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The Amplifying Effect of Psychological Capital on Emotional Management for Reducing Teachers' Work Stress During COVID-19

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Abstract

The present study investigated the stress-reducing effect of emotional management (EM) for teachers during the COVID-19 pandemic. Adopting the conservation of resources (COR) theory perspective, we employed a stratified random sampling design to conduct a survey of elementary school teachers in Taiwan with 211 valid responses. Questionnaires were used to assess EM, psychological capital (PsyCap), and perceived work stress. The moderated regression analysis indicated that EM was negatively related to perceived work stress, suggesting that teachers with better emotional management competencies experienced lower levels of work stress during COVID-19. Furthermore, we found a significant interaction between EM and PsyCap on perceived work stress. The interaction was significant for the overall PsyCap and all four components, namely, self-efficacy, hope, optimism, and resilience. Although the simple slope test was not significant for hope, the pattern of interaction was consistent. Specifically, teachers with higher EM perceived lower work stress when they had higher overall PsyCap, self-efficacy, optimism, and resilience. These findings offer evidence to support the COR proposition, showing that PsyCap amplifies the benefit of EM and works together in alleviating teaching stress during the height of the pandemic. The present study contributes to theoretical development by integrating the EM and PsyCap research under a unified theoretical framework of COR. Our finding that teachers with an abundance of resources fared the best under stress also informs the practical training programs to foster teachers' EM and PsyCap as personal resources for adaptive coping and thriving.

Keywords: teachers; emotional management; psychological capital; work stress; COVID-19

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1. Introduction

The outbreak of COVID-19 in 2020 caused unprecedented disruptions to education systems worldwide and elevated teachers' stress and risk of burnout (Kim & Asbury, 2020; Pressley, 2021). In Taiwan, with lessons learned from the previous crisis (the SARS outbreak), the government responded swiftly and forcefully to the outbreak, implementing draconian measures such as mandatory wearing of face masks, banning social gatherings, and closing business venues and schools. Only remote teaching was allowed from May 2021 to September 2022, with some mixed-form teaching for another 6 months due to

intermittent restrictions (Hsieh, 2021; Ministry of Education, Taiwan, 2022). The 16-month-long remote teaching was brought upon teachers abruptly, forcing them to adopt new instructional practices without adequate training. Meanwhile, teachers need to support students' academic and emotional needs and communicate effectively to alleviate parents' anxieties for the transition. Facing the abrupt change in teaching practices, substantially increased workload, intensified interactions with students and parents, and COVID-19-induced strains, teachers must mobilize available resources to maintain effective teaching and protect their own well-being. We thus set out to explore how different types of personal resources (emotional competence and positive psychological state) interact to alter the perception of COVID-19-induced work stress for teachers in Taiwan.

Although the COVID-19 pandemic is over, teachers still face a demanding work environment and a high risk of burnout (Qiu et al., 2025). In Taiwan, teacher stress is aggravated by the society's emphasis on education and academic credentials, parents' high expectations for their children's performance, and overprotection and overstepping in school activities (Chang et al., 2017). A recent news event in Taiwan put the spotlight on teachers' plight of overwork and stress, especially those related to managing students' classroom behavior and handling parents' demands (Central News Agency, Taiwan, 2026). On 25 May 2026, an experienced teacher in Kaohsiung City fell to his death from a building at the primary school where he taught. The teaching community and the public were deeply shocked by the tragic incident, and with a flurry of media reports, online discussions, and council inquiries, the roles of misbehaving students, abusive parents, and systemic failure of the administration to support teachers were all underlined as factors that contributed to the chronically demanding and stressful working conditions faced by teachers. We thus believe that the lessons we learn from coping with COVID-19-induced work stress will still have relevance for teachers coping with present-day teaching stress.

Teaching, whether during the height of the COVID-19 pandemic or in the present-day highly demanding environment in Taiwan, is an effortful process that requires resource investment for successful adaptation. This is the central tenet of the conservation of resources (COR) theory (Hobfoll, 2002). According to the COR perspective, personal resources are positive self-evaluations that refer to individuals' sense of their ability to successfully control and influence their environment (Hobfoll, 2002). Emotional management (EM hereafter) is a multifaceted construct, encompassing the ability to perceive, understand, regulate, and utilize emotions effectively in oneself and others (Mayer et al., 2016), which is crucial for personal and professional success (Mayer & Salovey, 1997). Psychological capital (PsyCap hereafter) as a positive psychological state comprising hope, self-efficacy, resilience, and optimism enables individuals to thrive and flourish in life (Luthans et al., 2007) and work (Avey et al., 2011; Tjimuku et al., 2025). The value of EM and PsyCap as personal resources for coping with stress has been established unequivocally by the burgeoning empirical studies; however, there is a research void regarding the *intersection and combined effects* of EM and PsyCap in the work context (Tjimuku et al., 2025).

How different resources combine and interact to facilitate adaptation is an important theoretical and practical issue, as people with greater resources are more resilient to resource loss and are more adept at acquiring resources; thus, the COR proposition is that resources typically travel in packs, or caravans (termed "*resource caravans*", Hobfoll, 2012). To understand how the resource caravans work, we need to decipher why the values of some resources are enhanced by the acquisition of other resources, that is, how resources combine to meet goals (e.g., examining interactive effects) (Hobfoll et al., 2018). We thus aim to investigate the *interactive effect* of EM and PsyCap to test the combined benefit of mobilizing multiple resources to cope with the surge of work demands and psychological strains for first-line educators during the COVID-19 pandemic. Doing so, we aim to address

the research gap on the interactive effect of two personal resources (EM and PsyCap) on reducing teaching stress in a high-demand work context.

1.1. Managing Teaching Stress Through Emotional Management

Teaching has been consistently identified as a high-stress profession even before the pandemic, due to its complex and multifaceted demands (Pressley, 2021; Qiu et al., 2025). Teachers must remain highly motivated to juggle multiple role demands, including instructional responsibilities, managing classroom behavior, school administrative duties, and maintaining interactions with parents, all of which contribute to heightened occupational stress and risk of burnout (Skaalvik & Skaalvik, 2017; Qiu et al., 2025). In Taiwan, a constant stream of educational reforms introduced by the government over the past 30 years has seriously eroded teachers' social status, professional identity, motivation, and career prospects, resulting in heightened work stress, burnout, and mental health problems (Hung et al., 2016; Li et al., 2026). These challenges were further intensified during the COVID-19 pandemic. The bunker mentality of "no caution is too much caution" was instilled in every citizen through the SARS experience, which enabled the government to reinforce a myriad of draconian health-related measures, including shutting down schools for young children. Teachers were forced to rapidly transition to online/remote instruction while complying with all health restrictions. This abrupt shift in work pattern increased workload and introduced additional demands associated with digital technologies, resulting in elevated levels of work stress, burnout, and psychological strain during the pandemic (Kim & Asbury, 2020; Pressley, 2021). Moreover, research on pandemic-related teaching contexts indicates that sudden instructional changes and uncertainty further exacerbated teachers' stress and negatively affected their well-being (Kim & Asbury, 2020; MacIntyre et al., 2020).

In addition to instructional responsibilities, teachers also need to cope with high emotional demands as they must continuously regulate their emotional responses in interactions with students, colleagues, and parents (Kyriacou, 2001; Taxer & Frenzel, 2015). These emotional demands became particularly salient during the COVID-19 pandemic, as teachers were required to adapt to rapidly changing instructional contexts while supporting students under uncertain conditions (Pressley, 2021). According to the COR, when people face potential or actual loss of valued resources, the feeling of stress motivates individuals to acquire, mobilize, and utilize resources to counter the resource loss. Emotional competence, pivoted on four branches of perception, understanding, regulation, and utilization of emotions (Mayer et al., 2016), can function as a personal resource that *ecologically fits* the emotionally challenging work role of a teacher (Hobfoll et al., 2018). Individuals with better emotional management competency as a resource are more likely to believe that they can successfully adapt to work stress than those with fewer such resources, which in turn leads to lower strains (Hobfoll, 2002). Research shows that individuals with better emotional regulation abilities are better able to cope with stress, maintain psychological health (Kevereski et al., 2016), and job performance (Tjimuku et al., 2025). Such successful experience in coping with work stress further enhances emotional management competency as a personal resource, which completes the resource gain cycles as proposed in the COR theory (Hobfoll, 2002).

In educational settings, where teaching involves sustained interpersonal interactions and high emotional demands, emotional management competency is a particularly valuable resource for positive educational outcomes. Research has found that teachers with better emotional regulation abilities report lower levels of work stress, burnout, better psychological well-being, work engagement, higher teaching self-efficacy, and more positive teacher–student relationships (Mérida-López et al., 2017; Pathak et al., 2025; Qiu et al., 2025). Recent research findings further highlight that teachers' emotion regulation

is pivotal to teaching effectiveness in diverse teaching contexts, including classroom climate and student outcomes (Aldrup et al., 2024; Burić et al., 2019). We thus hypothesized the following:

H1. *Teachers' emotional management is negatively related to perceived work stress during the COVID-19 pandemic.*

1.2. The Amplifying Effect of Psychological Capital: The Combined Benefit of Personal Resources

PsyCap is a construct that encompasses positive psychological resources individuals possess, which can be developed and utilized for personal growth and effectiveness in various domains of life (Luthans et al., 2007). PsyCap is a higher-order construct consisting of four distinct but interrelated components, self-efficacy (E), hope (H), resilience (R), and optimism (O), dubbed the HERO model, each contributing uniquely to an individual's overall PsyCap (Luthans et al., 2015). PsyCap is positively associated with desirable work outcomes, such as job satisfaction, well-being, and performance, and negatively associated with work stress and strain (Avey et al., 2009; Basinska & Rozkwitalska, 2022). A meta-analysis confirmed its robust relationships with employees' attitudes, behaviors, performance, and work stress (Avey et al., 2011), unequivocally confirming the value of PsyCap as a personal resource at work. Although past studies have linked emotional management ability to positive teaching outcomes (Aldrup et al., 2024) and PsyCap to favorable teacher well-being (Qiu et al., 2025), no research has explored how EM and PsyCap, as distinct personal qualities, might combine and interact to facilitate teachers' adaptation to work demands in stressful circumstances such as the pandemic.

According to the COR theory, individuals with greater resources are more capable of creating resource caravans. Teachers with better emotional competencies are more successful in work and life (Mayer et al., 2016), and thus more likely to develop the positive psychological characteristics of PsyCap. Research has indeed found that EM predicts PsyCap among students, and both were beneficial for their career success (Lye et al., 2023). Recent research evidence has supported one form of the interaction between resources in a caravan, namely, the *compensatory effect*. That is when a key resource is low or absent, a second resource may substitute for it and perform the compensatory role in coping (Hobfoll et al., 2018). A longitudinal study in Taiwan found that when working under illness, employees displayed the best job performance with high levels of both supervisory and collegial support, the worst performance with both support being low, and the intermediate when any one of the support was high (J. W. Chen et al., 2021). Another possible form of the interaction between resources is the *amplifying effect* they have on each other, as individuals are more confident to invest a resource when resources are abundant (Hobfoll et al., 2018). Thus far, the *interaction* between EM and PsyCap has not been explored in the literature (Tjimuku et al., 2025). Only one study in India has included both EM and PsyCap; they were treated as two separate moderators in a moderated moderation model of employee commitment and work engagement (Narayanasami et al., 2024). We extend this research to explore the *interaction* between EM and PsyCap in the form of the amplifying effect of two resources.

The rationale for PsyCap to enhance the effect of EM is that the cognitive component of hope and optimism, and the volitional component of self-efficacy and resilience, complement the socio-affective focus of emotional competencies. PsyCap was found to facilitate positive coping, which enhanced the effect of emotional intelligence on the self-rated health status of students in China during the COVID-19 pandemic (Jing et al., 2022). It thus seems that PsyCap may amplify coping capacity for people with better emotional competencies when facing stress.

The HERO model of PsyCap posits that the four interrelated components each contribute uniquely to the pool of positive psychological resources (Luthans et al., 2015). A meta-analysis of *resilience* in the workplace found robust relations between individual-level resilience and a variety of valued workplace outcomes (i.e., performance, job attitudes, psychological well-being, physical health) (Good et al., 2025). Ample research has found that *optimism* facilitates adaptive coping and reduces the negative impact of stress (Carver & Scheier, 2017). *Self-efficacy* involves confidence in one's skills, knowledge, and capacity to overcome challenges and obstacles, thus energizing one's goal setting, initial behaviors, and subsequent persistence (Luthans et al., 2015). *Hope* has consistently been theorized to and has shown to buffer against a variety of psychopathologies and promote well-being (Pleeging et al., 2021). Hope's relationship with resilience and mental health during the COVID-19 pandemic has been further highlighted by a surge of research interest (Senger, 2023).

In the present study, we follow the HERO model, treating PsyCap as a higher-order construct consisting of four distinct but interrelated components (Luthans et al., 2015). A recent systematic literature review confirmed that PsyCap and emotional competencies are positively correlated and each contributes to adaptive functioning in organizational contexts (Tjimuku et al., 2025). The authors highlight the research lacuna and the pressing need to integrate these two streams of research. They further suggest conducting sector-specific studies to elucidate effective organizational interventions to build a work environment that nurtures the development and enhancement of EM and PsyCap as personal resources. We thus rooted our study in the *primary educational context* in an Asian society (Taiwan) during the pandemic and hypothesized:

H2. *Psychological capital interacts with emotional management to reduce perceived work stress among elementary school teachers during the COVID-19 pandemic.*

H2a. *Psychological capital-self-efficacy interacts with emotional management to reduce perceived work stress among elementary school teachers during the COVID-19 pandemic.*

H2b. *Psychological capital-hope interacts with emotional management to reduce perceived work stress among elementary school teachers during the COVID-19 pandemic.*

H2c. *Psychological capital-resilience interacts with emotional management to reduce perceived work stress among elementary school teachers during the COVID-19 pandemic.*

H2d. *Psychological capital-optimism interacts with emotional management to reduce perceived work stress among elementary school teachers during the COVID-19 pandemic.*

2. Materials and Methods

2.1. Research Design and Participants

The present study was conducted during the first back-to-school semester (September 2022–January 2023) in the wake of the COVID-19 Pandemic in Taiwan. A retrospective study design was adopted to ask teachers to recall their experiences during the full-scale online teaching period (May 2021–September 2022). The study was approved by the Research Ethics Committee of the principal researcher's Institute, National Taiwan University (protocol code 202205HS023 and date of approval 28 July 2022). Participants were drawn from 88 public elementary school teachers in Hsinchu County, Taiwan. To ensure the representativeness of our sample and minimize bias, a stratified random sampling approach was adopted. Schools were first classified into three categories based on municipal government guidelines: small (1–12 classes), medium (13–48 classes), and large (49 or more

classes). The number of teachers sampled from each stratum was determined proportionally to school size. A total of 211 valid responses were obtained for analysis in this study (response rate = 70%). The study sample was predominantly female (n = 179, 84.8%). Participants' mean age was 46.24 years (SD = 7.67, range = 25–63). The average teaching experience was 18.71 years (SD = 8.61), indicating a relatively experienced teacher sample.

2.2. Measures

The survey includes structured questionnaires written in Chinese, and all the standard measures have been developed for and validated in Taiwanese samples. The instructions for the survey are: "Please recall your experiences during the nationwide full COVID-19 restriction period (May 2021–September 2022), and answer all the following questions as truthfully as you can. There are no right or wrong answers, and the data collected is strictly for research purposes; your details will not be disclosed in any way."

2.2.1. Emotional Management Scale

The Emotional Management Scale, developed by M. J. Chen and Tu (2015) for Taiwanese samples, consists of 17 items measuring emotional awareness, emotional expression, and emotional regulation. Sample items are "I could clearly perceive changes in my own emotions" and "I help others stabilize their emotions during stressful situations." Responses were measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating better emotional management. The original scale demonstrated good reliability (Cronbach's $\alpha = 0.91$). In the present study, the Cronbach's α value was 0.91, indicating high internal consistency.

2.2.2. Teacher Work Stress Scale

We used the Teacher Work Stress Scale (Chang et al., 2017) to assess teachers' perceived work stress during the pandemic. The scale includes 18 items measuring workload, professional knowledge, student behavior, and administrative work. Sample items are: "My teaching was frequently disrupted by students' inappropriate behaviors" and "I experienced stress due to insufficient competence in integrating information technology into teaching." Items were rated on a five-point Likert scale, with higher scores indicating higher perceived work stress. The original scale reported high reliability (Cronbach's $\alpha = 0.95$). In this study, the Cronbach's α value was 0.90, indicating acceptable reliability.

2.2.3. Psychological Capital Scale

The Psychological Capital Scale, developed for teachers (Shen, 2020), comprises 20 items measuring four components: self-efficacy, hope, optimism, and resilience. Sample items are: "I was confident in my ability to appropriately handle student-related problems" and "When encountering setbacks, I was able to recover and regain momentum after a period of adjustment." Responses were rated on a five-point Likert scale, with higher scores indicating higher levels of PsyCap. The original scale demonstrated excellent reliability (Cronbach's $\alpha = 0.96$). In the present study, the overall Cronbach's α value was 0.91, and those for the four components were 0.87, 0.89, 0.87, and 0.94, respectively, indicating high internal consistency.

2.2.4. Control Variables

In addition to scales measuring the main research variables, demographic and work information (i.e., gender, age, school size, and years of teaching experience) was collected and included in the analyses as control variables. The rationale for controlling these background variables was based on findings from previous research. For example, gender, school size,

and teaching experience were associated with teachers' work stress and psychological functioning (Johnson et al., 2005; Kyriacou & Chien, 2004).

2.3. Strategy of Analysis

We used SPSS Statistics 26 for statistical analyses. Because our study is based exclusively on self-reports, results may have been subject to common-method variance problems (Podsakoff et al., 2003). However, researchers have noted that CMV might enhance main effects, but interaction effects were hardly attributable to such method bias (Cohen et al., 2003). Due to our focus on teachers' psychological competence and state, namely, EM, PsyCap, and perception of stress, external ratings (i.e., students, colleagues, parents) of these would also be deficient, as psychological states and experiences of stress are not always observable by others (Gabriel et al., 2019). Nonetheless, we checked for the CMV bias following Podsakoff et al. (2003) and conducted a Harman's one-factor test, before testing hypotheses.

3. Results

3.1. Descriptive Analysis and CMV Check

Before the hypothesis testing, bivariate correlations were computed, and the results are shown in Table 1. EM negatively correlated with perceived work stress. The overall PsyCap and its four components all negatively correlated with perceived work stress. None of the demographic characteristics (gender, age, year of teaching experience) correlated with perceived work stress. Gender negatively correlated with EM, overall PsyCap, and all but one (resilience) of the components. That is, male teachers reported higher levels of EM, PsyCap, self-efficacy, hope, and optimism. Age was positively correlated with EM, overall PsyCap, and the four components. Years of teaching experience were positively correlated with EM and hope. School size was significantly positively correlated with gender and negatively correlated with perceived work stress, indicating that more female teachers worked in smaller schools and those who worked in smaller schools reported higher levels of perceived work stress.

Table 1. Descriptive statistics and correlations among research variables.

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Gender	/	/	1										
2. Age	46.24	7.67	−0.01	1									
3. Years of teaching experience	18.71	8.61	0.02	0.74 ***	1								
4. School size	2.28	0.81	0.15 *	0.02	0.04	1							
5. Emotional management	3.82	0.49	−0.16 *	0.32 ***	0.18 **	−0.00	1						
6. Perceived work stress	3.06	0.59	0.08	0.00	−0.09	−0.19 **	−0.18 **	1					
7. PsyCap	3.66	0.57	−0.18 **	0.29 ***	0.10	−0.00	0.65 ***	−0.30 ***	1				
8. Self-efficacy	3.55	0.61	−0.21 **	0.25 ***	0.06	−0.01	0.49 ***	−0.33 ***	0.85 ***	1			
9. Hope	3.60	0.66	−0.41 *	0.26 ***	0.14 *	−0.04	0.58 ***	−0.25 ***	0.91 ***	0.74 ***	1		
10. Optimism	3.65	0.62	−0.18 *	0.26 ***	0.10	−0.00	0.62 ***	−0.23 **	0.92 ***	0.66 ***	0.76 ***	1	
11. Resilience	3.83	0.63	−0.11	0.26 ***	0.08	0.04	0.62 ***	−0.26 ***	0.90 ***	0.64 ***	0.72 ***	0.87 ***	1

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Gender: 1 = male, 2 = female; School size: 1 = small, 2 = medium, 3 = large.

We followed Podsakoff et al. (2003) and conducted Harman's one-factor test to assess the threat that all items converge on a single latent construct due to CMV. When all items were subjected to an exploratory factor analysis using Maximum Likelihood to extract factors, 10 factors emerged, and the first one accounted for only 29.77% of the total variance. This shows that common method bias may not be a serious bias in this study. Nonetheless, future studies will benefit from collecting objective data on work stress.

3.2. Hypothesis Testing

Moderated regression analyses were employed to test the hypotheses (Cohen et al., 2003). Following procedures suggested by Cohen et al., predictors were standardized,

and interaction terms were created from these standardized predictors. We conducted five series of hierarchical regression analyses to test H1, H2, and the sub-hypotheses of H2a to H2d. Perceived work stress is the dependent variable for all analyses. We first entered the control variables (gender, age, year of teaching experience, and school size) in the regression model (Model 1). At the second step, we entered EM as the independent variable to test the direct effect (Model 2 for H1). At the third step, we entered EM and PsyCap as the moderator (Model 3). At the final step, the respective two-way interaction term (EM × PsyCap, EM × self-efficacy, EM × hope, EM × optimism, EM × resilience) was entered (Model 4 for H2, Model 4a for H2a, Model 4b for H2b, Model 4c for H2c, Model 4d for H2d). The results are reported in Table 2.

Table 2. Hierarchical regression testing the interactive effects of EM, PsyCap, and the four components (HERO) on perceived work stress.

	Model 1	Model 2	Model 3	Model 4 (for PsyCap)	Model 4a (for E)	Model 4b (for H)	Model 4c (for O)	Model 4d (for R)	R^2	F
	β	β	β	β	β	β	β	β		
Gender	0.11	0.08	0.05	0.04						
Age	0.13	0.21 *	0.28 **	0.17						
YoTE	−0.16	−0.20 *	−0.25 *	−0.12					0.06	3.42 ***
School size	−0.21 **	−0.20 **	−0.20 **	−0.20 **						
EM		−0.18 *	0.03	0.00	−0.13	−0.22 *	−0.25 **	−0.16	0.09	3.97 ***
PsyCap			−0.36 ***	−0.39 ***					0.16	6.50 ***
E					−0.33 ***					
H						−0.22 **				
O							−0.18 **			
R								−0.24 **		
EM × PsyCap				−0.24 **					0.21	7.44 ***
EM × E					−0.30 ***				0.26	17.02 ***
EM × H						−0.22 **			0.16	7.95 ***
EM × O							−0.19 **		0.14	5.94 ***
EM × R								−0.21 **	0.17	8.28 ***

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Gender: 1 = male, 2 = female; School size: 1 = small, 2 = medium, 3 = large. YoTE = Years of Teaching Experience; E = Self Efficacy; H = Hope; O = Optimism; R = Resilience.

The results in Model 2 of Table 2 show that, after controlling for demographics and school size, EM was significantly negatively associated with perceived work stress. The direct effect of EM explained a net 3% of the variance in perceived work stress. Thus, H1 was supported.

The results in Model 4 of Table 2 reveal a significant interaction effect between EM and PsyCap. The moderating effect explained 5% of the variance in perceived work stress. Thus, H2 was supported. Models 4a to 4d reveal a similar pattern across the four components of PsyCap: interactions between EM and self-efficacy, EM and hope, EM and optimism, and EM and resilience were all statistically significant. Thus, H2a through H2d were all supported.

To better understand the nature and magnitude of the amplifying effect of PsyCap on EM in reducing teachers' perceived work stress, interaction plots were generated using Dawson's (2014) procedure for PsyCap and the four components (Figures 1–5). As shown in Figures 1–5, the form of moderation was consistent across PsyCap and the four components. For those with higher levels of PsyCap, self-efficacy, hope, optimism, and resilience, the relationship between EM and perceived work stress was negative. Teachers with higher levels of both EM and PsyCap perceived the lowest level of work stress. We then conducted the simple slope test to complement the visualization of moderation effects. This series of analyses revealed that the slopes of the two regression lines were significantly different for PsyCap ($t = -3.34$, $p < 0.01$), self-efficacy ($t = -2.12$, $p < 0.05$), optimism ($t = -2.02$, $p < 0.05$), and resilience ($t = -2.89$, $p < 0.01$), but not for hope ($t = -1.23$, *ns*). Although the slope test was not significant for hope, the overall pattern on PsyCap (4 out of 5 tests)

corroborated our hypothesis: teachers with higher EM perceived lower work stress when they had higher overall PsyCap, self-efficacy, optimism, and resilience.

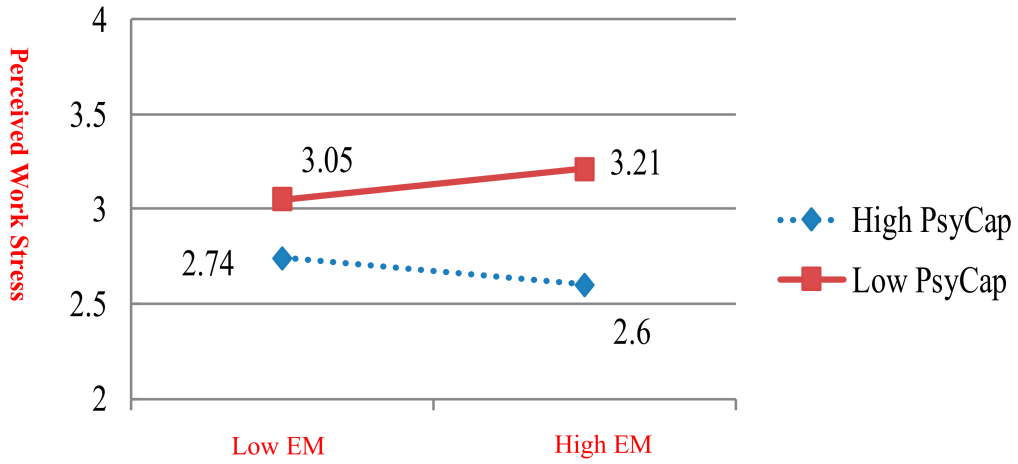


Figure 1. The interactive effect of EM and PsyCap on perceived work stress.

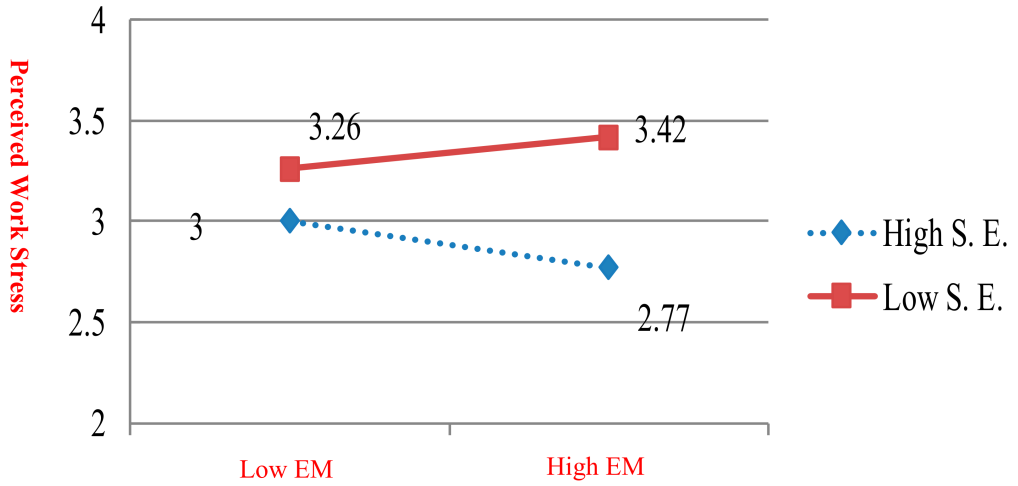


Figure 2. The interactive effect of EM and self-efficacy on perceived work stress.

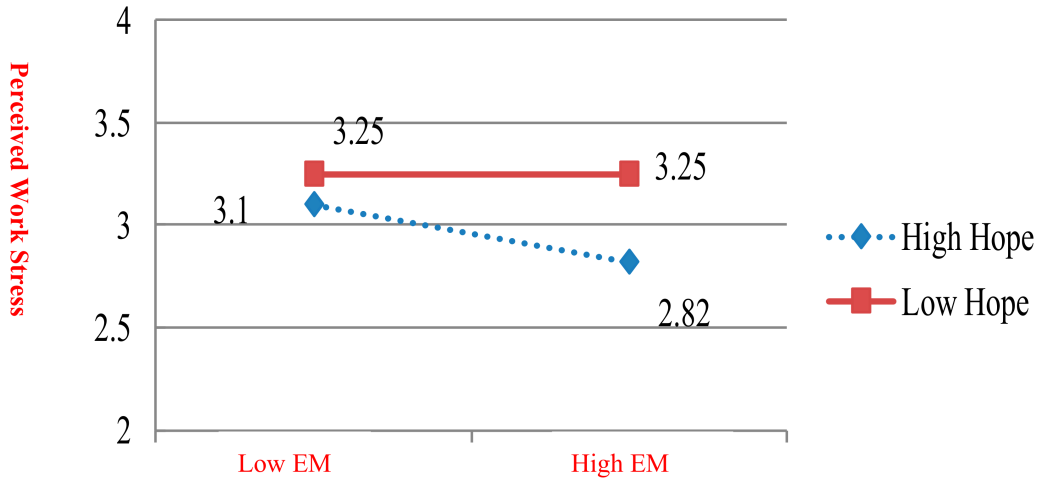


Figure 3. The interactive effect of EM and hope on perceived work stress.

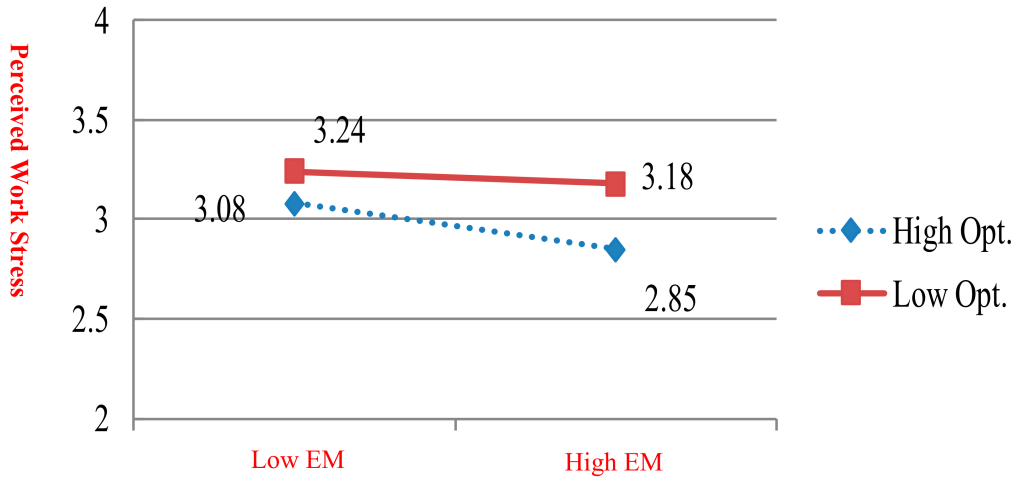


Figure 4. The interactive effect of EM and optimism on perceived work stress.

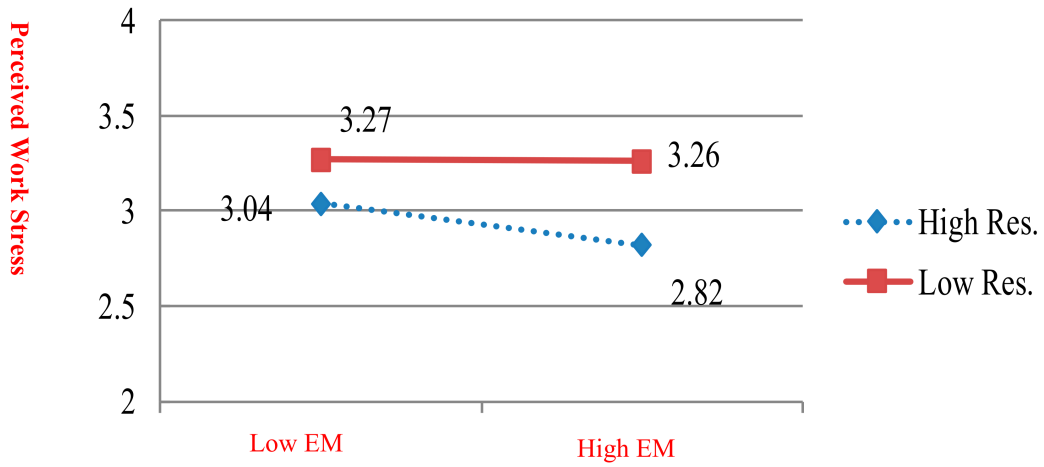


Figure 5. The interactive effect of EM and resilience on perceived work stress.

4. Discussion

4.1. Theoretical Contribution

The primary objective of this study is to test the interactive effect of two personal resources (EM and PsyCap) on reducing teaching stress in an extreme situation of the surge of work stress during the COVID-19 pandemic in the understudied Asian educational context. We found a significant amplifying effect of PsyCap on EM in reducing teachers' perceived work stress. Simple slope tests further confirmed that the interaction effect is quite robust across the overall PsyCap and three of the components, namely optimism, self-efficacy, and resilience (Figures 1, 2, 4 and 5). Therefore, we confirmed the rarely investigated *interactive* effect of resources in stress reduction as a "resource caravan" by disentangling the joint effects of different types of resources.

This study has thus made an important contribution to the flourishing emotional management and PsyCap literature. That is, we incorporate emotional management abilities and PsyCap under the broad auspices of the COR perspective to empirically test the joint benefit of mobilizing these personal resources in coping with the surge of work stress during the COVID-19 pandemic. As noted in a recent literature review (Tjimuku et al., 2025), although emotional competencies and PsyCap are highly associated constructs, they are usually studied separately following their different roots: EM stemming from the work of Goleman (1995) on emotional intelligence, while PsyCap evolves from the positive psychology perspective (Luthans et al., 2007, 2015). Integrating the two streams of research

under a unified, broad theoretical framework not only helps to ground the empirical studies on a firm conceptual basis but also opens new ways to elucidate the mechanisms of stress adaptation pivoting on these critical personal resources (Tjimuku et al., 2025). The present study has testified to the value of COR as an overriding theoretical model.

Furthermore, we extend the resource caravans proposition of the COR theory and confirm the joint effects of EM and PsyCap in reducing work stress in an Asian school context. This is in line with the COR proposition that resource gains are even more important when facing resource loss (Hobfoll, 2002, 2012), such as the extremely taxing situations during the height of the pandemic. Teachers with the abundant resources (*both* EM and PsyCap) consistently fared the best in the high-demand work situation. Our findings corroborate earlier findings that having more than one type of resource may be better than having only one (J. W. Chen et al., 2021). The value of resource caravan is more pronounced when the potential resources "fit" the situational demands, as termed ecological congruence (Hobfoll et al., 2018). On the one hand, teaching is a highly demanding work with intense emotional labor involved in interactions with students, parents, and colleagues (Pressley, 2021; Qiu et al., 2025). For teachers working through the uncertain and demanding times of teaching during the pandemic, emotional labor intensified, and the ability to perceive, express, and regulate emotions became critical in coping with stress and maintaining professional functioning (Kim & Asbury, 2020). Thus, emotional management competency as a personal resource fits the emotional demands of the teaching role (Hobfoll et al., 2018).

On the other hand, during the pandemic, teachers were confronted not only with routine work demands but also with uncertainty, health-related concerns, and rapid instructional changes. Psychological capital serves as a second resource that promotes positive appraisals, maintains a positive outlook, and adapts effective coping behaviors (Basinska & Rozkwitalska, 2022; Jing et al., 2022). Specifically, self-efficacy reflects individuals' confidence in their ability to accomplish challenging tasks (Luthans et al., 2015). Teachers with stronger self-efficacy adjusted better to pandemic-related stress (Pressley, 2021). Hope represents goal-directed determination and the perceived ability to identify pathways to achieve goals (Luthans et al., 2015). Teachers with higher levels of hope were more motivated to solve problems (Sucan, 2019). Optimism refers to a generalized expectation that positive outcomes will occur (Luthans et al., 2015), which is associated with favorable stress outcomes (Carver & Scheier, 2017). Resilience refers to the ability to recover, adapt, and grow in response to adversity (Luthans et al., 2015), and ample research has shown that resilience contributes to favorable work outcomes and employee well-being (Good et al., 2025). Thus, psychological capital meets the cognitive and behavioral demands of the teaching role, complementing the affect-oriented and social-focused emotional competency. We have thus empirically tested one of the core ideas of COR: the effectiveness of resources is situation dependent and contingent upon "fit" between the resource and the situation (Hobfoll et al., 2018). Furthermore, when acting as a resource caravan, the abundance of resources may compensate for one another (J. W. Chen et al., 2021) or amplify the effect of the other (the present study).

4.2. Practical Implications

The practical implications of this study are significant for school leaders, teachers, and managers in various industries. First, our findings offer insights into strategies for enhancing employee well-being by leveraging EM. Schools can implement effective training programs to develop teachers' emotional competencies to improve adaptive coping with teaching stress. The EM training programs should focus on enhancing the four branches of EM components, namely skills of perception, understanding, regulation, and utilization of emotions.

Second, by understanding how EM and PsyCap interact with each other, schools can tailor resources to nurture a positive psychological state in teachers to amplify and enhance the benefit of their social–emotional abilities. The PsyCap programs should focus on fostering hope, optimism, resilience, and self-efficacy (PsyCap components). Building up a reservoir of EM and PsyCap can address challenges of teaching stress, burnout, and career stagnation. Overall, the practical implications of this study provide actionable recommendations for schools to cultivate EM and PsyCap as critical drivers of teachers' stress adaptation and school success.

4.3. Limitations and Future Research Directions

Several limitations of this study should be acknowledged. First, our study sample was small and consisted solely of public elementary school teachers from one county in Taiwan. Although we employed a stratified random sampling method based on school size to ensure representativeness and enhance generalizability of the findings, factors such as urban–rural disparities and variations in school environments may influence teachers' work stress. Future research should recruit larger samples from other geographical regions and/or school characteristics to test the robustness of our findings in different educational contexts.

Second, this study focused primarily on EM and PsyCap as personal resources for coping with work stress in the height of full-scale remote teaching during the COVID-19 pandemic. While EM and PsyCap are theoretically meaningful variables, future research should explore other potential resources, especially social resources such as organizational support, colleague support, and family support, to broaden the repertoire of resources that mitigate strain. The concept of resource caravans posits that individuals would use multiple resources simultaneously, depending on the demands and context (Hobfoll et al., 2018). Future research could also investigate the interaction effects of a wide range of individual or organizational resources in the context of workplace stress.

Third, this study used solely self-report data, which may increase the possibility of contamination of the reported relationships through common method bias. According to previous research, interaction effects were hardly attributable to CMV (Cohen et al., 2003). It is thus unlikely that our findings of quite a robust moderation effect of PsyCap are solely due to common method bias. Nonetheless, we conducted the post hoc CMV test (Podsakoff et al., 2003) to mitigate the concern of common method bias. Future studies will benefit from collecting objective data, such as biomarkers of stress. Furthermore, as our data were cross-sectional, causal relationships between emotional management, PsyCap, and work stress perception could not be ascertained. Researchers in the future should adopt a longitudinal study design to establish causality.

Finally, as the present study is conducted in Taiwan, the findings should be interpreted within the local educational context. Due to declining birth rates, parents invest greater expectations and protective attention in their children's learning and well-being. Consequently, teachers experience increasing pressure from parent–teacher communication, classroom management, and concerns regarding student performance and well-being, fueling work stress, burnout, and career fatigue (Chang et al., 2017). Hsinchu County, where we conducted our study, is next to the most prominent semiconductor science park and is characterized by a high proportion of young families with high socioeconomic status. The heightened parental expectation of educational attainment may amplify teaching stress and limit the generalizability of our findings. Future research can develop in two directions. One is to explore the cultural context deeper, for example, including cultural values on education in the study, or to collect data from both teachers and parents. Another direction is to conduct cross-cultural studies to understand the impact of societal-level factors, such

as values, educational institutions, and teachers' working conditions, on teaching stress and adaptation.

5. Conclusions

The present study expands on existing research on EM and PsyCap by integrating the two streams of different origins under a unified theoretical framework of conservation of resources, specifically, the "resource caravan" of COR. We found that, under the extremely demanding work conditions of the COVID-19 pandemic, mobilizing personal resources, namely EM and PsyCap, could mitigate work stress. Teachers with an abundance of resources fared the best (*the more the better*); furthermore, resources that fit situational demands had greater value for adaptation (*the right one counts*). The joint protective effect of these two different types of personal resources offers valuable empirical evidence supporting the idea of the "resource caravan" within COR theory. In coping with high work demands, nurturing, deploying, and utilizing resources can hold the key to teachers' thriving.

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Data Availability Statement: The dataset that supports the findings of this study is original and has not been used before. The data that support the findings of this study are available from the corresponding author upon reasonable request.

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