Russia: A case study of mid-level academic management at an elite State university. *Compare*, 43(2), 184–202.
<https://doi.org/10.1080/03057925.2012.685585>

Merriam, S. (2009). *Qualitative Research: A Guide to Design and Implementation*. 3rd edition. San Francisco: Jossey-Bass.
Methods in Educational Leadership and Management, edited by A. Briggs, M. Coleman, and M. Morrison, 75-89. London: Sage.

Moustakas, C. (1994). *Phenomenological Research Methods* (1st ed.). SAGE Publications, Inc.

Mustafa, Ā. (2020). EFFECTS OF SCHOOL PRINCIPALS' LEADERSHIP STYLES ON LEADERSHIP PRACTICES. *MOJES: Malaysian Online Journal of Educational Sciences*, 8(2), 1-13.

Noordin, Y., Mohammad Aslan, M. T., Jasmi, I., Zainudin, S., Azizi, Y., Yusof, B. & Sharin, H. (2011). Relationship between leadership personality types and source of power and leadership styles among managers. *African Journal of Business Management*, 5(22), 9635-9648. DOI: 11.5897/AJBM11.1611

Northouse, P. G. (2018). *Leadership: Theory and practice*. Sage publications.

- Nwafor, S. O. (2012). The essential leadership styles for effective administration of universities in Nigeria. *Asian Journal of Social Sciences & Humanities*, 1(3), 173-179.
- Paranosic, N. & Riveros, A. (2015). The metaphorical department head: Using metaphors as analytic tools to investigate the role of department head. *International Journal of Leadership in Education*, 20(4), 432-450.
<https://doi.org/10.1080/13603124.2015.1085095>
- Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Pham, T. Van, Nghiem, T. T., Nguyen, L. M. T., Mai, T. X., & Tran, T. (2019). Exploring key competencies of mid-level academic managers in higher education in Vietnam. *Sustainability (Switzerland)*, 11(23), 1–13. <https://doi.org/10.3390/su11236818>
- Popa, B. M. (2012). The relationship between leadership effectiveness and organizational performance. *Journal of Defence Resources Management* 3(1), 123-127.
- Puni, A., Ofei, S. B. & Okoe, A. (2014). The effect of leadership styles on firm performance in Ghana. *International Journal of Marketing Studies* 6(1): p. 177. DOI:10.5539/ijms.v6n1p177
- Saenz, H. (2011). "Transformational Leadership." In *The Sage Handbook of Leadership*, edited by Alan Bryman, David Collinson, Keith Grint, Brad Jackson and Mary Bien, 299-310. London: Sage.
- Schoel, C., Bluemke, M., Mueller, P. & Stahlberg, D. (2011). When autocratic leaders become an option – uncertainty and self-esteem predict implicit leadership preferences. *Journal of Personality and Social Psychology* 101 (3), 521-540.
<https://doi.org/10.1037/a0023393>

- Spears, L. (1996). Reflections on Robert K. Greenleaf and servant-leadership. *Leadership & organization development journal* 17(7), 33-35. <https://doi.org/10.1108/01437739610148367>
- Williams, D. A. (2013). *Strategic Diversity Leadership: Activating Change and Transformation in Higher Education*. Sterling: Stylus Publishing.
- Xin, X., Shu-Jiang, Y., Nan, P., ChenXu, D., & Dan, L. (2022). Review on A big data-based innovative knowledge teaching evaluation system in universities. *Journal of Innovation and Knowledge*, 7(3), 100197. <https://doi.org/10.1016/j.jik.2022.100197>
- Yukl, G. (2013). *Leadership in Organizations*. 8th ed. Upper Saddle River, NJ: Pearson Education.
- Zhou, J. & Deneen, C. (2020). 'Sandwiched' or 'filtering': middle leaders' agency in innovation enactment. *Journal of Higher Education Policy and Management* 42(3), 332-346. <https://doi.org/10.1080/1360080X.2020.1736778>
- Zhu, C. & Zayim-Kurtay, M. (eds) (2019). *University Governance and Academic Leadership in the EU and China*. Hershey, PA: IGI Global.
- Zomer, A. & Benneworth, P. (2011). "The Rise of the University's Third Mission." In *Reform in Higher Education in Europe*, edited by J. Enders, H. F. de Boer and D. F. Westerheijden, 81-101. Rotterdam: Sense Publishers.



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Examination of the Effectiveness of School Leadership: A Second-order Meta-analysis Study

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Abstract

This study aimed to examine the effectiveness of school leadership by exploring the relationships between various school leadership models and practices and different school outcomes, including organizational, teacher, and student outcomes. Data for this study were retrieved from multiple databases, including Web of Science, Scopus, ERIC, Academic Search Ultimate, and TR Dizin-Turkish national index. The analysis synthesized findings from 23 meta-analysis studies, utilizing second-order meta-analysis with the random-effects model. The study revealed a significantly positive relationship between school leadership and school outcomes, with a high level of correlation (mean effect size: 0.46). Additionally, this relationship varied significantly based on the type of school leadership, school outcome, and the quality of the studies conducted.

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Introduction

School leadership plays a crucial role in shaping both internal and external processes within schools by influencing various stakeholders. School leaders strive to align their actions with the school's vision, working in collaboration with stakeholders (Bush & Glover, 2014). Their intention is to enhance the quality of school outcomes, thereby defining school effectiveness (Huber & Muijs, 2010). Consequently, researchers have focused on examining the relationship between school leaders and school outcomes, as evidenced by studies conducted by Hendriks & Steen (2012) and Leithwood et al. (2020). The connection between school leadership and school outcomes is intricately linked to the effectiveness of school leadership (Mumford & Barrett, 2013).

In addition to primary studies exploring the relationship between school leadership and school outcomes, several meta-analysis studies have delved into this area (Alanoğlu & Karabatak, 2022; Liebowitz & Porter, 2019; Tan et al., 2021). Synthesizing the findings of these meta-analysis studies can provide a comprehensive evaluation of school leadership effectiveness. Such comprehensive meta-analysis studies are essential for a holistic assessment of school leadership effectiveness, fulfilling a crucial need within the existing literature.

School leadership constitutes a pivotal factor in accomplishing school objectives. The gauge for measuring the school's goal attainment is reflected in its outcomes, encompassing organizational, teacher, and student-level achievements. Understanding the influence of school leadership on these outcomes is essential. Hence, it is crucial to delineate the correlation between school leadership and organizational, teacher, and student-level outcomes. This exploration allows us to discern the specific levels at which school leadership

proves most effective and where its efficacy is comparatively low. Through this analysis, management policies can be formulated, taking into account the strengths and weaknesses of school leadership, thus ensuring a more targeted and strategic approach to school improvement.

Theoretical Background

School leadership

School leaders, comprising principals, assistant principals, and teachers, play a significant role in influencing school stakeholders in alignment with the school's objectives (Bush & Glover, 2014; Tan et al., 2020). School leadership involves the process of engaging internal and external school stakeholders in harmony with the vision, mission, values, and principles of the schools. Tan et al. (2020) and Krüger and Scheerens (2012) point out that school leadership comprises two essential aspects: school leadership models and school leadership practices.

Bush and Glover (2014) and Gümüş et al. (2018) state that school leadership models have a solid theoretical background, focusing on leadership situations rather than the characteristics of individual leaders. These models are derived from the examination of more successful and effective school examples. Furthermore, the literature encompasses various school leadership models, including instructional, transformational, authentic, distributed, systemic, moral, contingent, managerial, and teacher leadership models.

On the other hand, school leadership practices concern the actions of school leaders. In other words, these practices encompass the behaviors exhibited by school leaders (Liebowitz & Porter, 2019). School leadership practices include activities such as building shared



vision and values, school redesign, providing professional development, enhancing teaching and learning, empowering teachers, motivating teachers, managing resources, and engaging families and the community (Tan et al., 2020).

School leadership effectiveness

Mumford and Barrett (2013) define leadership effectiveness as the impact of organizational leaders on the organization's outcomes. They categorize these outcomes as organizational, social, psychological, performance, substantive, interpersonal, and team-related. Similarly, Derue et al. (2011) define leadership effectiveness as the extent to which leaders influence organizational performance, affective aspects, and relational characteristics of individuals and teams. In the context of schools, leadership effectiveness refers to the impact of school leaders on school outcomes (Hendriks & Steen, 2012).

Effective school leaders create a conducive learning environment by considering the specific context they are in. In doing so, they implement interventions to enhance motivation, commitment, and working conditions for staff, particularly teachers. Moreover, effective school leadership is closely linked to the equitable distribution of leadership responsibilities among various school stakeholders (Leithwood et al., 2020). Consequently, school leaders concentrate on improving learning outcomes.

Tan et al. (2020) and Scheerens (2012a) argue that school leaders significantly contribute to the outcomes of organizations, teachers, and students. Organizational outcomes, as identified by Karadağ et al. (2015) and Sarier and Uysal (2020), include aspects such as organizational culture, climate, health, performance, learning, citizenship, commitment, trust, and justice. They also pinpoint

negative organizational outcomes like stress, burnout, and cynicism. Similarly, teacher outcomes encompass self-efficacy, job satisfaction, well-being, and teaching practices (Alanoglu, 2021; Goktas, 2021; Liebowitz & Porter, 2019). Additionally, student outcomes, as defined by Tan et al. (2021), encompass academic achievement, learning attitudes, and attainment.

Moderator variables

Several variables can mediate the relationship between school leadership and school outcomes. Various meta-analysis studies have indicated that this relationship varies based on the countries in which the studies were conducted (location) (Alanoğlu & Karabatak, 2022; Balwant, 2016; Uysal & Sarier, 2019). However, Alanoglu (2021) observed that this relationship remained consistent regardless of countries.

Another moderator is the hierarchical statuses of leaders. Tan et al. (2020) found that leadership status influenced school outcomes, while Tan et al. (2021) did not find a significant difference. The third moderator variable is the school level at which school leaders operate. Köybaşı Şemin (2022) suggested that the relationship between school leadership and school outcomes varied based on school levels, although some other studies (Ertem, 2021; Karadağ, 2020) did not find such a distinction.

Other potential moderator variables include the quality of studies, types of primary studies, and publication bias statuses. The reliability of calculated effect size should consider the quality of meta-analysis studies, the types of reports they encompass, and the presence of publication bias (Kung et al., 2010).

The present study

Wu and Shen (2021), Scheerens (2012a), and Hendriks and Steen (2012) conducted second-order meta-analysis studies investigating the relationships between school leadership and student cognitive outputs. However, these studies did not account for the issue of overlap in meta-analysis studies. In contrast, Tan et al. (2020) published a second-order meta-analysis study on school leadership and school outcomes, yet it did not include published book chapters. Additionally, Tan et al. (2020) recommended that future second-order meta-analysis studies should incorporate cross-cultural comparisons.

In this study, we addressed the problem of overlap while examining meta-analysis studies on school leadership and school outcomes. Furthermore, this research included published book chapters in the meta-analysis. Moreover, the analysis encompassed meta-analysis studies published in Turkish, in addition to those in English, considering the cultural context in the examination of these studies.

Purpose

This study aims to examine the relationships between school leadership and school outcomes. The research sought to answer the following questions in line with this purpose:

1. What is the level of the relationship between school leadership and school outcomes?
2. Does the relationship between school leadership and school outcomes differ significantly in terms of moderator variables?



Method

The current study utilized the second-order meta-analysis method to examine the relationships between school leadership and school outcomes. This method is akin to the first-order meta-analysis approach (Schmidt & Oh, 2013). In the second-order meta-analysis method, meta-analysis studies are employed to calculate the effect sizes instead of primary research studies (Oh, 2020). Consequently, this method allows for a more comprehensive examination of the constructs.

Data collection

The data for this study comprised meta-analysis studies. Electronic databases, such as Web of Science, Scopus, ERIC, Academic Search Ultimate, and TR Dizin national index, were utilized to access meta-analysis studies focusing on school leadership and school outcomes. The search utilized keywords including leadership, leader, principal, administrator, and meta-analysis, meta analysis, or meta-analytic. The data were selected based on the previously identified inclusion criteria.

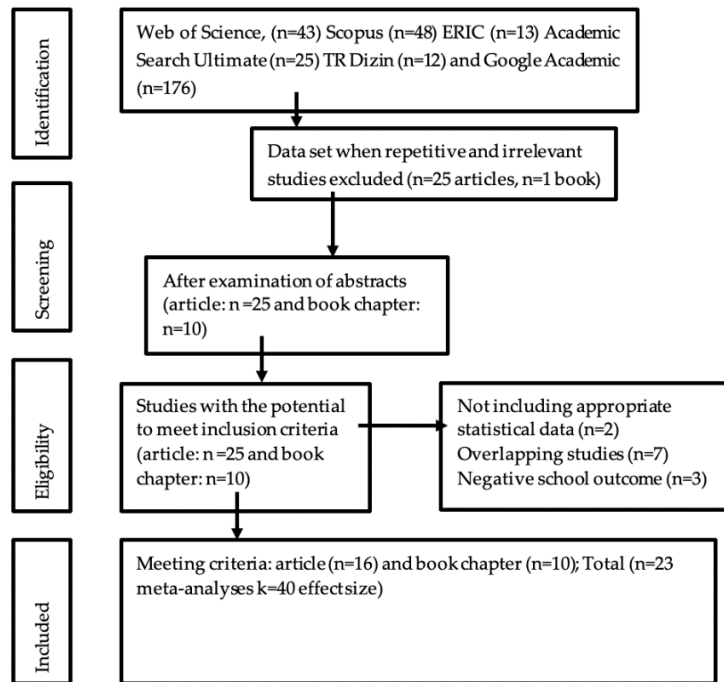


Figure 1. PRISMA flow diagram

Inclusion criteria

1. Meta-analysis studies published between 2015-2022 in Turkish or English were considered.
2. Meta-analysis studies focusing on school leadership and school outcomes were included.
3. Meta-analysis studies should contain appropriate data to calculate generic effect size, such as effect size, lower limit, upper limit, standard error, and variance.

A data pool consisting of 35 studies meeting the inclusion criteria of the current study was compiled. The contents, methods, and findings

of these studies were examined. The PRISMA flow diagram detailing the formation of the dataset is presented in Figure 1. Nine studies were excluded for reasons explained in Figure 1. Consequently, the dataset for this study comprised 23 studies. The characteristics of these studies are provided in Appendix-1.

Overlapping problem

One challenge encountered in second-order meta-analysis studies is the issue of overlap among the meta-analysis studies. Cooper and Koenka (2012) assert that meta-analysis studies with over 25% overlap with other meta-analysis studies should not be included in second-order meta-analysis studies. Consequently, one of the overlapping meta-analysis studies was excluded from our analysis. Details regarding the overlapping meta-analysis studies and the chosen ones among them are provided in Appendix-2.

Karadağ (2020) simultaneously assessed the relationship between academic achievement and leadership models and practices. In contrast, Tan et al. (2021) examined only the relationship between leadership practices and student outcomes, such as academic achievement. There was partial overlap between the meta-analysis studies by Karadağ (2020) and Tan et al. (2021) concerning the constructs of leadership practices and academic achievement. Consequently, effect sizes related to leadership practices and academic achievement in Karadağ (2020) were excluded from this study. However, effect sizes representing the relationship between leadership models and academic achievement in Karadağ (2020) were included.

Additionally, Uysal and Sarier (2019) analyzed the relationships between teacher leadership and student outcomes in different countries (Turkey and the USA). The general effect sizes in the USA



overlapped with those in Shen et al. (2020). Consequently, the study by Uysal and Sarier (2019) was only represented with effect sizes from Turkey, and coding was conducted accordingly.

Quality evaluation

The Revised Assessment of Multiple Systematic Reviews (R-AMSTAR) scale, introduced by Kung et al. (2010), was employed to assess the quality of the meta-analysis studies. R-AMSTAR comprises 11 parts. However, the A and B items in the eighth part, designed for clinical practices, were excluded from the analysis in this study. The scores in the R-AMSTAR were categorized as follows: 0-11= inadequate, 12-22= low, 23-33= medium, 34-42= high (Young, 2017).

Coding

A coding form reflecting the characteristics of meta-analysis studies was created. The codes in this study are presented in Table 1.

Table 1.
Coding of meta-analysis research

Group	Code
Study	Researcher/s (Publication Year)
School leadership	Leadership Model, Leadership Practice, And Mixed
Leadership status	Administrator, Teacher, and Mixed
School-level	K12, Higher, Mixed, and Unknown
Outcomes	Organizational Outcomes, Teacher Outcomes, Student Outcomes and Mixed
Primary research report type	Article And Mixed
Country location	Multi-county , Turkey and Indonesia
Meta-analysis quality	Inadequate, Low, Medium, and High
The state of bias	Yes, No, Negligible and Unknown

Statistical Independence

If the meta-analysis studies were coded concerning leadership models, leadership behaviors, and leadership practices, they were treated as independent meta-analyses. For example, effect sizes related to transformational leadership and instructional leadership were coded separately. Similarly, if the meta-analysis studies categorized their outcomes as organizational outputs, teacher outputs, and student outputs, these studies were also treated as independent. For instance, if ethical leadership was separately coded for job satisfaction and organizational commitment, each was considered independently. However, if the meta-analysis studies examined school leadership and school outcomes in a general context, they were coded as per the researchers' original coding.

Statistical model

Borenstein et al. (2011) recommend using the random-effects model when the samples and characteristics of studies, whose effect sizes will be combined, are highly diverse. In this study, the effect size, heterogeneity, moderator, and publication bias analyses were conducted using the random-effects model. The analyses below were performed for the dataset.

Effect size calculation

Out of the 23 studies in the dataset, 21 used Pearson correlation coefficient (r), and 5 used Fisher's z (Fz) index as effect size metrics. The Pearson correlation (r) index ranges from 1 to -1, leading to a limited variance. Therefore, all effect sizes were converted to the Fisher's z index as recommended by Borenstein et al. (2011). To interpret the magnitude of effect size, the value intervals provided by Funder and Ozer (2019) were utilized.

Publication bias analysis

The reliability of the calculated effect size is closely related to publication bias. Therefore, several publication bias analyses were conducted, including the examination of the Funnel Plot, Duval and Tweedie's trim and fill analysis techniques, Begg and Mazumdar rank correlation test (BMRC), and Egger's regression test (ERT) (Jin, Zhou & He, 2015).

Heterogeneity and moderator analysis

Q statistics were utilized to calculate the overall heterogeneity of the effect sizes. Additionally, I² tests were performed to assess the levels of heterogeneity among the effect sizes (Higgins et al., 2003). Moderator variables, such as school leadership types, school outcome types, school levels, primary research report types, location types, meta-analysis quality, and bias status, were assigned. Mean effect sizes for the moderator groups were computed, and the statistical differences between these groups were examined using Q between tests. The statistical analyses were conducted using the CMA 2.0 package program.

Findings

This section presents statistical analyses concerning the school leadership and school outcomes dataset.

School leadership and school outcomes

This section presents descriptive analyses, mean effect size calculations, publication bias assessments, heterogeneity evaluations, and moderator analyses for the school leadership and school outcomes dataset. The school outcomes examined in this study include teacher

self-efficacy, teacher job satisfaction, teacher performance, teacher well-being, teaching practices, organizational health, organizational justice, organizational commitment, organizational trust, organizational performance, organizational trust, organizational climate, learning schools, organizational culture, student motivation, student outcomes, instructor credibility, and satisfaction with the leader. This dataset comprises 23 meta-analysis studies, generating a total of 40 effect sizes. If the overlap rate between meta-analyses exceeds 25%, the overlapping studies are excluded, and these exclusions are presented in the appendix. For cases where the overlap rate is below 25%, it is assumed that the meta-analyses are independent of each other.

The effect sizes in the dataset ranged between $ES=.10$ and $ES=.1.07$. The mean effect size was calculated as $ES=.51$ with a 95% confidence interval of $[.45; .58]$. In other words, the relationship between school leadership and school outcomes is at a high level. The total heterogeneity of the effect sizes was calculated as $Q=912.61$ ($p<.05$), indicating significant heterogeneity ($I^2=95.72$).

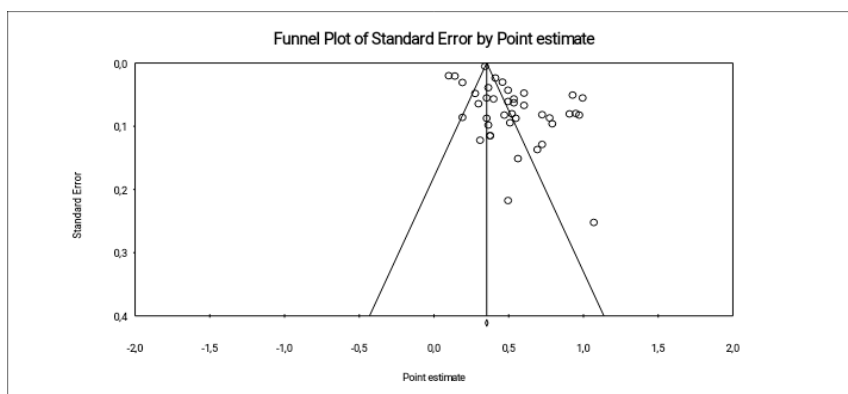


Figure 2. *Funnel Plot for the first data set*



Publication bias analyses

The funnel plot for the dataset is presented in Figure 2. Observing Figure 1, it is noted that the distribution of effect sizes by standard errors is partially symmetrical. The Begg and Mazumdar rank correlation test did not indicate publication bias ($\tau=.06$, $p >.60$). However, Egger's regression test detected publication bias ($t=3.02$, $p <.05$). Additionally, the Duval and Tweedie's trim and fill analysis techniques did not reveal publication bias. Considering the results of all these tests, it was deduced that the dataset has weak publication bias.

Moderator and heterogeneity analyses

Table 2 presents the moderator and heterogeneity analyses regarding the dataset. The notable findings are as follows:

The mean effect sizes differ significantly in terms of school leadership types ($Q(2)=6.51$, $p <.05$). General school leadership (mixed), leadership models, and leadership practices were associated with school outcomes at high ($ES=.59$), high ($ES=.50$), and medium ($ES=.32$) levels, respectively. The mean effect sizes also significantly vary concerning school outcome types ($Q(3)=16.98$, $p <.05$). School leadership is linked to organizational outcomes at a high level ($ES=.63$), teacher outcomes at a high level ($ES=.46$), and student outcomes at a medium level ($ES=.36$).

Additionally, the mean effect sizes of the meta-analysis studies differ significantly in terms of quality levels ($Q(1)=21.54$, $p <.05$). Meta-analysis studies with high quality produced medium-level effect sizes ($ES=.30$), whereas studies with medium-level quality yielded high-level effect sizes ($ES=.60$). Furthermore, studies from Turkey ($ES=.52$) produced larger effect sizes than studies from mixed countries

(ES=.44).

Table 2.
Moderator and heterogeneity analyses

Group	<i>k</i>	<i>ES(Fz)</i>	<i>LL</i>	<i>UL</i>	<i>Q(b)</i>	<i>df(Q)</i>	<i>p</i>
School leadership							
Leadership model	15	.50	.41	.59			
Leadership practices	6	.32	.16	.47			
Mixed	19	.59	.51	.68	9.93	2	.01
Outcomes							
Organizational outcomes	21	.63	.55	.71			
Teacher outcomes	6	.46	.31	.60			
Student outcomes	11	.36	.25	.46			
Mixed	2	.50	.26	.75	16.98	3	<.01
Leadership status							
Principal	21	.54	.43	.64			
Teacher	6	.47	.28	.66			
Mixed	2	.26	-.06	.59			
Unknown	11	.57	.43	.72	3.16	3	.37
Education level							
K12	23	.46	.38	.53			
Higher	7	.57	.43	.71			
Mixed	2	.74	.50	.99			
Unknown	8	.58	.44	.71	7.01	3	.07
Country location							
Multi-county	28	.49	.40	.57			
Turkey	11	.60	.46	.73			
Indonesia	1	.52	.06	.98	1.09	2	.38
Research quality							
High quality	11	.30	.20	.41			
Medium quality	29	.60	.53	.66	21.54	1	<.01
Publication Bias status							
No	30	.53	.45	.60			
Negligible	5	.40	.21	.59			
Yes	1	.50	.12	.87			
Unknown	4	.59	.38	.79	2.01	3	.57
Publication type							
Article	1	.52	.13	.92			
Mixed	39	.51	.45	.58	.01	1	.97



No: There is no publication bias; Yes: There is publication bias; Negligible: There is publication bias but negligible; Unknown: There is no information.

Discussion, Conclusion and Recommendations

This study synthesized the results of 23 meta-analysis studies using the second-order meta-analysis method.

School leadership effectiveness

This study revealed a strong relationship between school leadership and school outcomes, accounting for 21.2% of the variance in school outcomes. A comparison between school leadership models and school leadership practices suggests that school leadership models have a more robust relationship with school outcomes than school leadership practices. Specifically, school leadership models explain 20.3% of the variance regarding organizational outcomes, while school leadership practices explain 10.2%.

Furthermore, school leadership exhibits a high-level relationship with organizational and teacher outcomes, while its relationship with student outcomes is at a medium level. In other words, school leadership demonstrates a stronger connection with organizational and teacher outcomes compared to student outcomes. These results align with Tan et al. (2020). However, it's worth noting that the relationship between school leadership and student outcomes reported in this study is at a medium level, contrasting with the findings of Wu and Shen (2021) and Scheerens (2012b), who reported this relationship at a low to medium level. The variance in these relationships might stem from the inclusion of various student outcomes in this study, such as attainment, learning attitudes, student satisfaction, and other factors beyond academic achievement.

The study indicates that school leadership is more effective in shaping organizational behavior and processes. Moreover, the impact of school leadership on teacher behaviors is notably significant. School leaders primarily influence the school's culture, climate, and teacher attitudes and behaviors. The effect of school leadership on student outcomes is comparatively lower and occurs through school processes and teacher behaviors. To enhance student outcomes, school administrators should focus on behaviors aimed at activating organizational processes and improving teacher attitudes.

School leadership effectiveness and moderator variables

Identifying the quality of studies included in meta-analysis studies is crucial for interpreting the magnitude of effect sizes (Kung et al., 2010). This study reveals that mean effect sizes differ based on the quality of research studies. High-quality studies produced smaller effect sizes, whereas studies with medium-level quality yielded larger effect sizes. This trend might be linked to the school outcome types of high-quality studies. Specifically, this study included eleven effect sizes with high-quality ratings. Most of these high-quality studies focused on student outcomes ($k=7$). Consequently, the relationship between school leadership and student outcomes resulted in smaller effect sizes compared to other school outcome types (Table 2). This disparity could be attributed to the predominance of high-quality studies addressing student outcomes.

In this study, the relationship between school leadership and school outcomes did not vary concerning leadership status, school level, location, or publication bias status. These findings partially align with those of Tan et al. (2020). Tan et al. (2020) observed differences in terms of leadership status (principal and mixed). However, it's worth noting that teacher leadership was included in the leadership status categories



(principal and mixed) in this study, which might explain the variance. On the other hand, the relationship between school leadership and school outcomes is stronger in studies from Turkey but weaker in studies from mixed locations (representing various countries).

Implications for practice

The effectiveness of school leadership demonstrates a stronger correlation with organizational and teacher outcomes compared to student outcomes. Moreover, the effectiveness of school leadership is primarily evaluated through student outcomes (Scheerens, 2012b). The primary aim of in-school processes and activities is to enhance the quality of student outcomes. Therefore, school systems require effective school leaders to achieve this goal. In this regard, school leaders are essential for realizing the educational vision, mission, and values of schools. Implementing in-service training programs can enhance school administrators' leadership practices. These training programs can be designed based on the integral leadership model, encompassing both transformational and instructional approaches.

Additionally, the criteria for selecting school administrators are crucial in achieving the educational vision and mission of schools. Projects and initiatives conducted at the school or regional level, aimed at realizing the educational vision and mission of schools, can be utilized as selection criteria for school administrators.

Limitations and Recommendations for Future Research

This study is restricted to research studies published in English and Turkish between 2015 and 2022. Future second-order meta-analysis studies might encompass unpublished meta-analysis studies and studies published in other languages. Additionally, this study is limited to school outcomes. Subsequent research could delve into in-

school processes, such as communication, motivation, and conflict resolution. Finally, a more analytical approach could be adopted to analyze the relationship of leadership models with school outcomes independently from each other (e.g., examining the connection between school outcomes and transformational school leadership or instructional school leadership).

References

*Included meta-analysis

- Akar, H. (2018). Meta-analysis study on organizational outcomes of ethical leadership. *Educational Policy Analysis and Strategic Research, 13*(4), 6-25. <https://doi.org/10.29329/epasr.2018.178.1>*
- Akın-Mart, Ö. & Tulunay-Ateş, Ö. (2021). Investigation of technological leadership of the school administrators in Turkey: A meta-analysis study. *Bartın University Journal of Faculty of Education, 10*(1), 169-186. <https://doi.org/10.1016/buefad.740794>.*
- Alanoglu, M. (2021). The role of instructional leadership in increasing teacher self-efficacy: a meta-analytic review. *Asia Pacific Education Review, 1*-12. <https://doi.org/10.1007/s12564-021-09726-5>*
- Alanoğlu, M., & Karabatak, S. (2022). The Relationship between school administrators' leadership traits and learning schools: A Meta-analysis study. *Participatory Educational Research, 9*(3), 403-427. <http://dx.doi.org/10.17275/per.22.73.9.3>*
- Armağan, Y., & Erzen, E. (2015). The effect of leadership on organizational justice. E. Karadağ (ed.) *In Leadership and organizational outcomes* (pp. 239-254). Springer, Cham.*

- Balwant, P. T. (2016). Transformational instructor-leadership in higher education teaching: A meta-analytic review and research agenda. *Journal of leadership studies*, 9(4), 20-42. <https://doi.org/10.1002/jls.21423>*
- Borenstein, M., Hedges, L. V., Higgins, J. P., & Rothstein, H. R. (2011). *Introduction to meta-analysis*. West Sussex: John Wiley & Sons.
- Bush, T., & Glover, D. (2014). School leadership models: What do we know?. *School Leadership & Management*, 34(5), 553-571. <https://doi.org/10.1080/13632434.2014.928680>
- Cakmak, E., Öztekin, Ö., & Karadağ, E. (2015). The effect of leadership on job satisfaction. E. Karadağ (ed.) *In Leadership and organizational outcomes* (pp. 29-56). Springer, Cham.*
- Cooper, H., & Koenka, A. C. (2012). The overview of reviews: Unique challenges and opportunities when research syntheses are the principal elements of new integrative scholarship. *American Psychologist*, 67(6), 446-462. <https://doi.org/10.1037/a0027119>
- Çoğaltay, N., & Karadağ, E. (2016). The effect of educational leadership on organizational variables: A meta-analysis study in the sample of Turkey. *Educational Sciences: Theory & Practice*, 16, 603-646. <https://doi.org/10.12738/estp.2016.2.2519>*
- Danişman, Ş., Tosuntaş, Ş. B., & Karadağ, E. (2015). The effect of leadership on organizational performance. E. Karadağ (ed.) *In Leadership and organizational outcomes* (pp. 143-168). Springer, Cham.*
- Derue, D. S., Nahrgang, J. D., Wellman, N. E. D., & Humphrey, S. E. (2011). Trait and behavioral theories of leadership: An integration and meta-analytic test of their relative

validity. *Personnel psychology*, 64(1), 7-52.

<https://doi.org/10.1111/j.1744-6570.2010.01201.x>

Ertem, H., Y. (2021). Relationship of school leadership with school outcomes: A meta-analysis study. *International Education Studies*, 14(5), 31-41. https://doi.org/10.5539/ies.v14n5p31.*

Goktas, E. (2021). Effectiveness correlates of school leadership styles and teachers' job satisfaction: A meta-analytic review. *International Online Journal of Educational Sciences*, 13(4), 1023-1044. DOI: https://doi.org/10.15345/iojes.2021.04.006*

Gümüş, S., Bellibaş, M. S., Esen, M., & Gümüş, E. (2018). A systematic review of studies on leadership models in educational research from 1980 to 2014. *Educational Management Administration & Leadership*, 46(1), 25-48.

Hendriks M., Steen, R. (2012). Results from School Leadership Effectiveness Studies (2005–2010). J. Scheerens (Ed) In. *School Leadership Effects Revisited*. SpringerBriefs in Education. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-2768-7_4

Higgins, J. P. T., Thompson, S., G., Deeks, J. J., & Altman, D. G. (2003). Measuring inconsistency in meta-analyses. *British Medical Journal*, 327(7414), 557-560. <https://doi.org/10.1136/bmj.327.7414.557>

Huber, S.,G., Muijs D. (2010). School Leadership Effectiveness: The Growing Insight in the Importance of School Leadership for the Quality and Development of Schools and Their Pupils. Huber S. (Ed) In *School Leadership - International Perspectives*. *Studies in Educational Leadership*, vol 10. Springer, Dordrecht. https://doi.org/10.1007/978-90-481-3501-1_4

İşçi, S., Cakmak, E., & Karadağ, E. (2015). The effect of leadership on

- organizational climate. E. Karadağ (ed.) *In Leadership and organizational outcomes* (pp. 123-141). Springer, Cham.*
- Jin, Z. C., Zhou, X. H., & He, J. (2015). Statistical methods for dealing with publication bias in meta-analysis. *Statistics in medicine*, 34(2), 343-360. <https://doi.org/10.1002/sim.6342>
- Karadağ, E. (2020). The effect of educational leadership on students' achievement: A cross-cultural meta-analysis research on studies between 2008 and 2018. *Asia Pacific Education Review*, 21(1), 49-64. <https://doi.org/10.1007/s12564-019-09612-1>*
- Karadağ, E., Çiftçi, Ş. K., & Bektaş, F. (2015). Discussion, limitations and suggestions. E. Karadağ (ed.) *In Leadership and organizational outcomes* (pp. 255-267). Springer, Cham.
- Koçyiğit, M. (2015). The effect of leadership on organizational culture. E. Karadağ (ed.) *In Leadership and Organizational Outcomes* (pp. 111-122). Springer, Cham.*
- Köybaşı Şemin, F. (2022). The relationship between transformational leadership and organizational learning in educational organizations: A meta-analysis study. *Hacettepe University Journal of Education*, 37(1), 204-214. [doi:http://dx.10.16986/HUJE.2020064441](http://dx.10.16986/HUJE.2020064441)
- Krüger, M., & Scheerens, J. (2012). Conceptual perspectives on school leadership. J. Scheerens, (Ed) *In School leadership effects revisited* (pp. 1-30). Springer, Dordrecht.
- Kung et.al. (2010). From systematic reviews to clinical recommendations for evidence-based health care: Validation of revised assessment of multiple systematic reviews (R-AMSTAR) for grading of clinical relevance. *The open dentistry journal*, 4, 84-91. <https://doi.org/10.2174/1874210601004020084>

- Leithwood, K., Harris, A., & Hopkins, D. (2020). Seven strong claims about successful school leadership revisited. *School leadership & management, 40*(1), 5-22.
<https://doi.org/10.1080/13632434.2019.1596077>
- Liebowitz, D. D., & Porter, L. (2019). The effect of principal behaviors on student, teacher, and school outcomes: A systematic review and meta-analysis of the empirical literature. *Review of Educational Research, 89*(5), 785-827.
<https://doi.org/10.3102/0034654319866133>*
- Mumford, M. D., & Barrett, J. D. (2013). Leader effectiveness: Who really is the leader? In M. G. Rumsey (Ed.), *The Oxford handbook of leadership* (pp. 423-438) Oxford University Press.
<https://10.1093/oxfordhb/9780195398793.013.0025>
- Oh, I., S. (2020). Beyond meta-analysis: Secondary uses of meta-analytic data. *Annual Review of Organizational Psychology and Organizational Behavior, 7*, 125-153.
<https://doi.org/10.1146/annurev-orgpsych-012119-045006>
- Öztekin, Ö., İşçi, S., & Karadağ, E. (2015). The effect of leadership on organizational commitment. E. Karadağ (Ed.) *In Leadership and Organizational Outcomes* (pp. 57-79). Springer, Cham.*
- Öztürk, C., & Ay, Y. (2015). The effect of leadership on organizational citizenship. E. Karadağ (Ed.) *In Leadership and Organizational Outcomes* (pp. 97-109). Springer, Cham.*
- Scheerens, J. (2012a). Anatomy of some representative school leaders' effectiveness studies. J. Scheerens, (Ed.) *In School Leadership Effects Revisited* (pp. 45-64). Springer, Dordrecht.
- Scheerens, J. (2012b). Summary and conclusion: Instructional leadership in schools as loosely coupled organizations. J.

- Scheerens,(Ed.) *In School leadership effects revisited* (pp. 131-152). Springer, Dordrecht.
- Schmidt, F.,L. & Oh, I. S. (2013). Methods for second-order meta-analysis and illustrative applications. *Organizational Behavior and Human Decision Processes* 121(2): 204–218.
<https://doi.org/10.1016/j.obhdp.2013.03.002>
- Shen, J., Wu, H., Reeves, P., Zheng, Y., Ryan, L., & Anderson, D. (2020). The association between teacher leadership and student achievement: A meta-analysis. *Educational Research Review*, 31, 100357.<https://doi.org/10.1016/j.edurev.2020.100357>*
- Sutresna, W. B. O., & Wijayanti, W. (2020). Relationship between principal transformational leadership and teacher performance: A meta analysis. *European Journal of Education Studies*, 7(9),<https://doi.org/334-343.10.46827/ejes.v7i9.3273>.*
- Tan, C. Y., Dimmock, C., & Walker, A. (2021). How school leadership practices relate to student outcomes: Insights from a three-level meta-analysis. *Educational Management Administration & Leadership*, 17411432211061445.
<https://doi.org/10.1177/17411432211061445>*
- Tan, C. Y., Gao, L., & Shi, M. (2020). Second-order meta-analysis synthesizing the evidence on associations between school leadership and different school outcomes. *Educational Management Administration & Leadership*, 1741143220935456.
<https://doi.org/10.1177/1741143220935456>
- Uslu, F., & Oklay, E. (2015). The effect of leadership on organizational trust.E. Karadağ (ed.) *In Leadership and organizational outcomes* (pp. 81-95). Springer, Cham.*
- Uysal, S., & Sarier, Y. (2019). Teacher leadership effects on student

achievement and student satisfaction: A meta-analysis of the studies published in turkey and the usa. *Croatian Journal of Education*, 21(3), 989-1010.<https://doi.org/10.15516/cje.v21i3.3257>*

Wu, H., & Shen, J. (2021). The association between principal leadership and student achievement: A multivariate meta-meta-analysis. *Educational Research Review*, 100423.
<https://doi.org/10.1016/j.edurev.2021.100423>

Yılmaz, E., & Jafarova, G. (2019). Leadership and school climate in effective schools: A meta-analysis. *Journal of Economic Sciences: Theory & Practice*, 76(1), 48-69*

Young, J. (2017). Technology-enhanced mathematics instruction: A second-order meta-analysis of 30 years of research. *Educational Research Review*, 22, 19-33.
<https://doi.org/10.1016/j.edurev.2017.07.001>

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Appendix 1

The characters of the studies

study	ES (r)	LL	UL	k	Grade	Culture	Report	Status
Alanoğlu, & Karabatak (2022)	.65	.54	.71	20	K12	Mixed	Mixed	Principals
Akın-Mart, & Tulunay-Ateş (2021).	.38	.28	.48	38	K12	Mixed	Mixed	Mixed
Ertem (2021).	.54	.47	.61	21	K12	Turkey	Mixed	Principals
Alanoglu (2021).	.39	.35	.43	24	K12	Mixed	Mixed	Principals
Goktas (2021)	.49	.39	.57	15	K12	Turkey	Mixed	Principals
Yılmaz, & Jafarova (2019).	.60	.40	.64	11	K12	Mixed	Mixed	Principals
Sutresna, & Wijayanti (2020).	.48	.35	.58	16	K12	Indonesia	Article	Principals
Karadağ (2020).	.27	.18	.35	39	K12	Mixed	Mixed	Principals
	.30	.07	.50	5	K12	Mixed	Mixed	Principals
	.34	.24	.43	35	K12	Mixed	Mixed	Principals
Tan, et. al (2021).	.14	.10	.18	108	K12	Mixed	Mixed	Mixed
Liebowitz, & Porter (2019).	.36	.15	.58	51	K12	Mixed	Mixed	Principals
	.35	.17	.53		K12	Mixed	Mixed	Principals
	.79	.52	1.06		K12	Mixed	Mixed	Principals
	.10	.06	.14		K12	Mixed	Mixed	Principals
Akar (2018).	.76	.71	.81	9	Mixed	Turkey	Mixed	Principals
	.44	.30	.57	11	Mixed	Turkey	Mixed	Principals
Çoğaltay & Karadağ(2016)	.75	.67	.81	9	K12	Turkey	Mixed	Principals
	.35	.28	.41	7	K12	Turkey	Mixed	Principals
	.43	.38	.49	25	K12	Turkey	Mixed	Principals
	.73	.68	.77	5	K12	Turkey	Mixed	Principals
	.36	.15	.53	5	K12	Turkey	Mixed	Principals
	.50	.36	.62	9	K12	Turkey	Mixed	Principals
Cakmak, et. al (2015).	.46	.39	.52	121	Unknown	Mixed	Mixed	Unknown
Öztekin, et. al (2015)	.49	.40	.57	25	Unknown	Mixed	Mixed	Unknown
	.54	.44	.63	19	Higher	Mixed	Mixed	Unknown
Uslu & Oklay (2015).	.74	.66	.80	20	Unknown	Mixed	Mixed	Unknown
Öztürk, & Ay (2015).	.46	.07	.73	5	Unknown	Mixed	Mixed	Unknown
Koçyiğit (2015).	.51	.26	.70	5	Unknown	Mixed	Mixed	Unknown
İşçi et. al (2015).	.46	.36	.55	34	Unknown	Mixed	Mixed	Unknown
	.62	.44	.75	10	Higher	Mixed	Mixed	Unknown
Danişman et.al (2015).	.34	.18	.48	12	Higher	Mixed	Mixed	Unknown
	.29	.17	.40	22	Unknown	Mixed	Mixed	Unknown
Armağan & Erzen (2015).	.66	.54	.73	7	Unknown	Mixed	Mixed	Unknown

Shen, et.al (2020).	.19	.13	.25	21	K12	Mixed	Mixed	Teacher
Balwant (2016).	.47	.34	.60	22	Higher	Mixed	Mixed	Teacher
	.72	.65	.80		Higher	Mixed	Mixed	Teacher
	.62	.53	.70		Higher	Mixed	Mixed	Teacher
	.19	.05	.33		Higher	Mixed	Mixed	Teacher
Uysal & Sarier (2019).	.33	.32	.34	26	K12	Turkey	Mixed	Teacher

Appendix 1

The characters of the studies

study	Leadership Construct	Outcome	Quality	Bias	year range
Alanoğlu, & Karabatak (2022)	Transformational	Learning Schools	Medium	No	2000-2020
Akın-Mart & Tulunay-Ateş (2021).	Technological	Combined	High	No	2010-2019
Ertem (2021).	Mixed	Combined Teacher Self-	Medium	No	2010-2018
Alanoglu (2021).	Instructional	Efcacy Teacher Job	Medium	No	2000-2020
Goktas (2021)	Transformational	Satisfaction School	Medium	No	2010-2020
Yılmaz, & Jafarova (2019).	Mixed	Effectiveness Teacher	Medium	No	1990-2016
Sutresna, & Wijayanti (2020). Karadağ (2020).	Transformational	Performance. Students'	Medium	Negligible	2013-2020
	Transformational	Achievement Students'	High	No	2008-2018
	Distributed	Achievement Students'	High	No	2008-2018
	Instructional	Achievement Student	High	No	2008-2018
Tan, et. al (2021). Liebowitz, & Porter (2019).	Leadership Practices	Outcomes Teacher Well-	High	No	2000-2018
	Principal Behaviors	Being Teaching	High	Negligible	2001-2019
	Principal Behaviors	Practices Organizational	High	Negligible	2001-2019
	Principal Behaviors	Health Student	High	Negligible	2001-2019
Akar (2018).	Principal Behaviors	Achievement Organizational	High	Negligible	2001-2019
	Ethical	Justice	Medium	No	2008-2018

Çoğaltay & Karadağ(2016)	Ethical	Organizational Commitment	Medium	No	2008-2018
	Mixed	Organizational Justice	Medium	No	2000-2013
	Mixed	Organizational Citizenship	Medium	No	2000-2013
	Mixed	Organizational Commitment	Medium	No	2000-2013
	Mixed	Organizational Trust	Medium	No	2000-2013
	Mixed	Organizational Performance	Medium	No	2000-2013
	Mixed	Organizational Climate	Medium	No	2000-2013 before
Cakmak, et. al (2015). Öztekin, et. al (2015)	Mixed	Job Satisfaction	Medium	Yes	1990-2014 before
	Mixed	Organizational Commitment	Medium	No	1990-2014 before
	Mixed	Organizational Commitment	Medium	No	1990-2014 before
Uslu & Oklay (2015).	Mixed	Organizational Trust	Medium	No	1990-2014 before
Öztürk, & Ay (2015).	Mixed	Organizational Citizenship	Medium	No	1990-2014
Koçyiğit (2015). İşçi et. al (2015).	Mixed	Organizational Culture	Medium	No	2000-2013 before
	Mixed	Organizational Climate	Medium	No	1990-2014 before
	Mixed	Organizational Climate	Medium	No	1990-2014 before
Danışman et.al (2015).	Mixed	Organizational Performance	Medium	No	2000-2014
	Mixed	Organizational Performance	Medium	No	2000-2014
	Mixed	Organizational Performance	Medium	No	2000-2014
Armağan & Erzen (2015).	Mixed	Organizational Justice	Medium	No	1990-2014
Shen, et.al (2020). Balwant (2016).	Teacher Leadership	Student Outcomes	High	No	1997-2018
	Transformational Instructor-Leadership	Student Motivation	Medium	Unknown	1997-2014
	Transformational Instructor-Leadership	Instructor Perceived Credibility	Medium	Unknown	1997-2014
	Transformational Instructor-Leadership	Instructor Satisfaction With Leader	Medium	Unknown	1997-2014



Kaya (2023). Examination of the effectiveness of school leadership...

	Transformational Instructor-Leadership	Academic Performance Student Outcomes	Medium	Unknown	1997-2014
Uysal & Sarier (2019).	Teacher Leadership		High	No	2000-2017

Appendix 2

Studies excluded and selected due to overlap

Excluded	Included	Outcome
Köybaşı Şemin (2022) and Tosuntaş, & Danişman (2015)	Alanoğlu, & Karabatak (2022)	Learning Schools
Uysal & Sarier (2018)	Alanoglu (2021) and Tan, et. al (2021) and Karadag (2020)	Student Outcomes
Karadağ, et al (2015)	Karadağ (2020)	Student Outcomes
Coğaltay, et. al (2016) and Coğaltay, & Karadağ (2016) Selvitopu, & Kaya (2017)	Goktaş (2021) Coğaltay, & Karadağ (2016)	Job Satisfaction Organizational Commitment

Stress Experiences and Coping Strategies Among Employed Teachers of Ifugao State University During the COVID-19 Pandemic

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Abstract

The COVID-19 pandemic changed the teaching-learning modality around the world. These sudden changes, along with the health threats and uncertainty of COVID-19, made teachers feel stressed, including those in higher education institutions. Hence, a descriptive survey was conducted to assess the stress experiences and coping strategies of employed university teachers of Ifugao State University (IFSU), Ifugao, Philippines. It was found that most (82.54%) of the participating university teachers experienced moderate perceived stress. Moreover, as the reported frequency of experience with various stressors increased, so did their reported feelings of stress. Among the contributing stressors, health-related stressors were often experienced, finance-related and work-related stressors were sometimes experienced, while personal and well-being-related stressors were rarely experienced. It was also found that female university teachers were more vulnerable to health-related stressors than male university teachers. At the same time, single university teachers were more vulnerable to personal and well-being-related stressors than married university

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teachers. As the reported feelings of stress increased, so did the frequency of use of coping strategies. Approach-style coping strategies were used more than avoidance-style coping strategies. In addition, religious coping was often used, while humor coping was rarely used. IFSU could devise several ways to alleviate the stress of university teachers. These could help university teachers cope positively to retain high-quality teaching and promote a culture of resilience, problem-solving, and well-being.

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Introduction

The COVID-19 pandemic has affected the education sector, including higher education. Due to the rapid increase in morbidity and mortality rates worldwide, several countries, including the Philippines, enforced quarantines, lockdowns, and other health protocols to slow the spread of the virus. This resulted in the suspension of the traditional face-to-face classes and their replacement with online classes to allow the continuation of the teaching-learning process within the safety of the participant's homes. In response, the university teachers were prompted to convert and redesign their instructional materials for use in an online environment and to master the various online learning tools in time for class reopening. However, the shift to online classes was faced with several challenges. A recent study identified issues related to motivating students, using Information and Communication Technology (ICT), managing time, and effectively evaluating students'



acquired knowledge as the most salient challenges encountered by Filipino teachers during the pandemic (Bautista et al., 2021). These challenges, along with personal problems and frustrations with the institution's lack of support during the pandemic, were reported to have compromised teachers' mental health (Robinson et al., 2023).

Stress is a state of worry or mental tension developed as a response to a difficult situation like the COVID-19 pandemic (World Health Organization, 2022). It can alter how a person feels and behaves. It can even lead to the development of illnesses that may impair both mental and physical health. Teacher stress, in particular, strongly correlates with burnout (Wong et al., 2017). The more stressed the teachers are, the more emotionally exhausted and depersonalized they become. The high stress levels can negatively affect the teachers' teaching quality and productivity and the students' engagement and school satisfaction (Ramberg et al., 2019; Herman et al., 2020).

Several studies have shown various accounts of the effects of stress on teachers during the COVID-19 pandemic. A study conducted among Argentinian teachers showed that teachers who perceived high pressure and had fewer resources were at a higher risk of work stress. The predominant stressors identified by the study were not inherent to the teaching role. Still, they were related to the epidemiological situation, fear of contagion, uncertainty, and the use of new technologies (Vargas-Rubilar & Oros, 2021). A study among Chilean teachers reported that participants who suffered from severe or very severe stress symptoms related to the COVID-19 pandemic were particularly concerned about aspects related to work, mental health, and the health situation. It was also observed that the participants generally presented low levels of resilience, which suggests that they may have been more vulnerable to the adverse effects of stress



(Lacomba-Trejo et al., 2022). A study among Filipino university teachers reported that university teachers who perceive themselves as having poorer health status and those at higher risk of getting COVID-19 may experience greater stress brought on by the pandemic (Oducado et al., 2020).

Coping strategies can moderate an individual's feelings of stress (Tracy et al., 2022). The various coping strategies can be categorized as follows (Eisenberg et al., 2012): (1) Approach-style coping strategies that allow an individual to actively deal with and alleviate the source of stress (e.g., problem-solving or seeking information); (2) Avoidance-style coping strategies which make an individual disengage and turn away from the source of stress (e.g., denial or withdrawal); (3) Religious coping and (4) humor coping, which may consist of both adaptive and maladaptive components that cannot be wholly segregated into either of the first two categories of coping strategies mentioned above. Depending on the type of coping strategies used, it can affect how an individual responds to stressful situations. Using approach-style coping strategies can help alleviate feelings of stress, thus resulting in improved long-term mental and physical health outcomes (Rehr & Nguyen, 2021). On the other hand, the use of avoidance-style coping strategies can intensify feelings of stress, thus resulting in adverse health outcomes (Warchol-Biedermann et al., 2021).

Studies have found that teachers with poor coping abilities tend to experience significantly high stress levels (Rajesh et al., 2022). According to Herman et al. (2020), high stress levels can negatively affect the teacher's classroom management, affecting student behavior. Disruptive student behavior can further contribute to the teacher's stress. Continuous stress exposure by teachers can lead to burnout and



student underachievement. Hence, effective coping strategies can help improve the teachers' response to stressful situations, overall well-being, and attaining students' educational outcomes.

The Ifugao State University (IFSU), both a higher educational institution and a workplace, needs to adapt and incorporate such factors to improve the well-being of university teachers as they are the key figures in educating and guiding students to reach their career goals. Hence, this study focused on assessing the general stress experiences of university teachers and what coping strategies were used during the COVID-19 pandemic. The study's results can be used as a basis for policy-making and the development of strategies that can be used to improve the well-being of university teachers, even after the pandemic.

Objectives

The study's general objective was to assess the stress experiences and coping strategies used by university teachers of IFSU during the COVID-19 pandemic.

The specific objectives of the study were to determine the:

1. Perceived stress
2. Frequency of experience with stressors
3. Sociodemographic variation in the frequency of experience with stressors
4. Frequency of use of coping strategies
5. Sociodemographic variation in the frequency of use of coping strategies, and



6. Variation in the frequency of experience with stressors and frequency of use of coping strategies with perceived stress.

Methods

Research Method

The study's objectives were addressed by conducting a descriptive survey research design. The study utilized printed survey questionnaires to gather information from the university teachers of IFSU.

Selection of Participants

The target population included all the 332 university teachers of IFSU employed from October to December 2021. Since the population was relatively small, complete enumeration was used in gathering the data. Before the data gathering, informed consent was obtained from the university teachers through a signed informed consent form. Of the 332 university teachers, only 189 responded (56.9%). The sociodemographic characteristics of the respondents are shown in Table 1.

Table 1.

The sociodemographic profile of the respondents.

Characteristics	n	Percent (%)
Overall	189	100
Sex		
Male	76	40.2
Female	113	59.8
Age Group		
20 to 29	79	41.8
30 to 39	54	28.6
40 to 49	38	20.1
50 to 60	18	9.5

Marital Status		
Single	91	48.1
Married	98	51.9
Employment Status		
Permanent	90	47.6
Contractual	99	52.4
Monthly Salary		
20k to 29k	139	73.5
30k to 49k	34	18.0
50k and above	16	8.5

Instruments for Data Gathering

Three questionnaires, adopted from several studies (detailed below), were used to measure the perceived stress, frequency of experience with stressors, and frequency of use of coping strategies. Since these adopted questionnaires were originally used in foreign settings, they were subjected to content validity to ensure their applicability in the context of the Philippines and IFSU. The content validity was assessed by a panel of social science and psychology experts, all employed at IFSU and not part of the research team. Pilot testing was also conducted to ascertain the questionnaires' internal consistency (via Cronbach Alpha).

1. *The Pandemic-Related Perceived Stress Questionnaire or PRPSQ* (Cronbach $\alpha = 0.81$) from the study of Campo-Arias et al. (2020) was used to measure perceived stress. It consisted of 10 Likert items, rated using the score: 0 - never, 1 - rarely, 2 - sometimes, 3 - often, and 4 - always. The sum of the Likert items was used to determine the level of perceived stress as mild (0 - 13), moderate (14 - 26), or severe (27 - 40) (Graves et al., 2021).
2. *The Stress Index Questionnaire or SIQ* (Cronbach $\alpha = 0.70$) from the study of MacIntyre et al. (2020) was used to measure the frequency of experience with stressors. It consisted of 15 Likert



items corresponding to 15 stressors rated using the score: 1 - never, 2 - rarely, 3 - sometimes, 4 - often, and 5 - always. For this study, the listed stressors were grouped into four categories: health-related (3), work-related (5), finance-related (2), and personal and well-being-related stressors (5). An open-ended question about the other stressors experienced during the pandemic was also included.

3. *The BriefCOPE Questionnaire* (Cronbach $\alpha = 0.92$) from the study of Carver (1997) was used to measure the frequency of use of coping strategies. It consisted of 28 Likert items rated using the score: 1 - never, 2 - rarely, 3 - sometimes, 4 - often, and 5 - always. The coping strategies were categorized as follows: (1) Approach-style coping strategies, including active coping, use of emotional support, use of instrumental support, positive reframing, planning, and acceptance; (2) Avoidance-style coping strategies, including self-distraction, denial, substance use, behavioral disengagement, venting, and self-blame; (3) Religious coping; and (4) Humor coping.

Data Gathering Procedure

The data was gathered for about a month, from November to December 2021. The printed questionnaires were personally distributed to the university teachers, who were given a week to complete. The completed questionnaires were then retrieved personally from the respondents. The results were immediately transcribed into a password-protected spreadsheet file. Immediately after, the transcribed questionnaires were shredded and sent to the recycling.



Statistical Tools

Frequency was used to segregate the computed perceived stress scores into mild, moderate, or severe. Mean was used in computing the average scores for the PRPSQ, SIQ, and BriefCOPE. The mean score for the SIQ and BriefCOPE was interpreted using the scale in Table 2. ANOVA was used in comparing the mean scores for the following: (1) sociodemographic variation in the frequency of experience with stressors, (2) sociodemographic variation in the frequency of use of coping strategies, (3) variation in the frequency of experience with stressors with perceived stress, and (4) variation in the frequency of use of coping strategies with perceived stress. Post-hoc analyses for significantly different results were done using Tukey's Honestly Significant Difference (HSD) Test. All inferential statistical tests were done at $\alpha = .05$.

Table 2.

Frequency scale used in interpreting the mean rating score.

Rating	Mean Score Range	Interpretation
1	1.00 - 1.80	never
2	1.81 - 2.60	rarely
3	2.61 - 3.40	sometimes
4	3.41 - 4.20	often
5	4.21 - 5.00	always

Internal Review

The research proposal for this study had undergone an agency in-house review (AIHR) organized by the Ifugao State University in December 2020. In the AIHR, the research proposal was reviewed by several experts in the field of social science research. The review



included an evaluation of the ethical and regulatory compliance to ensure that the study complies with ethical standards and relevant regulations.

Results and Discussion

Perceived Stress

Table 3.

The perceived stress of IFSU university teachers during the COVID-19 pandemic.

Characteristics	n	Mild Stress (%)	Moderate Stress (%)	Severe Stress (%)
Overall	198	3.17	82.54	14.29
Sex				
Male	76	1.32	82.89	15.79
Female	113	4.42	82.30	13.27
Age Group				
20 to 29	79	3.80	79.75	16.46
30 to 39	54	1.85	88.89	9.26
40 to 49	38	2.63	81.58	15.79
50 to 60	18	5.56	77.78	16.67
Marital Status				
Single	91	2.20	80.22	17.58
Married	98	4.08	84.69	11.22
Employment Status				
Permanent	90	4.44	80.00	15.56
Contractual	99	2.02	84.85	13.13
Monthly Salary				
20k to 29k	139	3.60	82.01	14.39
30k to 49k	34	2.94	79.41	17.65
50k and above	16	0.00	93.75	6.25

It is shown in Table 3 that most university teachers experienced moderate perceived stress (82.54%). A small fraction experienced severe perceived stress (14.29%), while an even smaller fraction experienced mild perceived stress (3.17%). When grouped according to the various sociodemographic characteristics, it was also found that



most university teachers experienced moderate perceived stress regardless of their sex, age group, marital status, employment status, or monthly salary. This trend was also consistent with the results obtained by Oducado et al. (2021) among their target university teachers in the Philippines during the pandemic, where most of their respondents experienced moderate perceived stress. A recent study by Oshri et al. (2022) has shown that experiencing mild to moderate perceived stress may have potential benefits, such as developing efficient and effective coping behavior and reduced risk of developing mental health disorders. In contrast, experiencing severe perceived stress can be damaging to an individual. Following these findings, most university teachers in IFSU may have improved resiliency against future stressful situations. However, further investigation must be done to confirm this, as various individuals have different abilities to tolerate stress, and there is a very thin line between the right amount of stress and too much stress (Oshri et al., 2022).

Frequency of Experience with Stressors

It is shown in Table 4 that eight out of the 15 listed stressors during the COVID-19 pandemic were rated above the midpoint (3 out of 5). In addition, the health-related stressors ($M = 3.73$) were often experienced by the university teachers. Finance-related stressors ($M = 3.14$) and work-related stressors ($M = 2.86$) were sometimes experienced. In contrast, personal and well-being-related stressors ($M = 2.51$) were rarely experienced.

Among the health-related stressors, university teachers were always stressed concerning their family's health ($M = 4.54$) and their own ($M = 4.26$). Similar results were shown in the studies of Gadermann et al. (2021) and Frenkel et al. (2022), where the top stressors were also health-related: the fear of vulnerable family members getting severely



Table 4.
The frequency of experience with stressors of IFSU university teachers during the COVID-19 pandemic.

List of Stressors	Mean	Frequency of Experience
<i>Health-related Stressors</i>		
1. I am concerned with the health of my family.	4.54	always
2. I am concerned with my own health.	4.26	always
3. I experience stress in my responsibility as a caregiver to my parents and/or children.	2.39	rarely
Grand Mean	3.73	often
<i>Finance-related Stressors</i>		
1. I have problems with my finances.	3.26	sometimes
2. I experience shortages in my daily necessities.	3.01	sometimes
Grand Mean	3.14	sometimes
<i>Work-related Stressors</i>		
1. I have a heavy workload.	3.23	sometimes
2. I experience long or irregular hours of work.	3.06	sometimes
3. I feel stressed with teaching online.	3.07	sometimes
4. I lose control of my work.	2.52	rarely
5. I have no life and work balance.	2.43	rarely
Grand Mean	2.86	sometimes
<i>Personal and Well-being-related Stressors</i>		
1. I cannot travel freely to places I want to go.	3.44	often
2. I do not have recreational activities.	2.58	rarely
3. I lose control of my own decisions.	2.29	rarely
4. I feel isolated and lonely.	2.15	rarely
5. I have problems with my relationships with other people.	2.10	rarely
Grand Mean	2.51	rarely

sick and dying and the fear of getting infected and infecting others. These fears and concerns were expected as COVID-19 already claimed millions of lives since its onset (World Health Organization, 2022). These may also be attributed to their fear of getting quarantined in the hospitals and converted facilities, which are in poor condition and were already at full capacity (Morales & Lema, 2021) during data



gathering. Moreover, going to the hospital for treatment of non-COVID-19 diseases was rather difficult because of the lack of public transportation, declining funds (Uy et al., 2021), long queues for admission, and additional documents needed (such as a negative COVID-19 test) to enter the hospital's premises.

The open-ended question that listed 'other' stressors experienced produced the following answers, which supported the university teachers' experiences on these health-related stressors: (1) people not following prescribed COVID-19 protocols and (2) emergence of new COVID-19 variants. Amidst the reported increasing mortality rate due to the COVID-19 virus, some people in the country have violated stay-at-home orders, were not wearing face masks, and were not practicing social distancing (Hapal, 2021). Such violation of pandemic protocols was feared to have caused the rapid increase in morbidity and successive lockdowns. Upon the arrival of the COVID-19 vaccines, several misconceptions circulated in social media, which resulted in hesitancy and refusal of people to get vaccinated (Amit et al., 2022; Watzl, 2022). Moreover, new COVID-19 variants also deemed some vaccines less effective in providing immunity (Singh et al., 2022).

The financial-related stressors - problems with finances ($M = 3.27$) and shortage in daily necessities ($M = 3.01$) - were also highly rated. Financial difficulties may result in low quality of life and may lead to severe stress and other mental health problems, such as depression and anxiety (Aruta, 2021). These can be attributed to the continuous price increase of daily necessities (mostly food) since the onset of the COVID-19 pandemic (Asian Development Bank, 2021). The continuous price increase has worsened the management of finances to pay the rent, mortgage, food, and health insurance, among others (Swigonski et al., 2021). This was supported by the report of the World



Bank (2020) that about 40% of the households in the country have reduced capacity to buy food essentials.

The open-ended question, which listed 'other' stressors experienced, produced the following answers that further supported the university teachers' experiences on these financial-related stressors: (1) late salary disbursement and (2) increasing expenses on internet data usage. Late salary disbursement was a persistent problem among contractual university teachers even before the pandemic. Thus, the pandemic may have aggravated the financial problems, primarily if university teachers only relied on their salaries for their finances. The pandemic also caused the shift to online classes, which were highly dependent on reliable and stable internet connections. While IFSU has an internet connection, it was not reliable and stable enough, especially when many connected and conducted online classes simultaneously. Hence, the university teachers used their money to buy internet data plans, further depleting their available financial resources.

The following work-related stressors were also highly rated: heavy workload ($M = 3.24$), long or irregular hours of work ($M = 3.06$), and teaching online ($M = 3.05$). Similar stressors were also prevalent in several studies (Aperribai et al., 2020; Kuwato & Hirano, 2020; Minihan, Begley et al., 2022). In general, the workload of teachers has significantly increased because of the COVID-19 pandemic (Jain et al., 2021; Minihan, Adamis et al., 2022). Due to the suspension of face-to-face classes, university teachers had to recalibrate their instructional materials and change their teaching style to fit the online classes' demands. This was further aggravated by the time pressure for the immediate implementation in time for the class reopening. Moreover, the amount of paperwork to be submitted has increased (Minihan, Begley et al., 2022). In IFSU, several report documents - daily time



record, monthly performance output report, individual plan report, individual accomplishment report, request for work-from-home schedule, mode of verification for activities report, and a copy of contract (for the contractual university teachers) - were required to be submitted simultaneously at the end of the month as requirements for salary disbursement. Additional documents were also created to cater to the compliance of students with their in-progression (IP) status of grades, which further increased the work of university teachers as they had to recheck and recalculate the grades. In conjunction with the heavy workload was increased working hours (Gicheva, 2021; Lizana & Vega-Fernandez, 2021). To meet set deadlines in their workload, university teachers had to extend beyond their work hours per day and per week. In addition, the prevalence of out-of-hour communications from supervisors, colleagues, and students made it hard for university teachers to get disconnected outside of work hours (Minihan, Begley et al., 2022).

Of the personal and well-being-related stressors, only one was highly rated: being unable to travel freely to places they want to go ($M = 3.44$). This was supported by the study of Mayo et al. (2021), which reported changes in the traveling pattern - due to the restrictions, people only went out to buy essentials, while traveling to work had decreased due to the formation of the "work from home" arrangements that allowed them to finish their task within the comforts and safety of their homes. Furthermore, because of the continued rise in the number of new COVID-19 cases and variants amidst the nationwide administration of COVID-19 vaccination, public and private transportation restrictions were prevalent at the time of data generation (Philippines Department of Health, 2022).



In the study of MacIntyre et al. (2020), having no recreational activities, no life and work balance, losing control of their own decisions, and losing control of work were among the top stressors experienced by their target population. However, in this study, university teachers rarely experienced these stressors. This may be due to the differences in the time frame during the conduct of the study: the study of MacIntyre et al. (2020) was conducted during the onset of the pandemic when a lot of changes and adjustments were still being made, while this study was conducted when protocols were already established. Hence, the university teachers would have already adapted to the current life and work set-up. Sociocultural differences may have also influenced the results since social and cultural support interactions are among the factors that can shape one's experience of stress (Pourmand et al., 2021). Since the study of MacIntyre et al. (2020) did not include participants from Southeast Asia, it may not have captured how university teachers in this region experienced stress during the pandemic. A recent study by Litam and Chan (2022) listed several culturally specific traits of Filipinos, including self-reliance, patience, endurance, flexibility, inner strength, resilience, and hardiness. Hence, these culturally specific traits could be why university teachers were less likely to be stressed from having no recreational activities, no life and work balance, and losing control of their own decisions and work. However, further investigation must be done to verify how these culturally specific traits play a role in the stress experiences of university teachers of IFSU.

Sociodemographic Variation in the Frequency of Experience with Stressors

It is shown in Table 5 that the frequency of experience with health-related stressors between male and female university teachers

significantly differed ($p < .05$). The female university teachers were found to have experienced health-related stressors more frequently than the male university teachers. This result agrees with the studies of Kirmizi et al. (2021) and Saeedi et al. (2022), which showed that women have higher health anxiety than men during the COVID-19 pandemic. This may be due to the effect of the behavioral anxiety-inducing sex hormone (extrahypothalamic corticotropin-releasing hormones), and women generally perform more tasks and responsibilities in life than men (Saeedi et al., 2022).

Table 5.

The sociodemographic variation in the frequency of experience with stressors of IFSU university teachers during the COVID-19 pandemic.

Characteristics	Stressors			
	Health	Finance	Work	Personal
Overall	3.73	3.14	2.85	2.51
Sex				
Male	3.57	3.01	2.79	2.45
Female	3.84	3.23	2.91	2.55
Fvalue	7.047	2.818	1.258	1.050
P-value	.009*	.095 ^{NS}	.263 ^{NS}	.307 ^{NS}
Age Group				
20 to 29	3.72	3.20	2.79	2.65
30 to 39	3.73	2.99	2.97	2.34
40 to 49	3.88	3.29	2.92	2.50
50 to 60	3.44	2.97	2.74	2.43
Fvalue	1.536	1.227	0.912	2.290
P-value	.207 ^{NS}	.301 ^{NS}	.436 ^{NS}	.080 ^{NS}
Marital Status				
Single	3.75	3.26	2.82	2.63
Married	3.71	3.03	2.90	2.40
Fvalue	0.150	3.310	0.642	5.192
P-value	.699 ^{NS}	.070 ^{NS}	.424 ^{NS}	.024*
Employment Status				
Permanent	3.73	3.03	2.90	2.48
Contractual	3.73	3.24	2.82	2.54



Fvalue	0.034	2.674	0.547	0.281
P-value	.953 ^{NS}	.104 ^{NS}	.461 ^{NS}	.597 ^{NS}
Monthly Salary				
20k to 29k	3.72	3.16	2.83	2.52
30k to 49k	3.92	3.00	3.06	2.54
50k and above	3.45	3.22	2.70	2.40
Fvalue	2.671	0.529	1.889	0.249
P-value	.072 ^{NS}	.590 ^{NS}	.154 ^{NS}	.780 ^{NS}

Note. Means not sharing subscripts differ significantly at $\alpha = .05$, as indicated by Tukey's HSD Test.

* $p < .05$; NS = not significant

It was also found that the frequency of experience with personal and well-being-related stressors between single and married university teachers was significantly different ($p < .05$). Particularly, the single university teachers experienced personal and well-being-related stressors more frequently than married university teachers. This result agrees with the studies of Peng et al. (2022) and Kowal et al. (2022), which showed that single individuals experienced lower well-being and higher stress than married individuals. A recent study by Girme et al. (2022) showed that social support and social discrimination mediate the relationship between marital status and well-being. Married individuals tend to have higher social support compared to single individuals. This can be attributed to the additional social support married individuals receive from their spouses. Single individuals tend to be discriminated against compared to married individuals in various aspects, including but not limited to social treatment, health benefits, salary, and taxes (DePaulo & Morris, 2006). The study of Girmet et al. (2022) further showed that single individuals also tend to get discriminated against by people they turn to for comfort (e.g., married friends and parents).

Frequency of Use of Coping Strategies

As shown in **Table 6**, most of the coping strategies often used by university teachers belonged to the approach-style coping strategies ($M = 3.57$). Meanwhile, those under the avoidance-style coping strategies ($M = 2.30$) were rarely used. These results were consistent with several studies (Goldman, 2021; Nazari et al., 2022), showing that approach-style coping strategies were used more often than avoidance-style coping strategies. Hence, the use of approach-style coping strategies enabled university teachers to adapt to the COVID-19 pandemic by facing and accepting the reality, getting used to the situation, attempting to improve the situation, and getting support from others rather than developing negative emotions like withdrawal, denial, despair, or disengagement (Carver, 1997).

Table 6.

The frequency of use of coping strategies by IFSU university teachers during the COVID-19 pandemic.

Coping Strategies	Mean	Frequency of Use
<i>Approach-style Coping</i>		
1. Acceptance	4.05	often
2. Positive Reframing	3.78	often
3. Active Coping	3.76	often
4. Planning	3.60	often
5. Use of Emotional Support	3.22	sometimes
6. Use of Instrumental Support	3.17	sometimes
Grand Mean	3.59	often
<i>Avoidance-style Coping</i>		
1. Self-distraction	3.30	sometimes
2. Venting	2.76	sometimes
3. Denial	2.26	rarely
4. Behavioral Disengagement	2.02	rarely
5. Self-Blame	2.03	rarely



6. Substance Abuse	1.49	never
	Grand Mean	2.31
Religion	3.93	often
Humor	2.47	rarely

Among the avoidance-style coping strategies, it was found that university teachers sometimes used self-distraction and venting. In contrast, the rest of the avoidance-style coping strategies were rarely used. These results were consistent with several studies which also showed that self-distraction (Hock et al., 2021; Munsell et al., 2020) and venting (Dumciene & Pozeriene, 2022; Gurvich et al., 2021; Salazar et al., 2021) were the commonly used avoidant coping strategies during the COVID-19 pandemic. Since travel restrictions were imposed during the pandemic, university teachers could not freely travel to anywhere they wanted to go to relieve their stress. Hence, self-distraction allowed university teachers to disengage from the stressful situation. Instead, they engage in pleasurable activities within the comforts of their home, such as reading books, playing games, and watching television (Allen & Leary, 2010). These were consistent with several studies during the pandemic, which showed that self-distraction activities like playing video games (Barr & Copeland-Stewart, 2021) and watching TV series (Boursier et al., 2021) were able to provide a means of escape and even showed positive effects on well-being. On the other hand, venting allowed university teachers to express and share their emotions with others. This validated their negative feelings and even allowed them to garner sympathy from others. However, it should be noted that venting alone is insufficient and can worsen matters in the long run as it further escalates negative emotions among the users (Liverant et al., 2004; Vicary & Fraley, 2010).



University teachers also often used religious coping ($M = 3.93$). This was expected since the Philippines is generally known for its strong religious faith. Several studies (Fatima et al., 2021; Thomas & Barbato, 2020) have also affirmed that religious coping can be linked to lower depression and suicidal thoughts.

University teachers rarely used humor coping ($M = 2.47$) despite the emergence and prevalence of various COVID-19-themed humor in the country (Torres et al., 2020). While some studies showed that humor can reduce anxiety, increase sense of control, increase happiness, and lower stress (Bitterly & Schweitzer, 2021; Torres-Marin et al., 2022; Simione & Gnagnarella, 2023), it was not often practiced among the university teachers. This can be attributed to the lingering fear of the COVID-19 virus, as evident in the university teachers' relatively high frequency of experience with health-related stressors. This was supported by the study of Saricali et al. (2022), which showed that higher fear of the COVID-19 virus is associated with a lower sense of humor and higher hopelessness.

Sociodemographic Variation in the Frequency of Use of Coping Strategies

As shown in **Table 7**, a significant difference ($p < .05$) was found in the frequency of use of approach-style coping strategies, religion, and humor between the male and female university teachers. In particular, it was found that female university teachers depended on approach-style coping strategies and religion more than male university teachers. On the other hand, male university teachers depended on humor more than female university teachers. These results agreed with the study of Babicka-Wirkus et al. (2021), which attributed the differences between the coping strategies of male and female participants to gender socialization. Specifically, women are socialized

to be more emotional and seek support in interpersonal relationships, while men are socialized to cope with their problems on their own or use humor. Previous studies also showed that women are often more religious than men (Rassoulilian et al., 2021), especially among countries that are primarily composed of Christian populations (Schnabel et al., 2018), like the Philippines.

Table 7.
The sociodemographic variation in the frequency of use of coping strategies by IFSU university teachers during the COVID-19 pandemic.

Characteristics	Coping Strategies			
	Approach-style	Avoidance-style	Religion	Humor
Overall	3.57	2.30	3.93	2.44
Sex				
Male	3.44	2.30	3.57	2.70
Female	3.70	2.32	4.17	2.31
Fvalue	8.143	0.080	23.963	7.533
P-value	.005*	.778 ^{NS}	.000*	.007*
Age Group				
20 to 29	3.64	2.38	3.80	2.60 _a
30 to 39	3.65	2.34	4.07	2.54 _a
40 to 49	3.48	2.15	3.75	2.34 _a
50 to 60	3.48	2.27	4.06	1.94 _b
Fvalue	0.880	1.655	1.190	2.688
P-value	.452 ^{NS}	.178 ^{NS}	.315 ^{NS}	.048*
Marital Status				
Single	3.62	2.41	3.84	2.67
Married	3.57	2.22	4.02	2.28
Fvalue	0.237	6.131	1.964	8.115
P-value	.627 ^{NS}	.014*	.163 ^{NS}	.005*
Employment Status				
Permanent	3.46	2.26	3.94	2.30
Contractual	3.72	2.35	3.91	2.62
Fvalue	7.862	1.246	0.055	5.432
P-value	.006*	.266 ^{NS}	.815 ^{NS}	.021*
Monthly Salary				
20k to 29k	3.68 _a	2.34	3.94	2.58 _a



30k to 49k	3.39 _b	2.26	3.85	2.32 _a
50k and above	3.33 _b	2.15	4.00	1.81 _b
Fvalue	4.453	1.123	0.184	5.307
P-value	.013*	.327 ^{NS}	.832 ^{NS}	.006*

Note. Means not sharing subscripts differ significantly at $\alpha = .05$, as indicated by Tukey's HSD Test.

* $p < .05$; NS = not significant

The use of humor among the different age groups of university teachers was also found to be significantly different ($p < .05$). It was observed that as the age group increased, the use of humor decreased; this was especially true among university teachers belonging to the 50 to 60 age group whose use of humor was significantly lower than the rest of the age groups. This was consistent with the study of Jain and Jha (2020), which found a decrease in the use of humor with age. This can be attributed to the declining sense of humor with age (Svebak et al., 2006). Age differences in humor preferences may also be influenced by opinions about what constitutes suitable social behavior, with older persons being less inclined to laugh at jokes that do not fit their preferred humor style (Stanley et al., 2014). For example, unlike younger people, older people are less likely to enjoy aggressive jokes - a type of humor that is used to put down, tease, ridicule, and make a mockery of other people - which was the second most prevalent type of humor in the country during the pandemic (Torres et al., 2020). The higher number of health comorbidities among older people (Peterfi et al., 2022) could also be why older university teachers used less humor. This is because the presence of health comorbidities is associated with the occurrence of anxiety and depression (Lee et al., 2022; Mishra et al., 2023); thus, these may hinder older university teachers from using humor. However, further study needs to be conducted to verify this,



as the present study did not collect any data on the comorbidities, anxiety level, and depression level of the target university teachers.

The use of avoidance-style coping strategies and humor significantly differed ($p < .05$) between the single and married university teachers of IFSU. In particular, single university teachers depended more on avoidance-style coping strategies and humor than married university teachers. These results agreed with the studies of Hossain et al. (2022) and Javed and Parveen (2021), which found that single individuals used avoidance-style coping strategies more than married individuals. These differences can be attributed to dyadic coping among married individuals. This allowed married individuals to face the stresses with their spouse/partner, while single individuals relied more on their internal resources to manage stress (Donato et al., 2021). Hence, dyadic coping may help them lean towards approach-style coping strategies rather than avoidance-style coping strategies.

Contractual university teachers were found to use varied coping strategies more often than permanently employed university teachers. This difference was marked by the use of approach-style coping strategies and humor ($p < .05$). These differences can be attributed to the fact that contractual employees are generally more vulnerable to work-related stress due to less control, limited support, high work demands, and job insecurity, among others (Ghezzi et al., 2020).

The use of approach-style coping strategies and humor among university teachers belonging to different salary range groups were found to be significantly different ($p < .05$). Specifically, it was observed that university teachers with lower salary range have higher use of both approach-style coping strategies and humor than university teachers belonging to the higher salary range. This was supported by the study of Yang et al. (2022), which found that lower-income people

were more likely to experience the economic distress brought about by the COVID-19 pandemic than higher-income people because they generally have lower buying power. This was further aggravated by the continuous price increase of several commodities and services in the Philippines during the pandemic.

Variation in the Frequency of Experience with Stressors and Frequency of Use of Coping Strategies with Perceived Stress

Table 8.

The variation in the frequency of experience with stressors with perceived stress.

Perceived Stress	Stressors			
	Health	Finance	Work	Personal
Mild	3.28	2.25 ^a	1.87 ^a	2.00 ^a
Moderate	3.71	3.10 ^b	2.85 ^b	2.47 ^a
Severe	3.95	2.85 ^c	3.16 ^c	2.85 ^b
Fvalue	2.637	6.893	8.713	5.515
P-value	.074 ^{NS}	.001 [*]	.000 [*]	.005 [*]

Note. Means not sharing subscripts differ significantly at $\alpha = .05$, as indicated by Tukey's HSD Test.

* $p < .05$; NS = not significant

It can be seen in Table 8 that the more frequently university teachers experienced the stressors, the higher their perceived stress. University teachers with severe perceived stress experienced the stressors more frequently than those with moderate and mild perceived stress. It was also found that the frequency of experience on the health-related stressors was not significantly different ($p > .05$) for mild, moderate, or severe levels of perceived stress. This means that these stressors were equally felt and experienced by all university teachers during the pandemic.



Table 9
The variation in the frequency of use of coping strategies with perceived stress.

Perceived Stress	Coping Strategies			
	Approach-style	Avoidance-style	Religion	Humor
Mild	3.04 _a	1.90 _a	4.08	1.67 _a
Moderate	2.58 _b	2.26 _a	3.87	2.44 _b
Severe	3.83 _c	2.71 _b	4.22	2.80 _b
Fvalue	4.383	10.945	1.917	3.859
P-value	.014*	.000*	.150 ^{NS}	.023*

Note. Means not sharing subscripts differ significantly at $\alpha = .05$, as indicated by Tukey's HSD Test.

* $p < .05$; NS = not significant

Table 9 shows that as the perceived stress of university teachers increased, so did their frequency of use of coping strategies. University teachers with severe perceived stress used coping strategies more frequently than those with moderate and mild perceived stress. It was also found that religious coping was not significantly different ($p > .05$) for mild, moderate, or severe levels of perceived stress. This means that religious coping was widely used among university teachers, regardless of the intensity of their feelings of stress.

Limitations of the Study

This study used three questionnaires (PRPSQ, SIQ, and BriefCOPE), composed of single-choice, close-ended Likert items, to measure the perceived stress, frequency of experience with stressors, and frequency of use of coping strategies among university teachers of IFSU during the COVID-19 pandemic. Hence, the responses from university teachers were limited to the available choices and could not capture the nuances of the respondents' actual experiences or opinions. It is recommended that a case study be conducted to fully grasp the specific



and contextualized experiences of stress and the use of coping strategies by university teachers. In addition, only 56.9% of the target population responded to the questionnaires. Thus, the results of this study cannot be generalized to the entire teaching community of IFSU. Stress-related variables can also be measured, such as job satisfaction, burnout, anxiety, depression, and student performance, as explored in various studies (De Francisco et al., 2016; Herman et al., 2020; Chen et al., 2020). Since the public health response to the COVID-19 pandemic has become more relaxed across the globe as of this writing, and face-to-face classes have returned, it is recommended that a longitudinal study be conducted. The longitudinal study can look into the changes in experiences of stress and the use of coping strategies by university teachers as the situation returns to pre-pandemic teaching-learning processes.

Conclusions and Recommendations

This study has shown that most university teachers at IFSU experienced moderate perceived stress during the COVID-19 pandemic. It was also found that the more frequently university teachers experienced the stressors, the higher their perceived stress. Thus, IFSU must focus on alleviating the stressors to retain high-quality teaching, as it can positively impact the overall quality of education provided by IFSU. Among the stressors that contributed to stress, it was found that university teachers often experienced health-related stressors. To address this, IFSU can initiate a health and wellness package for university teachers. This may include regular check-up programs with partner health facilities and doctors, discounted basic laboratory fees, and health insurance covering medical, dental, and vision expenses. Exercise programs (e.g., dance fitness, yoga, and volleyball) can also be organized to help university



teachers stay fit and, at the same time, provide an avenue for socialization with one another. Finance-related stressors were sometimes experienced, attributed to a shortage of financial resources and daily necessities. A loan board can be organized by IFSU, which can work with financial institutions to negotiate favorable loan terms for university teachers. Similarly, work-related stressors were sometimes experienced owing to heavy workloads, irregular work hours, and stress with teaching online. IFSU can revise its policies concerning flexible work schedules to give university teachers a better work-life balance. IFSU can also review workload policies and make adjustments to ensure they can handle their responsibilities. It was also found that female university teachers experienced health-related stressors more than male university teachers. In addition, single university teachers experienced personal and well-being-related stressors more than married university teachers. Hence, IFSU should also focus on university teachers who belong to these more vulnerable groups. In particular, IFSU can organize a social support group facilitated by a professionally-trained social worker or psychologist so that university teachers can share their problems, seek companionship, and cope with stress healthily.

The study has also shown that as the perceived stress of university teachers increased, so did their frequency of use of various coping strategies. Religious coping was found to be often used among university teachers. Religious coping can be reinforced by conducting a regular “Recollection Day” program facilitated by trained non-sectarian personnel. Through this program, university teachers can do activities such as self-reflection, meditation, sharing life experiences, self-appreciation, appreciation of others, seeking forgiveness, and praying. Most university teachers also used approach-style coping



strategies compared to avoidance-style coping strategies. This can also be reinforced by providing workshops on healthy stress management techniques. Access to counseling services can also be provided to help them manage personal or work-related stressors. While some studies found that humor can decrease stress, it was rarely used among university teachers in this study. Hence, workshops can be designed to help university teachers cultivate positive emotions, such as humor, gratitude, and optimism, to cope with stress in times of adversity. Through these recommendations, IFSU can help to promote a culture of resilience, problem-solving, and well-being among university teachers.

References

- Akar, H. (2018). Meta-analysis study on organizational outcomes of ethical leadership. *Educational Policy Analysis and Strategic Research, 13*(4), 6-25. <https://doi.org/10.29329/epasr.2018.178.1>
- Allen, A. B., & Leary, M. R. (2010). Self-Compassion, Stress, and Coping. *Social and Personality Psychology Compass, 4*(2), 107–118. <https://doi.org/10.1111/j.1751-9004.2009.00246.x>
- Amit, A. M. L., Pepito, V. C. F., Sumpaico-Tanchanco, L., & Dayrit, M. M. (2022). COVID-19 vaccine brand hesitancy and other challenges to vaccination in the Philippines. *PLOS Global Public Health, 2*(1), e0000165. <https://doi.org/10.1371/journal.pgph.0000165>
- Aperribai, L., Cortabarría, L., Aguirre, T., Verche, E., & Borges, Á. (2020). Teacher's Physical Activity and Mental Health During Lockdown Due to the COVID-2019 Pandemic. *Frontiers in Psychology, 11*(November), 1–14. <https://doi.org/10.3389/fpsyg.2020.577886>



- Aruta, J.J.B.R. (2021). Socio-ecological determinants of distress in Filipino adults during COVID-19 crisis. *Curr Psychol*. <https://doi.org/10.1007/s12144-020-01322-x>
- Asian Development Bank. (2021). *Food Inflation and Food and Nutrition Security Situation in Developing Asia During the COVID-19 Pandemic*. Retrieved July 28, 2022, from <https://www.adb.org/news/features/food-inflation-food-nutrition-security-situation-developing-asia-covid-19-pandemic>
- Babicka-Wirkus, A., Wirkus, L., Stasiak, K., & Kozłowski, P. (2021). University students' strategies of coping with stress during the coronavirus pandemic: Data from Poland. *PLOS ONE*, 16(7), e0255041. <https://doi.org/10.1371/journal.pone.0255041>
- Barr, M., & Copeland-Stewart, A. (2021). Playing Video Games During the COVID-19 Pandemic and Effects on Players' Well-Being. *Games and Culture*, 17(1), 122–139. <https://doi.org/10.1177/15554120211017036>
- Bautista, A., Jr, Bleza, D., Buhain, C. B., & Balibrea, D. (2021). School Support Received and the Challenges Encountered in Distance Learning Education by Filipino Teachers during the Covid-19 Pandemic. *International Journal of Learning, Teaching and Educational Research*, 20(6), 360–385. <https://doi.org/10.26803/ijlter.20.6.19>
- Bitterly, T. B., & Schweitzer, M. E. (2021). Humor and Coping in a Pandemic. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.3776994>
- Boursier, V., Musetti, A., Gioia, F., Flayelle, M., Billieux, J., & Schimmenti, A. (2021). Is Watching TV Series an Adaptive Coping Strategy During the COVID-19 Pandemic? Insights From an Italian Community Sample. *Frontiers in Psychiatry*, 12.

<https://doi.org/10.3389/fpsy.2021.599859>

- Campo-Arias, A., Pedrozo-Cortes, M. J., & Pedrozo-Pupo, J. C. (2020). Pandemic-Related Perceived Stress Scale of COVID-19: An exploration of online psychometric performance. *Revista Colombiana de Psiquiatria*, 49(4), 229–230.
- Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine*, 4, 92-100.
- Chen, H., Liu, F., Pang, L., Liu, F., Fang, T., Wen, Y., . . . Gu, X. (2020). Are You Tired of Working amid the Pandemic? The role of Professional Identity and Job Satisfaction against Job Burnout. *International Journal of Environmental Research and Public Health*.
- De Francisco, C., Arce, C., Vílchez, M. del P., & Vales, Á. (2016). Antecedents and consequences of burnout in athletes: Perceived stress and depression. *International Journal of Clinical and Health Psychology*, 16(3), 239–246.
<https://doi.org/10.1016/j.ijchp.2016.04.001>
- DePaulo, B. M., & Morris, W. L. (2006). The unrecognized stereotyping and discrimination against singles. *Current Directions in Psychological Science*, 15(5), 251–254.
<https://doi.org/10.1111/j.1467-8721.2006.00446.x>
- Donato, S., Parise, M., Pagani, A. F., Lanz, M., Regalia, C., Rosnati, R., & Iafrate, R. (2021). Together Against COVID-19 Concerns: The Role of the Dyadic Coping Process for Partners' Psychological Well-Being During the Pandemic. *Frontiers in Psychology*, 11.
<https://doi.org/10.3389/fpsyg.2020.578395>
- Dumciene, A., & Pozeriene, J. (2022). The Emotions, Coping, and Psychological Well-Being in Time of COVID-19: Case of Master's



- Students. *International Journal of Environmental Research and Public Health*, 19(10), 6014. <https://doi.org/10.3390/ijerph19106014>
- Eisenberg, S. A., Crews, R. T., Schwarz, E. R., & Mallon, S. (2011). Avoidant coping moderates the association between anxiety and patient-rated physical functioning in heart failure patients. *Journal of Behavioral Medicine*, 35(3), 253–261. <https://doi.org/10.1007/s10865-011-9358-0>
- Fatima, H., Oyetunji, T. P., Mishra, S., Sinha, K., Olorunsogbon, O. F., Akande, O. S., Srinivasan, & Kar, S. K. (2022). Religious coping in the time of COVID-19 Pandemic in India and Nigeria: Finding of a cross-national community survey. *International Journal of Social Psychiatry*, 68(2), 309–315. <https://doi.org/10.1177/0020764020984511>
- Frenkel, M. O., Pollak, K. M., Schilling, O., Voigt, L., Fritzsching, B., Wrzus, C., Egger-Lampl, S., Merle, U., Weigand, M. A., & Mohr, S. (2022). Stressors faced by healthcare professionals and coping strategies during the early stage of the COVID-19 pandemic in Germany. *PLoS ONE*, 17(1 January), 1–25. <https://doi.org/10.1371/journal.pone.0261502>
- Gadermann, A. C., Thomson, K. C., Richardson, C. G., Gagné, M., Mcauliffe, C., Hirani, S., & Jenkins, E. (2021). Examining the impacts of the COVID-19 pandemic on family mental health in Canada: findings from a national cross-sectional study. *BMJ Open*, 11(1), 1–11. <https://doi.org/10.1136/bmjopen-2020-042871>
- Ghezzi, V., Probst, T. M., Petitta, L., Ciampa, V., Ronchetti, M., Di Tecco, C., Iavicoli, S., & Barbaranelli, C. (2020). The Interplay among Age and Employment Status on the Perceptions of Psychosocial Risk Factors at Work. *International Journal of Environmental Research and Public Health*, 17(10), 3611.

<https://doi.org/10.3390/ijerph17103611>

Gicheva, D. (2021). Teachers' Working Hours During the COVID-19 Pandemic. *Educational Researcher*, 51(1), 85–87.

<https://doi.org/10.3102/0013189x211056897>

Girme, Y. U., Sibley, C. G., Hadden, B. W., Schmitt, M., & Hunger, J. M. (2021). Unsupported and stigmatized? The association between relationship status and Well-Being is mediated by social support and social discrimination. *Social Psychological and Personality Science*, 13(2), 425–435.

<https://doi.org/10.1177/19485506211030102>

Goldman, J. N. (2021). Relationships between coping mechanisms and perceived stress of Portland State University community members amidst covid-19. *PDXScholar*, 17.

Graves, B. S., Hall, M. E., Dias-Karch, C., Haischer, M. H., & Apter, C. (2021). Gender differences in perceived stress and coping among college students. *PLOS ONE*, 16(8), e0255634.

<https://doi.org/10.1371/journal.pone.0255634>

Gurvich, C., Thomas, N., Thomas, E. H., Hudaib, A. R., Sood, L., Fabiatis, K., Sutton, K., Isaacs, A., Arunogiri, S., Sharp, G., & Kulkarni, J. (2020). Coping styles and mental health in response to societal changes during the COVID-19 pandemic. *International Journal of Social Psychiatry*, 67(5), 540–549.

<https://doi.org/10.1177/0020764020961790>

Hapal, K. (2021). The Philippines' COVID-19 Response: Securitising the Pandemic and Disciplining the Pasaway. *Journal of Current Southeast Asian Affairs*, 40(2), 224–244.

<https://doi.org/10.1177/1868103421994261>

Herman, K. C., Reinke, W. M., & Eddy, C. L. (2020). Advances in



- understanding and intervening in teacher stress and coping: The Coping-Competence-Context Theory. *Journal of School Psychology, 78*, 69–74. <https://doi.org/10.1016/j.jsp.2020.01.001>
- Hock, T. C., Kai, T. A., Chin, J. P., Yi, L. J., Siva, R., Salvem, T., & Nichol, D. (2021). Lockdown during COVID-19 Pandemic: The Psychological Responses and Coping Strategies among Medical Students in a Public University in Malaysia. *Ulum Islamiyyah, 33*, 4–22. <https://doi.org/10.33102/uij.vol33no1.279>
- Hossain, M. A., Shafin, R., Ahmed, M. S., Rana, M. S., Walton, L. M., Raigangar, V., Ara, T., Rasel, M. A. H., Hossain, M. S., Kabir, M. F., Islam, M. R., Hasan, M. N., Hossain, D., Rumana, F. S., & Jahid, I. K. (2022). Health-Related Quality of Life and Coping Strategies adopted by COVID-19 survivors: A nationwide cross-sectional study in Bangladesh. <https://doi.org/10.1101/2022.04.30.22274514>
- Jain, S., & Jha, S. (2020). Is age just a number: Exploring fear, anxiety, and coping in individuals during COVID-19. *Industrial Psychiatry Journal, 29*(2), 293. https://doi.org/10.4103/ipj.ipj_183_20
- Jain, S., Lall, M., & Singh, A. (2021). Teachers' Voices on the Impact of COVID-19 on School Education: Are Ed-Tech Companies Really the Panacea? *Contemporary Education Dialogue, 18*(1), 58–89. <https://doi.org/10.1177/0973184920976433>
- Javed, S., & Parveen, H. (2021). Adaptive coping strategies used by people during coronavirus. *Journal of education and health promotion, 10*, 122. https://doi.org/10.4103/jehp.jehp_522_20
- Kirmizi, M., Yalcinkaya, G., & Sengul, Y. S. (2021). Gender differences in health anxiety and musculoskeletal symptoms during the COVID-19 pandemic. *Journal of Back and Musculoskeletal*



- Rehabilitation*, 34(2), 161–167. <https://doi.org/10.3233/bmr-200301>
- Kowal, M., Coll-Martín, T., Ikizer, G., Rasmussen, J., Eichel, K., Studzińska, A., Koszałkowska, K., Karwowski, M., Najmussaib, A., Pankowski, D., Lieberoth, A., & Ahmed, O. (2020). Who is the Most Stressed During the COVID-19 Pandemic? Data From 26 Countries and Areas. *Applied Psychology: Health and Well-Being*, 12(4), 946–966. <https://doi.org/10.1111/aphw.12234>
- Kuwato, M., & Hirano, Y. (2020). Sense of coherence, occupational stressors, and mental health among Japanese high school teachers in Nagasaki prefecture: A multiple regression analysis. *BMC Public Health*, 20(1), 1–8. <https://doi.org/10.1186/s12889-020-09475-x>
- Lacomba-Trejo, L., Schoeps, K., Valero-Moreno, S., Del Rosario, C., & Montoya-Castilla, I. (2022). Teachers' Response to Stress, Anxiety and Depression During COVID-19 Lockdown: What Have We Learned From the Pandemic? *Journal of School Health*, 92(9), 864–872. <https://doi.org/10.1111/josh.13192>
- Lee, K. W., Yap, S. F., Ong, H. T., Pheh, K. S., & Lye, M. S. (2022). Anxiety and coping strategies during the COVID-19 pandemic: A cross-sectional study of staff and students from a tertiary education center in Malaysia. *Frontiers in Public Health*, 10. <https://doi.org/10.3389/fpubh.2022.936486>
- Liverant, G. I., Hofmann, S. G., & Litz, B. T. (2004). Coping and anxiety in college students after the September 11th terrorist attacks. *Anxiety, Stress & Coping*, 17(2), 127–139. <https://doi.org/10.1080/0003379042000221412>
- Litam, S. D. A., & Chan, C. S. (2022). Experiences of Stress and Help-Seeking Behaviors in Filipino Americans. *International Journal for the Advancement of Counselling*, 44(4), 586–603.



<https://doi.org/10.1007/s10447-022-09485-x>

- Lizana, P. A., & Vega-Fernandez, G. (2021). Teacher teleworking during the covid-19 pandemic: Association between work hours, work–family balance and quality of life. *International Journal of Environmental Research and Public Health*, 18(14).
<https://doi.org/10.3390/ijerph18147566>
- Macintyre, P. D., Gregersen, T., & Mercer, S. (2020). Language teachers' coping strategies during the Covid-19 conversion to online teaching: Correlations with stress, wellbeing and negative emotions. *System*, 94(January), 1–13.
- Mayo, F. L., Maglasang, R. S., Moridpour, S., & Taboada, E. B. (2021). Exploring the changes in travel behavior in a developing country amidst the COVID-19 pandemic: Insights from Metro Cebu, Philippines. *Transportation Research Interdisciplinary Perspectives*, 12, 100461. <https://doi.org/10.1016/j.trip.2021.100461>
- Minihan, E., Adamis, D., Dunleavy, M., Martin, A., Gavin, B., & McNicholas, F. (2022). COVID-19 related occupational stress in teachers in Ireland. *International Journal of Educational Research Open*, 3(October 2021), 100114.
<https://doi.org/10.1016/j.ijedro.2021.100114>
- Minihan, E., Begley, A., Martin, A., Dunleavy, M., Gavin, B., & McNicholas, F. (2022). Examining COVID-19 related occupational stress in teachers in Ireland through a qualitative study using a thematic analysis approach. *International Journal of Educational Research Open*, 3(March), 100183.
<https://doi.org/10.1016/j.ijedro.2022.100183>
- Mishra, J., Samanta, P., Panigrahi, A., Dash, K., Behera, M. R., & Das, R. (2021). Mental Health Status, Coping Strategies During Covid-19 Pandemic Among Undergraduate Students of

- Healthcare Profession. *International Journal of Mental Health and Addiction*, 21(1), 562–574. <https://doi.org/10.1007/s11469-021-00611-1>
- Morales, N. J., & Lema, K. (2021). *Philippine hospitals struggle to cope as more severe COVID-19 wave hits*. Reuters. Retrieved July 28, 2022, from <https://www.reuters.com/world/asia-pacific/philippine-hospitals-struggle-cope-more-severe-covid-19-wave-hits-2021-04-20/>
- Munsell, S. E., O'Malley, L., & Mackey, C. (2020). Coping with Covid. *Educational Research: Theory and Practice*, 31(1), 101–109. <https://doi.org/10.18489/sacj.v32i1.858>
- Nazari, F., Ghanizadeh, A., & Mirzaee, S. (2022). EFL teachers' coping strategies amidst the Covid-19 virtual education and their association with work engagement and teacher apprehension. *Educational Research for Policy and Practice*, 0123456789. <https://doi.org/10.1007/s10671-022-09317-0>
- Oducado, R. M., Rabacal, J. S., Moralista, R. B., & Tamdang, K. A. (2021). Perceived Stress due to COVID-19 Pandemic Among Employed Professional Teachers. *International Journal of Educational Research and Innovation*, 15(15), 305–316.
- Oshri, A., Zehua, C., Owens, M. M., Carvalho, C., & Sweet, L. H. (2022). Low-to-moderate level of perceived stress strengthens working memory: Testing the hormesis hypothesis through neural activation. *Neuropsychologia*, 176, 108354. <https://doi.org/10.1016/j.neuropsychologia.2022.108354>
- Peng, J., Wu, W. H., Doolan, G., Choudhury, N., Mehta, P., Khatun, A., Hennesly, L., Henty, J., Jury, E. C., Liao, L. M., & Ciurtin, C. (2022). Marital Status and Gender Differences as Key Determinants of COVID-19 Impact on Wellbeing, Job



Satisfaction and Resilience in Health Care Workers and Staff Working in Academia in the UK During the First Wave of the Pandemic. *Frontiers in Public Health*, 10. <https://doi.org/10.3389/fpubh.2022.928107>

Péterfi, A., Mészáros, Á., Szarvas, Z., Péntzes, M., Fekete, M., Fehér, Á., Lehoczki, A., Csípő, T., & Fazekas-Pongor, V. (2022). Comorbidities and increased mortality of COVID-19 among the elderly: A systematic review. *Physiology International*, 109(2), 163–176. <https://doi.org/10.1556/2060.2022.00206>

Philippines Department of Health. (2022). *UPDATES ON NOVEL CORONAVIRUS DISEASE (COVID-19)*. Department of Health. Retrieved July 28, 2022, from <https://doh.gov.ph/2019-nCoV>

Pourmand, V., Lawley, K. A., & Lehman, B. J. (2021). Cultural differences in stress and affection following social support receipt. *PLOS ONE*, 16(9), e0256859. <https://doi.org/10.1371/journal.pone.0256859>

Rajesh, C., Ashok, L., Rao, C. R., Kamath, A., Devaramane, V., & Swamy, V. T. (2022). Psychological well-being and coping strategies among secondary school teachers: A cross-sectional study. *Journal of Education and Health Promotion*, 11(1), 152. https://doi.org/10.4103/jehp.jehp_1248_21

Ramberg, J., Brolin Låftman, S., Åkerstedt, T., & Modin, B. (2019). Teacher Stress and Students' School Well-being: the Case of Upper Secondary Schools in Stockholm. *Scandinavian Journal of Educational Research*, 64(6), 816–830. <https://doi.org/10.1080/00313831.2019.1623308>

Rassoulilian, A., Gaiger, A., & Loeffler-Stastka, H. (2021). Gender Differences in Psychosocial, Religious, and Spiritual Aspects in Coping: A Cross-Sectional Study with Cancer Patients. *Women's*

- Health Reports*, 2(1), 464–472.
<https://doi.org/10.1089/whr.2021.0012>
- Rehr, T. I., & Nguyen, D. J. (2021). Approach/Avoidance Coping among Community College Students and Applications for Student Affairs Professionals. *Journal of Student Affairs Research and Practice*, 1–15. <https://doi.org/10.1080/19496591.2021.1914641>
- Robinson, L. E., Valido, A., Drescher, A., Woolweaver, A. B., Espelage, D. L., LoMurray, S., Long, A. C. J., Wright, A. A., & Dailey, M. J. (2022). Teachers, Stress, and the COVID-19 Pandemic: A Qualitative Analysis. *School Mental Health*, 15(1), 78–89. <https://doi.org/10.1007/s12310-022-09533-2>
- Saeedi, M., Yazdi, S., & Bahador, R. C. (2022). Predictors of COVID-19-related health anxiety among health care workers: a cross-sectional study - *BMC Psychology*. BioMed Central. Retrieved October 3, 2022, from <https://bmcp psychology.biomedcentral.com/articles/10.1186/s40359-022-00880-y>
- Salazar, A., Palomo-Osuna, J., de Sola, H., Moral-Munoz, J. A., Dueñas, M., & Failde, I. (2021). Psychological Impact of the Lockdown Due to the COVID-19 Pandemic in University Workers: Factors Related to Stress, Anxiety, and Depression. *International Journal of Environmental Research and Public Health*, 18(8), 4367. <https://doi.org/10.3390/ijerph18084367>
- Saricali, M., Satici, S. A., Satici, B., Gocet-Tekin, E., & Griffiths, M. D. (2020). Fear of COVID-19, Mindfulness, Humor, and Hopelessness: A Multiple Mediation Analysis. *International Journal of Mental Health and Addiction*, 20(4), 2151–2164. <https://doi.org/10.1007/s11469-020-00419-5>
- Schnabel, L., Hackett, C., & McClendon, D. (2018). Where Men



- Appear More Religious Than Women: Turning a Gender Lens on Religion in Israel. *Journal for the Scientific Study of Religion*, 57(1), 80–94. <https://doi.org/10.1111/jssr.12498>
- Simione, L., & Gnagnarella, C. (2023). Humor Coping Reduces the Positive Relationship between Avoidance Coping Strategies and Perceived Stress: A Moderation Analysis. *Behavioral Sciences*, 13(2), 179. <https://doi.org/10.3390/bs13020179>
- Singh, H., Dahiya, N., Yadav, M., & Sehrawat, N. (2022). Emergence of SARS-CoV-2 New Variants and Their Clinical Significance. *Canadian Journal of Infectious Diseases and Medical Microbiology*, 2022, 1–8. <https://doi.org/10.1155/2022/7336309>
- Stanley, J. T., Lohani, M., & Isaacowitz, D. M. (2014). Age-related differences in judgments of inappropriate behavior are related to humor style preferences. *Psychology and Aging*, 29(3), 528–541. <https://doi.org/10.1037/a0036666>
- Svebak, S., Martin, R. A., & Holmen, J. (2004). The prevalence of sense of humor in a large, unselected county population in Norway: Relations with age, sex, and some health indicators. *Humor: International Journal of Humor Research*, 17(1–2). <https://doi.org/10.1515/humr.2004.001>
- Swigonski, N. L. (2021). *Physical, Mental, and Financial Stress Impacts of COVID-19 on Early Childhood Educators*. SpringerLink. Retrieved October 4, 2022, from https://link.springer.com/article/10.1007/s10643-021-01223-z?error=cookies_not_supported&code=0c6ec936-8fe6-45fc-984d-d6747e42aea1
- Thomas, J., & Barbato, M. (2020). Positive religious coping and mental health among christians and muslims in response to the covid-19 pandemic. *Religions*, 11(10), 1–13.

<https://doi.org/10.3390/rel11100498>

- Tracy, E. L., Chin, B., Lehrer, H. M., Carroll, L. W., Buysse, D. J., & Hall, M. H. (2022). Coping strategies moderate the effect of perceived stress on sleep and health in older adults during the COVID-19 pandemic. *Stress and Health, 38*(4), 708–721.
<https://doi.org/10.1002/smi.3124>
- Torres, J., Collantes, L. M., Astrero, E. T., Millan, A. R., & Gabriel, C. M. (2020). Pandemic Humor: Inventory of the Humor Scripts Produced during the COVID-19 Outbreak. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.3679473>
- Torres-Marín, J., Navarro-Carrillo, G., Eid, M., & Carretero-Dios, H. (2022). Humor Styles, Perceived Threat, Funniness of COVID-19 Memes, and Affective Mood in the Early Stages of COVID-19 Lockdown. *Journal of Happiness Studies, 23*(6), 2541–2561.
<https://doi.org/10.1007/s10902-022-00500-x>
- Uy, J., Siy Van, V. T., Ulep, V. G., Bayani, D. B., & Walker, D. (2022). The Impact of COVID-19 on Hospital Admissions for Twelve High-Burden Diseases and Five Common Procedures in the Philippines: A National Health Insurance Database Study 2019-2020. *The Lancet Regional Health - Western Pacific, 18*, 100310.
<https://doi.org/10.1016/j.lanwpc.2021.100310>
- Vargas-Rubilar, N.A., & Oros, L. B. (2021). Stress and Burnout in Teachers During Times of Pandemic. *Frontiers in Psychology, 12*.
<https://doi.org/10.3389/fpsyg.2021.756007>
- Vicary, A. M., & Fraley, R. C. (2010). Student Reactions to the Shootings at Virginia Tech and Northern Illinois University: Does Sharing Grief and Support Over the Internet Affect Recovery? *Personality and Social Psychology Bulletin, 36*(11), 1555–1563. <https://doi.org/10.1177/0146167210384880>



- Warchoń-Biedermann, K., Daroszewski, P., Bączyk, G., Greberski, K., Bugajski, P., Karoń, J., Mojs, E., Ziarko, M., Jasielska, A., & Samborski, W. (2021). Dysfunctional Coping Mediates the Relationship between Stress and Mental Health in Health-Care Staff Working amid the COVID-19 Pandemic. *Medical Principles and Practice, 30*(4), 395–400. <https://doi.org/10.1159/000516181>
- Watzl, C. (2022). COVID-19 vaccines – common misperceptions, false claims and myths explained. *European Journal of Immunology, 52*(5), 692–694. <https://doi.org/10.1002/eji.202270055>
- Wong, V. W., Ruble, L. A., Yu, Y., & McGrew, J. H. (2017). Too stressed to teach? Teaching quality, student engagement, and IEP outcomes. *Exceptional Children, 83*(4), 412–427. <https://doi.org/10.1177/0014402917690729>
- World Bank. (2020). *Impacts of COVID-19 on Households in the Philippines*. Retrieved July 28, 2022, from <https://pubdocs.worldbank.org/en/109011605520157559/Results-from-the-Philippines-COVID-19-Households-Survey-conducted-in-August-2020-Presentation.pdf>
- World Health Organization. (2022). *WHO Coronavirus (COVID-19) Emergency Dashboard*. Retrieved July 28, 2022, from <https://covid19.who.int/>
- World Health Organization. (2022). Stress. Retrieved April 6, 2023, from <https://www.who.int/news-room/questions-and-answers/item/stress>
- Yang, D., Hu, B., Ren, Z., & Li, M. (2022). Impact of income on mental health during the COVID-19 pandemic: Based on the 2020 China family panel survey. *Frontiers in Psychology, 13*. <https://doi.org/10.3389/fpsyg.2022.977609>



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