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Psychological Capital and Teacher Well-being: The Mediation Role of Coping with Stress

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Abstract: This study aimed to investigate the mediation role of coping with stress between psychological capital and teacher well-being based on positive psychology, conservation resource, and broaden-and-build theories. Participants in this study were 836 teachers from three clustered, ethnically diverse public universities. Our findings showed that, in line with previous studies, the psychological capital (PsyCap), coping with stress (CWS), and teacher well-being (TWB) dimensions showed the best fit in our data. PsyCap was related positively to TWB (total and dimensions), CWS, coping through withdrawal, and negative coping with acceptance and change. The indirect effect of PsyCap on TWB through coping with stress was fully mediated. PsyCap also positively and directly affected TWB and CWS. Coping through acceptance and change were fully mediated by PsyCap and TWB dimensions, while coping through withdrawal was not. PsyCap directly and positively affected coping with stress (acceptance and change) and negatively affected coping through withdrawal. Future theoretical and practical implications are discussed.

Keywords: Coping with stress, mediation analysis, psychological capital, teacher well-being, university teachers.

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Introduction

Teachers and teacher well-being are a central issue in the twenty-first century, impacted by countless negative and positive factors (McCallum et al., 2017). In a meta-analysis study on well-being, an International Education Research Council Project Study (AIS-NSW) found several potential factors such as stress, self-efficacy, motivation, emotional competence, resilience, relationships with others, organisational support, burnout, fatigue, exhaustion, positive school ecology and leadership (McCallum et al., 2017). Studies also found that teachers did not have healthy well-being (Collie et al., 2015; Pillay et al., 2005). Furthermore, the Organisation for Economic Co-operation and Development (OECD, 2011) reported that housing, income and wealth, jobs and earnings, social connections, subjective well-being, environmental quality, health status, education and skills, work and life, and personal security are the well-being indicators.

Other factors include the following: schools' well-being policy practice (Powell & Graham, 2017); the role of contextual factors on well-being (Kibret & Tareke, 2017); the relationship between coping strategies and psychological well-being (Gustems-Carnicer & Calderón, 2013); the association between psychological capital and well-being (Youssef & Luthans, 2015); the role of well-being on psychological contract (Kosker, 2018) and strategies for coping with stress (Rabenu & Yaniv, 2017).

Scholars previously argued that teacher well-being was primarily examined by focusing on its pathological aspect (Spilt et al., 2011). In recent years, though, the scientific study of positive psychology and well-being has undergone dramatic expansion (Cooke et al., 2016). Its main goal has been to change from adversity to building a flourishing and optimal life (Seligman & Csikszentmihalyi, 2000). Thus, positive psychology plays a crucial role in employees' well-being and fosters a healthy working environment. Understanding well-being among teachers is essential not only for the teachers but also for students, schools, and the nation (Duckworth et al., 2009). For instance, the newly emerging concept in various fields of psychology is positive psychological capital or PsyCap. Researchers and experts increasingly recognise the role and function of PsyCap and believe in its potential to attain optimal flourishing (Luthans et al., 2006). Indeed, the practical effectiveness of the model in the workplace continues to grow (Görgens-Ekermans & Herbert, 2013).

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Ethiopia is a country in sub-Saharan Africa with a population of 110 million and a recent history of universities. Ethiopia's nonspiritual higher education began in the 1950s with two universities (World Bank, 2003); currently, the country has 50 universities with limited human resources and poor infrastructure. Moreover, university teachers in developing countries have different challenges. For instance, Abebe and Woldehanna (2013) noted that lack of opportunities for professional development, low salaries, low professional status, lack of financial benefits, poor condition of school facilities, poor school management and administration, poor teacher motivation, and low value of teaching experience are the biggest challenges for Ethiopian higher education teachers.

The World Bank (2017) also reported that Ethiopian university teachers have higher work stress, are overburdened by meetings, suffer a lack of academic freedom and institutional interference, have poor motivation, lower job satisfaction, low salaries, and lower well-being. More experienced teachers have high well-being levels, whereas inexperienced teachers have higher stress levels, poor motivation, and lower overall well-being (World Bank, 2017).

Some studies in Ethiopia have addressed the main challenges of higher institutions, including the causes and possible solutions for academic staff flight from Ethiopian public universities (Alemayehu & Woldemariam, 2020), higher education development for Ethiopia (World Bank, 2003), gender equality in public higher education institutions in Ethiopia (Egne, 2015), the challenges and implications for professional learning of teachers in Ethiopia (Gemedo & Tynjälä, 2015), and teacher training and development in Ethiopia (Abebe & Woldehanna, 2013).

However, even though studies are found on higher institutions in Ethiopia, this study is novel in terms of testing the relevance of the integrated framework of (Luthans et al., 2006) positive PsyCap, Collie et al.'s (2015) teacher well-being model, and Rabenu et al.'s (2016) coping strategies model to today's higher education.

PsyCap and Teacher Wellbeing

Luthans et al. (2006) positive PsyCap derived from the positive psychology framework, demonstrating the positive relationship between PsyCap (hope, self-efficacy, resilience, and optimism) and well-being (Selvaraj, 2015), overall well-being (Luthans et al., 2013) and vocational well-being (Zhao & You, 2019). The evidence confirmed a significant positive relationship between the PsyCap and well-being constructs in all studies. Rabenu et al. (2016) and Rabenu and Yaniv (2017) also found that PsyCap resources lead to positive emotions and are the most vital ingredient of well-being: PsyCap enhances positive affect, emotional labour and vocational well-being (Zhao & You, 2019) and encourages a desirable attitude (Avey et al., 2011).

Furthermore, PsyCap was positively related to well-being and coping through change, and acceptance mediated PsyCap and well-being (Rabenu et al., 2016). However, Luthans et al. (2006) found that PsyCap was related to positive outcomes and negatively associated with negative outcomes, and positively impacted overall well-being (Luthans et al., 2010).

Rabenu et al. (2016) evidenced that all psychological resources (self-efficacy, hope, resilience, and optimism) were more strongly (positively) correlated with coping by change than with coping by acceptance. Studies have found that self-efficacy, hope, resilience, and optimism significantly and positively predict well-being and are related to desirable outcomes in the workplace (Luthans & Youssef-Morgan, 2017; Luthans et al., 2006).

PsyCap to Cope with Stress

An array of empirical findings support the link between PsyCap and coping with stress. For example, several correlational studies suggest a significant positive relationship between PsyCap (hope, efficacy, resilience, and optimism) and well-being. Rabenu et al. (2016) argued that the more PsyCap (hope self-efficacy, resilience, and optimism) an individual has, the more he or she will use coping through acceptance or change and less through withdrawal.

Specifically, Rabenu and Yaniv (2017) found the highest correlation between self-efficacy and coping through change. Luthans et al. (2006) also noted that individuals with high self-efficacy are highly self-motivated, set clear goals for their future life, are self-solution-centred in challenging situations, thrive and welcome challenges, and invest the desired effort to succeed at their goals.

Masten (2001) found that resilience plays a significant, decisive role in individuals' recovery from adversity, looking optimistically at difficulty, and developing the capacity to respond to pressure effectively. Furthermore, optimism was positively correlated with positive reappraisal and acceptance and inversely associated with withdrawal and avoidance coping (Efklides & Moraitou, 2013). Thus, optimists expect positives from life and are confident about their future; they feel happy and satisfied with their experience and tolerate the most challenging life events (Luthans et al., 2006). These results indicate that PsyCap's core constructs play a crucial role in coping with stress in teachers' work life.

Besides, Rabenu and Yaniv (2017) found that hope has a significant negative relationship with coping through withdrawal. In contrast, optimism was found to have close to no relationship with withdrawal and was mainly related to acceptance. In sum, PsyCap is a potential predictor of coping with stress.

Coping with Stress and Teacher Well-being

PsyCap contains a set of positive personal resources that could play a protective role in teacher well-being. It helps the teachers be better in behavioural, attitudinal and performance outcomes (Avey, Luthans & Youssef, 2010) and enhancing stressful work-life (Rabenu et al., 2016).

Furthermore, basic coping strategies are used to categorise how people react to or handle stress (Rabenu et al., 2016). Recently, Rabenu et al. (2015) and Rabenu et al. (2016) developed three strategies for coping with stress. Change corresponds to Lazarus and Folkman's (1984) problem-focused coping, which refers to managing the problem itself. Acceptance (an emotion-focused component) involves the individual deciding to adapt and adjust their perceptions, thoughts, and feelings to the stressful situation, where the stressors cannot be changed. Withdrawal, also part of Lazarus and Folkman's emotion-focused coping, involves controlling the emotions generated through the appraisal process (Folkman, 2012), wherein individuals withdraw psychologically by distancing themselves mentally from the stressful working environment (Rabenu et al., 2015, 2016).

Many scholars have investigated the relationship between coping with stress and well-being. For example, Folkman (2012, 2013), Park and Adler (2003), and Rabenu et al. (2016) all found a positive relationship between coping with stress and well-being. A significant positive relationship was also found between coping through change and well-being; however, no significant correlation was found between well-being and coping through acceptance and withdrawal (Rabenu et al., 2016). Researchers have evidence that coping style can improve physical and psychological health (Park & Adler, 2003).

Theoretical Background and Research Hypotheses

This study's main aim is to ascertain whether positive psychology, specifically PsyCap resources and coping strategies, is essential for university teachers' well-being and for them to flourish and optimise their achievement. The argument derives first from the broaden-and-build theory of positive emotions (BBPE; Fredrickson, 2004) and the conservation of resources (COR) theory (Hobfoll, 1989, 2002). We postulate those positive psychological resources, optimisation, and coping strategies are among the best enhancement mechanisms for teachers' well-being. The models also seek to explain that teachers can use positive resources and have positive emotions and coping mechanisms to achieve success in the workplace.

The COR theory is one of the best resource-oriented approaches, emphasising the importance of people's motivation to retain, defend, and accumulate resources when threatened with the actual loss of valued resources (Hobfoll, 1989). It predicts that the accumulation of resources results in positive individual outcomes like commitment (Hobfoll, 1989) and the maintenance of well-being and useful, balanced resources (Zhao & You, 2019).

The BBPE theory emphasises that the most vital resources that boost well-being and build positive effects are personal and social capital (Fredrickson, 2004). The BBPE approach is essential for teachers to use personal, positive, and social capital to cope successfully with problems, adapt to difficulties, enjoy a flourishing life, optimal functioning and a higher level of teaching satisfaction, and minimise stress (Fredrickson, 2004). Therefore, the conservation of resources and the broaden-and-build theory were considered appropriate and alternative explanations of PsyCap's functions and outcomes (Avey, Luthans, & Youssef, 2010).

Moreover, the COR theory has been linked to coping with stress and PsyCap. Thus, stress and coping theory provide a practical framework and testing hypotheses about stress coping strategies and their relationship with mental well-being (Folkman, 2013) and PsyCap (Rabenu et al., 2016). For instance, the COR theory can be viewed as an essential personal resource that helps attain goals because individuals with many potential resources can cope better with the difficulty they face in the workplace and move towards nurturing and optimising their resources.

Thus, PsyCap and coping strategies will help university teachers to understand and design solutions to the challenges of their work and boost their well-being. Therefore, PsyCap represents the positive agentic resources individuals possess, enabling them to flourish, optimise, and boost their day-to-day activities (Luthans & Youssef-Morgan, 2017). The COR and BBPE models emphasise affective, cognitive and social variables, including self-efficacy, goals, achievement, social resource and resilience. Luthans et al. (2006) depicting the role of PsyCap in teachers' well-being in the workplace.

Secondly, this study's argument derives from the positive psychology theory (Seligman, 2011). For a century, scholars have greatly contributed to the broad recognition of well-being in a wide range of areas, including education, work, relationships, the military, sports, health and life, and have given much prominence to mental disorders in general (Youssef & Luthans, 2015). However, earlier studies overlooked two crucial goals for the flourishing of humans in the field of psychology: (a) helping healthy people to be happier and more fruitful; and (b) realising human potential (Seligman & Csikszentmihalyi, 2000). Also, psychologists are currently trying to shift from a narrative of human weakness to a positive vision of a robust human side and immeasurable potential (Becker & Marecek, 2008). Thus, focused on the practical importance of positive psychology, an emerging teacher well-being model was developed by Collie et al. (2015) derived from three commonly investigated factors: workload stress, student relations, and organisational level stress.

Positive psychology is vital for teachers to cope with negative life events, build a flourishing life, and optimise their tasks. University teachers in developing countries like Ethiopia are characterised by low motivation, lack of professional development, and insufficient resources and facilities. Positive psychology has many potential benefits for individuals, groups and institutions (Gable & Haidt, 2005). The following definition credibly illustrates the positive psychological sources.

Positive psychology at the individual level [is] focused on positive personal traits: the capacity for love and wisdom, humanity, courage, aesthetic, forgiveness, interpersonal skills, sensibility, perseverance, originality, and vocation, spirituality, high ability, future mindedness. At the *subjective level* [it] is about valued personal experiences: in the past (contentment, satisfaction, and well-being), in the present (flow and happiness), and for the future (optimism and hope). At the *group level*, [it is] focused on the institutions and the civic virtues that move individuals towards better citizenship: nurturance, work ethics, civility, responsibility, altruism, moderation, and tolerance (Linley et al., 2006; Seligman & Csikszentmihalyi, 2000).

Inspired by Martin Seligman, the positive psychology movement has initiated PsyCap as a resource. Luthans et al. (2006) defined PsyCap as an individual's positive condition of development, characterised as (1) having the confidence needed to put in the necessary effort to succeed at challenging tasks (self-efficacy); (2) creating a positive stance regarding achievement now and in the future and thriving now and in the future (optimism); (3) diligence towards goals and, when necessary, finding new ways to succeed (hope); and (4) when beset by issues and adversity, carrying on and bouncing back (resilience).

PsyCap has many advantages in the work environment. For example, it encourages a positive attitude towards work (Avey et al., 2011), improves employees' performance, and is positively associated with positive outcomes and negatively associated with pathology (Peterson et al., 2011).

This research aims to explore the mediator role of coping with stress between PsyCap and teachers' well-being. It also examines the direct effect of stress and coping with stress on teachers' well-being. Furthermore, the study aims to test the psychometric properties of each scale used in the study using confirmatory factor analysis (CFA). The theoretical and conceptual models used in this study explicitly reflect the reality of the nature of teachers' work and the teaching profession; Collie et al.'s (2015) emerging theory briefly addresses teacher well-being. Therefore, it is possible that coping strategies (Rabenu & Yaniv, 2017) fuel teachers' useful positive psychological PsyCap resources of hope, self-efficacy, resilience, and optimism Luthans et al. (2006) to deal with stress and create a flourishing and optimal work-life balance (Seligman, 2011). Consequently, based on the latest scientific literature and the theoretical framework constructed in Figures 1 and 2, this study proposes the following testable hypotheses.

Hypothesis 1. There is a positive relationship between PsyCap and coping with stress (CWS) (H1a) and teachers' well-being (H1b).

Hypothesis 2: PsyCap directly affects CWS (H2a) and teachers' well-being (H2b).

Hypothesis 3: CWS has a direct effect on teachers' well-being.

Hypothesis 4: Coping with stress mediates the relationship between PsyCap and teachers' well-being (see Figure 1).

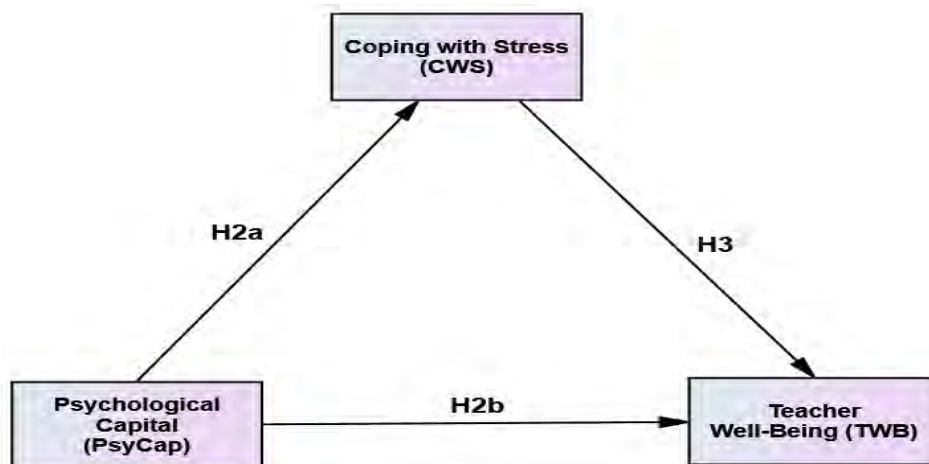


Figure 1. A theoretical model of the relations between PsyCap, coping with stress, and teachers' well-being

Hypothesis 5: PsyCap has a direct effect on coping through acceptance (H5a), coping through change (H5b), and withdrawal (H5c).

Hypothesis 6: PsyCap has a direct effect on workload well-being (H6a), organisational well-being (H6b), and student interaction well-being (H6c).

Hypothesis 7: Coping through acceptance (H7a–c), coping through change (H7d–f), and coping through withdrawal (H7g–i) directly affect workload well-being, organisational well-being, and student interaction well-being.

Hypothesis 8: Coping through acceptance, coping through change, and coping through withdrawal mediate the relationship between PsyCap and workload well-being (H8a), organisational well-being (H8b), and student interaction well-being (H8c) (see Figure 2).

Hypothesis 9: Coping through acceptance mediates the relationship between PsyCap and workload well-being (H9a), organisational well-being (H9b), and student interaction well-being (H9c).

Hypothesis 10: Coping through change mediates the relationship between PsyCap and workload well-being (H10a), organisational well-being (H10b), and student interaction well-being (H10c).

Hypothesis 11: Coping through withdrawal mediates the relationship between PsyCap and workload well-being (H11a), organisational well-being (H11b), and student interaction well-being (H11c).

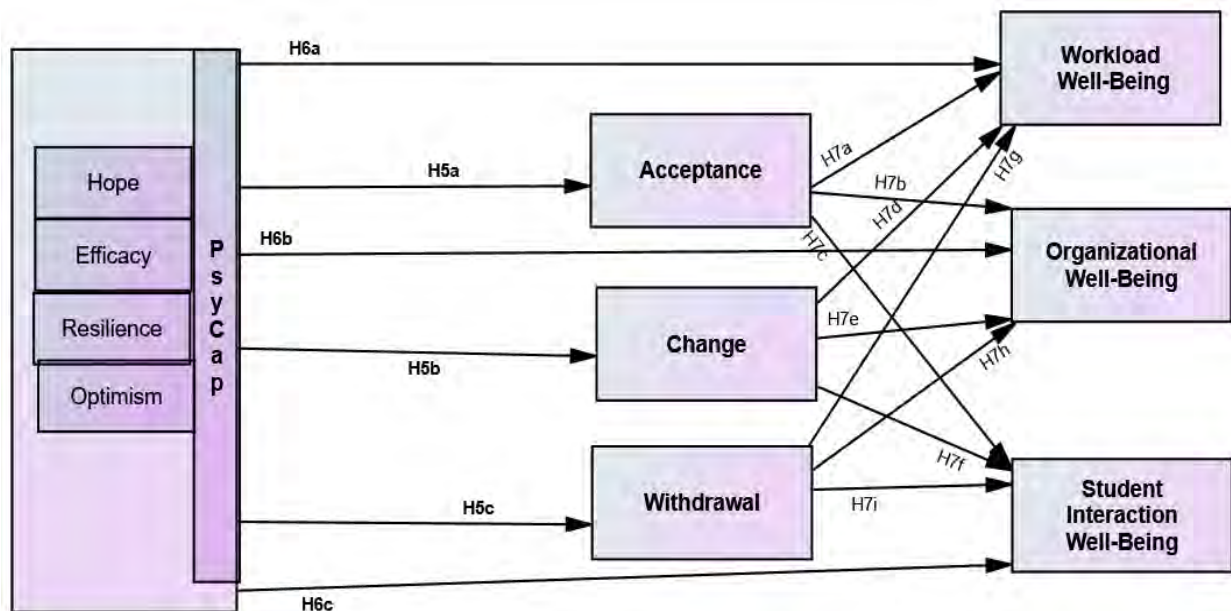


Figure 2. Theoretical model of the PsyCap construct on teachers' well-being dimensions mediated by coping through acceptance, change, and withdrawal.

Methods

Samples and Procedures of the Study

Table 1. General demographic characteristics of the respondents (N=836)

	Variables	Gender			
		Female		Male	
		Freq.	%	Freq.	%
Age	25-35	131	15.7	379	45.3
	36-45	59	7.1	218	26.1
	46 and above	16	1.9	33	3.9
	Total	206	24.6	630	75.4
University	Research university	95	11.4	214	25.6
	Applied university	40	4.8	210	25.1
	General university	71	8.5	206	24.6
	Total	206	24.6	630	75.4
Educational qualifications	Bachelor	93	11.1	178	21.3
	Master	86	10.3	380	45.5
	PhD and above	27	3.2	72	8.6
	Total	206	24.6	630	75.4
Teaching experience	Less than five years	89	10.6	173	20.7
	6-10 years	45	5.4	189	22.6
	11 years and above	72	8.6	268	32.1
	Total	206	24.6	630	75.4
Monthly income	4520 ETB (119 \$)	93	11.1	178	21.3
	11000 ETB (290 \$)	84	10	372	44.5
	17,200 ETB (453 \$)	29	3.5	80	9.6
	Total	206	24.6	630	75.4

Note: ETB= Ethiopian Birr or Currency

Measures

This study used standard, psychometrically sound and well-established scales in psychological and educational research areas across various cultural contexts.

The Teacher Wellbeing Scale (TWBS) is a seven-point Likert scale, assessed with a 16-item adapted scale that comprises workload well-being (WLW), organisational well-being (OWB), and student interaction well-being (SIWB; Collie et al., 2015). We rated each item from 1 (negatively) to 7 (positive). Collie et al. (2015) found that the psychometric properties of the TWBS have excellent construct, internal and external validity. This study also confirmed the CFA of the TWBS scale measurement model has a good fit: $\chi^2(101) = 296.7$, $p < 0.001$, $\chi^2/df = 2.9$, $GFI = 0.958$, $AGFI = 0.943$, $RFI = 0.945$, $TLI = 0.963$, $CFI = 0.969$, $SRMR = 0.039$, $RMSEA = 0.048$ (0.042, 0.082) (see Table 2). The Cronbach's alpha (α) and composite reliability (CR) for the dimensions of TWB in this study were: workload well-being ($\alpha = 0.87$; $CR = 0.79$); organisational well-being ($\alpha = 0.85$; $CR = 0.87$); and student interaction well-being ($\alpha = 0.88$; $CR = 0.88$). The total scale reliability was ($\alpha = 0.83$; $CR = 0.85$) (see Table 3).

The Psychological Capital Questionnaire (PCQ-12), a short version of the measurement scale designed by Luthans et al. (2006) was measured by twelve items with four sub-dimensions of hope, efficacy, resilience and optimism, shortened to HERO (Scheier & Carver, 1985; Wagnild & Young, 1993). Respondents ranked items on a six-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). Luthans et al. (2006) also found the scale to have high factorial and discriminant validity. The PCQ-12 is used here for this study has got a permission process through www.mindgarden.com Luthans et al. (2006), which has provided a permission letter to use the PsyCap instrument.

Using the maximum likelihood estimation method, the CFA results of this study confirmed the best model fit: $\chi^2(48) = 264.8$, $\chi^2/df = 4.91$, $GFI = 0.952$, $AGFI = 0.943$, $RFI = 0.929$, $TLI = 0.941$, $CFI = 0.957$, $SRMR = 0.047$, $RMSEA = 0.074$ (0.065, 0.082). The PsyCap construct had excellent Cronbach's alpha (α), and composite reliability (CR) for all constructs was ($\alpha = 0.87$; $CR = 0.84$), and for each of the HERO dimensions were as follows: hope ($\alpha = 0.88$; $CR = 0.88$); efficacy ($\alpha = 0.84$; $CR = 0.85$); resilience ($\alpha = 0.82$; $CR = 0.82$); and optimism ($\alpha = 0.79$; $CR = 0.79$), respectively (see table 3).

The Coping with Stress Questionnaire (CWS-Q) is a ten-item scale developed by coping (Rabenu et al., 2016) to assess teachers' coping strategies, with three sub-scales. The questionnaire is composed of three dimensions, including change (three items), acceptance (three items), and withdrawal (four items). We rated each item on a six-point Likert scale ranging from 1 (very infrequently) to 6 (very frequently), with acceptable reliability ($\alpha = 0.65$). Sample items are, for

change, "During stressful situations at work I work to reduce stress"; for accept, "During stressful situations at work I re-evaluate the situation as positive"; and for withdrawal, "During stressful situations at work I feel comfortable looking for another job". The construct was highly reliable and valid (Rabenu et al., 2016).

CFA examined the model of the CWS-Q scale with a robust maximum likelihood estimation method. The construct validity of the scale of this study confirmed the goodness of fit of the model: $\chi^2(24)=104.3$, $p < 0.001$, $\chi^2/df=4.34$, GFI=0.973, AGFI=0.950, RFI=0.976, TLI=0.981, CFI=0.988, SRMR=0.058, RMSEA=0.063 (0.051, 0.076) (see Table 2). Moreover, the Cronbach's alpha reliability (α) and composite reliability (CR) indicated that the three the CWS dimensions had excellent reliability: acceptance ($\alpha = 0.91$; CR = 0.91.); change ($\alpha = 0.88$; CR = 0.89); and withdrawal ($\alpha = 0.95$; CR = 0.95) and the total scale reliability was ($\alpha = 0.71$; CR = 0.92) (see table 3).

Data Analysis

Before starting the data collection process, we received the Institutional Review Board (IRB) approval letter. Participation in this study was voluntary. In the next analysis stage, we addressed multicollinearity by checking the correlation among the values of the construct, which should be greater than 0.90, and the normality of distributions was examined following Kline (2016) and Tabachnick and Fidell (2018) recommendation. After the necessary criteria were met, the data were analysed using IBM SPSS Statistics 23.0 and AMOS 23 version.

In the third step, we conducted the Pearson correlation to check whether PsyCap, CWS and TWB correlated with the hypothesised model's demographic factors considered as the control variable (Edwards, 2008). None of the six demographic variables has a relationship with the PsyCap, CWS, and TWB constructs (see Table 3). As a result, we have no control variable in our study.

The values of skewness and kurtosis lie between [-2] and [+2]; this is acceptable to prove the normal distribution of the data (Ryu, 2011). As a result, this study's skewness values lie between -0.110 and 1.46, and kurtosis scores ranged from -0.10 to 1.9. These values suggest that all constructs showed relatively normal distribution (see Table 3).

The cut-off values of acceptable fitness of indices of the structural equation modelling are χ^2 =insignificant, $\chi^2/df \leq 5$; AGFI ≥ 0.90 ; GFI, RFI, TLI and CFI ≥ 0.90 and SRMR and RMSEA ≤ 0.80 ; these were considered as criteria of this research (Kline, 2016; Tabachnick & Fidell, 2018). However, in the large data sample, the chi-square is very sensitive and will have the probability to be significant and do not affect the model fitness (Hair et al., 2019). Before conducting the structural equation modelling (SEM), we tested the scales' using the CFA analysis as recommended by Hair et al. (2019). After checking the CFA results, we examined the measurement and the structural model, or the proposed mediation model, using the bootstrapping method (see Table 2). The structural model draws upon theory, prior literature, and the research objectives to differentiate which predictor variables explain each criterion variable. In contrast, the measurement model measures all variables together to represent the theory (Hair et al., 2019).

Finally, the hypothesised model described in Figures 1 and 2 were examined using the maximum likelihood method (ML), a standardised estimate-based SEM. The main reasons for using SEM in this study are: (1) this study is testing the relationships among latent constructs using various methods (Lei & Wu, 2007); (2) it is recommended to confirm the factor structure of a psychological instrument (Tomarken & Waller, 2005); (3) our proposed model is a complex one which examines direct and indirect (mediated) effects, structural factor models (CFA), and other complex relationships among variables (Lei & Wu, 2007); (4) this study uses bootstrapping for the proposed mediation model for inferences about indirect effects; and (5) it helps when discussing the theoretical and practical implications of the study.

The issue of Common Method Biases

The common method Biases comprises potential influences in social science studies, especially in the paper-and-pencil instrument, including the content, the response format, the general instructions of the items, and why the subject is taking the test (Podsakoff et al., 2003). Therefore, in this study to overcome such problems, the following measures were done: (a) the content or face validity of each item evaluated by experts in the field before administering the instrument; (b) Informed consent was obtained from all participants and their identity coded anonymously; (c) some items were reversely scored; (d) the predictor and the criterion variables were taken from different sources and cultural contexts; (e) for the issue of measurement error, the factor variance was computed. Following the Harman single factor test guidelines, the common method bias was performed (Podsakoff et al., 2003, 2012). Hence, there are no significant common method biases in this study since the computed variance (28.52%) is below the threshold of 50%.

Table 2. CFA of the scales, the measurement model, and the structural model of the constructs

Fit indices	CFAs of scales				Main constructs (Figure 1)				Rule of thumb
	Psychological Capital	Coping with stress	Teacher well-being		Measurement model	Structural model			
χ^2	264	104			296			1326	
df	48	24			101			616	
P-Value	0.001	0.001			0.001			0.001	
χ^2/df	4.91	4.34			2.9			2.15	≤ 5
GFI	0.952	0.973			0.958			0.920	≥ 0.90
AGFI	0.922	0.950			0.943			0.908	≥ 0.90
RFI	0.929	0.976			0.945			0.923	≥ 0.90
TLI	0.941	0.981			0.963			0.957	≥ 0.90
CFI	0.957	0.988			0.969			0.961	≥ 0.95
SRMR	0.047	0.058			0.039			0.064	≤ 0.08
RMSEA	0.074	0.063			0.048			0.074	≤ 0.08
	(0.065, 0.082)	(0.051, 0.076)			(0.042, 0.055)			(0.065, 0.082)	(0.034, 0.040)
	Model 1-A	Model 2-C			Model 3-W			Model 4-All (Figure 2)	Rule of thumb
	Measurement model	Structural model	Measurement model	Structural model	Measurement model	Structural model	Measurement model	Structural model	
χ^2	833	875	861	902	1115	906	1181	1326	
df	406	417	406	418	468	417	620	616	
P-value	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
χ^2/df	2.05	2.09	2.12	2.12	2.38	2.17	1.90	2.15	≤ 5
GFI	0.941	0.937	0.938	0.935	0.926	0.935	0.931	0.920	≥ 0.90
AGFI	0.927	0.926	0.925	0.923	0.911	0.923	0.918	0.908	≥ 0.90
RFI	0.931	0.930	0.927	0.925	0.915	0.931	0.929	0.924	≥ 0.90
TLI	0.963	0.962	0.960	0.958	0.951	0.961	0.965	0.958	≥ 0.95
CFI	0.968	0.966	0.965	0.963	0.955	0.965	0.969	0.962	≥ 0.95
SRMR	0.036	0.044	0.038	0.046	0.066	0.046	0.041	0.064	≤ 0.08
RMSEA	0.035	0.036	0.037	0.034	0.041	0.037	0.033	0.037 (0.034, 0.040)	≤ 0.08
	(0.032, 0.039)	(0.033, 0.040)	(0.033, 0.040)	(0.033, 0.040)	(0.038, 0.044)	(0.034, 0.041)	(0.030, 0.036)		

Notes: GFI=Goodness of Fit Index; AGFI=Adjusted Goodness-of-Fit Index; RFI=Relative Non-centrality Index; TKI=Tucker-Lewis Index; CFI=Comparative Fit Index; SRMR=Standardized Root Mean Square Residual; RMSEA=Root Mean Squared Error of Approximation

Model 1-A: PsyCap on teachers' workload well-being, organisational well-being, and student interaction well-being mediated by coping through acceptance.

Model 2-C: PsyCap on teachers' workload well-being, organisational well-being, and student interaction well-being mediated by coping through change.

Model 3-W: PsyCap on teachers' workload well-being, organisational well-being, and student interaction well-being mediated by coping through withdrawal.

Model 4-All: PsyCap on teachers' workload well-being, organisational well-being, and student interaction well-being mediated by coping through acceptance, change, and withdrawal.

Results

Descriptive Statistics, Bivariate Correlation, Normality Distributions of the Study Variables

Table 2 shows the constructs' internal consistency, descriptive statistics (means and standard deviations), the normality of distribution using kurtosis and skewness, and correlations of all main constructs. Supporting Hypothesis 1, the findings of this study confirmed a significant positive correlation between PsyCap and organisational well-being ($r=0.126$, $p<0.01$), student interaction well-being ($r=0.267$, $p<0.01$) and total teacher well-being ($r=0.167$, $p<0.01$). However, no significant correlations were found between PsyCap and workload well-being. A significant positive relationship is found between PsyCap and coping through acceptance ($r=0.266$; $p<0.01$), coping through change ($r=-0.272$; $p<0.01$) and total coping with stress ($r=-0.300$; $p<0.01$), but not coping through withdrawal ($r=-0.016$; $p>0.05$).

Moreover, coping through acceptance was positively correlated to student interaction well-being ($r=0.188$; $p<0.01$) and teacher well-being ($r=0.116$; $p<0.01$). However, it had no significant correlation with workload and organisational well-being. A significant and positive correlation was found between coping through change and organizational wellbeing ($r=0.087$; $p<0.01$), student interaction wellbeing ($r=0.180$; $p<0.01$) and teacher wellbeing ($r=0.100$; $p<0.01$). Surprisingly, coping through withdrawal also had a positive correlation with student interaction well-being ($r=0.092$; $p<0.01$) and total teacher well-being ($r=0.086$; $p<0.05$). Coping with stress was positively correlated with workload wellbeing ($r=0.082$; $p<0.05$), organizational wellbeing ($r=0.110$; $p<0.01$), student interaction wellbeing ($r=0.0266$; $p<0.01$) and teacher wellbeing ($r=0.175$; $p<0.01$).

Finally, coping through acceptance had a positive and significant correlation with coping through change ($r=0.607$, $p<0.01$) and was negatively correlated with withdrawal ($r=-0.333$, $p<0.01$). The correlation of coping through change with withdrawal was also negative and significant ($r=-0.270$, $p<0.01$).

Mediation Analysis

The study examined the mediating role of coping with stress as a link between PsyCap and teacher's well-being (see Tables 4 and 5). The direct effect model (PsyCap) is compared to another direct and indirect model (with mediators). The best structural equation model requires specifying the relationships, examining causations, and developing the models (structural and measurement models) recommended by Hair et al. (2019). For instance, the fit between the two models in the mediation analysis is essential and is examined in this study. Comparing the direct and indirect effect model (Figure 1) with the dimensional construct's direct and indirect effect model (Figure 2) showed a good fit. To measure the precision of prediction obtained with the structured model, we examined the proportion of variance explained by the predictor variables (i.e., R^2).

As displayed in Table 4, PsyCap explains 18.4 per cent of the variance of teacher well-being, and the variance of coping with stress was 12.5 per cent. The model accounts for 58.4 per cent of the variance of student interaction well-being, 11.3 per cent of organisational well-being, and 4.3 per cent of workload well-being. The predictor variables' direct and indirect effects on the criterion variables were analysed and presented (see Figures 2 and 3, Tables 4 and 5). The result shows that the standardised direct effect path from PsyCap to coping with stress is positive and significant ($\beta=0.353$, [BC 95% bootstrap CI: -0.260, 0.442], $p<0.01$), which supports the stated hypothesis H2a. PsyCap also has a significant and positive direct effect on teacher well-being ($\beta=0.356$ [95% bootstrap CI: 0.230, 0.492], $p<0.01$), supporting hypothesis H2b of the study. Furthermore, coping with stress has a significant and positive direct effect on teachers' well-being ($\beta=0.144$ [95% bootstrap CI: 0.021, 0.272], $p<0.01$), which supports the stated hypothesis H3.

Furthermore, the indirect effect of PsyCap (see Figure 3) on teachers' well-being mediated through coping with stress was positive and significant ($\beta=0.051$, 95% bootstrap CI [0.010, 0.100], $p<0.05$). The measurement model and the structural model of this mediation was tested. As a result, the structural model of this mediation indicates a good model fit (see Table 2): $\chi^2(616) = 1327$, $p<0.001$, $\chi^2/df=2.15$, GFI=0.920, AGFI=0.908, RFI=0.924, TLI=0.958, CFI=0.962, SRMR=0.064, and RMSEA=0.037(0.034, 0.040) (see Table 2). Moreover, the measurement model's goodness of fit is acceptable; $\chi^2(616) = 1327$, $p<0.001$, $\chi^2/df=2.15$, GFI=0.920, AGFI=0.908, RFI=0.923, TLI=0.957, CFI=0.961, SRMR=0.064, and RMSEA=0.037(0.034, 0.040). This result shows that the model (H4) featuring the mediating role of coping with stress in the relationship between PsyCap and teacher well-being was confirmed (Hair et al., 2019; Kline, 2016; Tabachnick & Fidell, 2018).

Table 3. Variables, descriptive statistics (M, SD), Cronbach's alphas (α), and correlations (r) among all the study constructs

Variables	M	SD	Sk	Ku	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1.Gender					.083*	0.053	.104**	.119**	.104**	0.026	0.004	-0.06	-0.01	-0.01	0.015	-0.01	-0.06	-0.01	-0.02	0.004	-0.01	-0.02
2.Age					1	-.332**	.777**	.717**	.774**	-0.01	0.041	0.012	-0.03	0.011	0.067	0.027	-0	0.063	0.028	0.017	-0.078*	-0.02
3. Un. lev						1	-.345**	-.339**	-.346**	-0.02	-0.03	-0.03	-.074*	-0.05	-0.04	0.005	.079*	-0.01	-0.05	-.081*	.151**	0.015
4.Ed. Q							1	.726**	.986**	-0.01	0.015	-0.02	-0.01	-0	0.067	0.002	0.001	0.047	0.034	0.034	-0.079*	-0.01
5.Expe								1	.723**	0.002	0.006	-0.01	-0.02	-0.01	0.062	-0.03	-0.01	0.036	0.051	0.021	-0.091**	-0.01
6.Income									1	-0.01	0.02	-0.02	-0.01	-0	0.061	0.001	-0.01	0.037	0.034	0.03	-0.073*	-0.01
7.EF	13.2	2.6	-0.32	0.01						0.84	.586**	.317**	.310**	.771**	0.045	0.047	.230**	.145**	.191**	.188**	-0.03	.203**
8.Ho	17.2	3.6	-0.53	0.2						0.88	.317**	.296**	.818**	0.058	.095**	.210**	.160**	.225**	.239**	0.016	.276**	
9.Op	9.11	1.8	-0.57	0.11						0.82	.411**	.622**	0.043	.160**	.133**	.127**	.216**	.191**	-0.01	.231**		
10.Rs	13	2.8	-0.45	-0.11						0.79	.678**	-0.05	.087*	.190**	0.053	.149**	.168**	-0.04	.160**			
11.PC	52.5	8	-0.12	-0.01						0.87	0.033	.126**	.267**	.167**	.266**	.272**	-0.02	.300**				
12.WWB	30.5	4.9	-0.39	0.14						0.87	.279**	.159**	.811**	0.039	0.035	0.067	.082*					
13.OWB	25.7	5.1	-0.27	0.67						0.85	.214**	.611**	0.049	.087*	0.055	.110**						
14.SIWB	14.9	4	-0.29	-0.52						0.88	.539**	.188**	.180**	.092**	.266**							
15.TWB	84.5	10.9	-0.11	0.03						0.83	.116**	.100**	.086*	.175**								
16.AC	12.2	3.6	-0.43	-0.46						0.91	.607**	-.333**	.734**									
17.Ch	12.6	3.5	-0.61	-0.09						0.88	-.270**	.760**										
18.Wd	6.5	3.7	1.5	1.9						0.95	.241**											
19.CWS	31.4	6.2	-0.2	0.35						0.71												

Notes: **p<0.001(2-tailed); *p<0.05(2-tailed); Cronbach's alpha (α) in **diagonal bold**, M=mean; SD=standard deviation; Sk=skewness; Ku=kurtosis; Un.lev=University Level, Ed.Q=Educational Qualification, Expe=Experience; EF=efficacy; Ho=hope; Op=optimism; Rs=resilience; PC=psychological capital; WWB=workload wellbeing; OWB=organizational wellbeing; SIWB=student interaction wellbeing; TWB=teacher wellbeing; Ac=acceptance; Ch=change; Wd=withdrawal; CWS=coping with stress

The next step was testing our proposed model by considering workload well-being, organisational well-being, and student interaction well-being as the dependent variables, PsyCap as the predictor variable, and coping through acceptance, change and withdrawal as the mediator variables. The standardized direct beta coefficients from PsyCap to coping through acceptance $\beta=0.834$ [95% bootstrap CI: 0.777–0.888], $p<0.01$ (supporting H5a) and coping through change $\beta=0.774$ [95% bootstrap CI: 0.714, 0.834], $p<0.01$ (supporting H5b) are positive and significant. Furthermore, PsyCap has a negative and significant direct effect on coping through withdrawal ($\beta=-0.370$ [95% bootstrap CI:-0.445, -0.290], $p<0.01$) (supporting H5c). Also, the study found a significant and positive direct effect of PsyCap on workload wellbeing ($\beta=0.567$ [95% bootstrap CI: 0.142, 0.867], $p<0.01$), organizational wellbeing ($\beta=0.954$ [95% bootstrap CI: 0.258, 0.015], $p<0.01$), and student interaction wellbeing ($\beta=1.19$ [95% bootstrap CI: -0.750, 3.60], $p<0.01$). The above findings confirmed the stated hypothesis 6 (6Ha–c).

Surprisingly, coping through acceptance (H7a–c) has a negative and significant direct effect on organizational wellbeing ($\beta= -0.503$ [95% bootstrap CI: -0.968, -0.120], $p<0.01$), and student interaction wellbeing ($\beta= -0.462$ [95% bootstrap CI: -1.88, 0.160], $p<0.05$) but not on workload wellbeing ($\beta= -0.250$ [95% bootstrap CI: -0.517, -0.011], $p>0.05$). Coping through change (H7d–f) also directly and negatively affects workload wellbeing ($\beta= -0.217$ [95% bootstrap CI: -0.412– -0.050], $p<0.05$) and student interaction wellbeing ($\beta= -0.357$ [95% bootstrap CI: -1.16, -0.103], $p<0.05$). However, it has no significant direct effect on organizational wellbeing ($\beta= -0.267$ [95% bootstrap CI: -0.574, 0.020], $p>0.05$). Moreover, coping through withdrawal (H7g–i) has a positive and significant direct effect on workload wellbeing ($\beta=0.140$ [95% CI: 0.073, 0.218], $p<0.001$), organizational wellbeing ($\beta=0.178$ [95% bootstrap CI: 0.106, 0.278], $p<0.001$), and student interaction wellbeing ($\beta=0.300$ [95% bootstrap CI: 0.200, 0.417], $p<0.01$).

The indirect effect of PsyCap through coping with acceptance, change and withdrawal is significant to workload wellbeing ($\beta= -0.428$ [95% bootstrap CI: -0.690– -0.080], $p<0.05$), organizational wellbeing ($\beta= -0.693$ [95% bootstrap CI: -1.16, -0.122], $p<0.01$), and student interaction wellbeing ($\beta= -0.772$ [95% bootstrap CI: -2.72, -0.400], $p<0.01$) which supports H8 of this study. The mediation model through coping with acceptance, change and withdrawal indicates an acceptable fit: $\chi^2(616)=1326$, $p<0.001$, $\chi^2/df=2.15$, GFI=0.920, AGFI=0.908, RFI=0.924, TLI=0.958, CFI=0.962, SRMR=0.064, and RMSEA=0.037(0.034, 0.040). The measurement model supported this construct, indicating an acceptable fit: $\chi^2(654)=1181$, $p<0.001$, $\chi^2/df=1.90$, GFI=0.931, AGFI=0.918, RFI=0.929, TLI=0.965, CFI=0.969, SRMR=0.041, and RMSEA=0.033(0.030, 0.036), and indicating that the model has acceptable structural validity, which is confirmed (Hair et al., 2019; Kline, 2016; Tabachnick & Fidell, 2018).

Table 4. A standardised direct effect of PsyCap and coping with stress (total and dimensions) on teacher well-being (total and dimensions)

Outcome variables	Path	Predictors	Standardised direct effect	Bootstrap 95% CI		
				Lower bound (LBC)	Upper bound (UBC)	p-value
Acceptance	←	PsyCap	0.834	0.778	0.889	0.01
Change	←	PsyCap	0.774	0.714	0.834	0.01
Withdrawal	←	PsyCap	-0.370	-0.445	-0.290	0.01
Student interaction Well-being (R ² =0.584)	←	PsyCap	1.20	0.750	3.60	0.01
Organisational well-being (R ² = 0.113)	←	PsyCap	0.954	0.258	1.50	0.01
Workload well-being (R ² = 0.043)	←	PsyCap	0.567	0.142	0.867	0.01
Student interaction well-being	←	Acceptance	-0.462	-1.88	-0.160	0.05
Organisational well-being	←	Acceptance	-0.503	-0.968	-0.120	0.01
Workload well-being	←	Acceptance	-0.250	-0.517	-0.010	NS
Student interaction well-being	←	Change	-0.357	-1.16	-0.103	0.05
Organisational well-being	←	Change	-0.267	-0.574	0.020	NS
Workload well-being	←	Change	-0.217	-0.412	-0.050	NS
Student interaction well-being	←	Withdrawal	0.300	0.200	0.417	0.01
Organisational well-being	←	Withdrawal	0.178	0.106	0.278	0.001
Workload well-being	←	Withdrawal	0.140	0.073	0.218	0.001
Total Constructs						
Coping with stress (R ² = 0.125)	←	PsyCap	0.353	0.260	0.442	0.01
Teacher well-being (R ² =0.287)	←	PsyCap	0.356	0.230	0.492	0.01
Teacher well-being	←	Coping with Stress	0.144	0.210	0.272	0.05

Notes: ** $p<0.01$ (2-tailed, statistically significant); LBC=lower bound; UBC=upper bound; PsyCap= psychological capital; R²= Regression model; TWB=teacher well-being; SIWB=student interaction well-being; OWB= organization well-being; WWB=workload well-being

The indirect effect of PsyCap on workload wellbeing, organizational wellbeing, and student interaction wellbeing through coping with acceptance (H9a–9c) is significant ($\beta = -0.116$ [95% bootstrap CI: -0.319, -0.030], $p < 0.01$), ($\beta = -0.202$ [95% bootstrap CI: -0.506, -0.082], $p < 0.05$), and ($\beta = 0.466$ [95% bootstrap CI: -0.466, -0.056], $p < 0.05$, respectively), which supports H9 of this study. The mediating structural model through coping with acceptance indicates an acceptable fit: $\chi^2(417)=406$, $p < 0.001$, $\chi^2/df=2.09$, GFI=0.937, AGFI=0.926, RFI=0.930, TLI=0.962, CFI=0.966, SRMR=0.044, and RMSEA=0.036(0.033, 0.040). Also, the measurement model indicates an acceptable fit: $\chi^2(406)=833$, $p < 0.001$, $\chi^2/df=2.05$, GFI=0.941, AGFI=0.927, RFI=0.931, TLI=0.963, CFI=0.968, SRMR=0.036, and RMSEA=0.035(0.032, 0.039).

PsyCap also has a significant indirect effect on workload, organizational, and student interaction wellbeing through coping with change—($\beta = -0.132$ [95% bootstrap CI: -0.346, -0.045], $p < 0.01$), ($\beta = -0.175$ [95% bootstrap CI: -0.455, -0.065], $p < 0.01$), and ($\beta = -0.212$ [95% bootstrap CI: -0.506, -0.082], $p < 0.01$), respectively—which supports H10 of this study. The structural model shows good fitness of indices: $\chi^2(418)=902$, $p < 0.001$, $\chi^2/df=2.16$, GFI=0.935, AGFI=0.923, RFI=0.925, TLI=0.958, CFI=0.963, SRMR=0.046, and RMSEA=0.037(0.034, 0.041), and the measurement model indicates an acceptable fit: $\chi^2(406)=861$, $p < 0.001$, $\chi^2/df=2.12$, GFI=0.938, AGFI=0.925, RFI=0.927, TLI=0.960, CFI=0.965, SRMR=0.038, and RMSEA=0.037(0.033, 0.040).

Finally, the indirect (mediated) effect of PsyCap on workload wellbeing (H11a) organizational wellbeing (H11b), and student interaction wellbeing (H11c) mediated through coping through withdrawal was negative but statistically insignificant ($\beta = -0.002$ [95% bootstrap CI: -0.032, 0.006], $p < 0.05$), ($\beta = -0.002$ [95% bootstrap CI: -0.035, 0.006], $p < 0.05$), and ($\beta = -0.004$ [95% bootstrap CI: -0.064, 0.007], $p < 0.05$). This finding indicates that coping through withdrawal does not play a mediator role in the relationship between PsyCap and workload, organisational, and student interaction well-being.

However, the structural model shows good fitness of indices: $\chi^2(417)=906$, $p < 0.001$, $\chi^2/df=2.17$, GFI=0.935, AGFI=0.923, RFI=0.931, TLI=0.961, CFI=0.961, SRMR=0.046, and RMSEA=0.037(0.034, 0.041), and the measurement model also indicates an acceptable fit: $\chi^2(468)=1115$, $p < 0.001$, $\chi^2/df=2.38$, GFI=0.926, AGFI=0.911, RFI=0.915, TLI=0.949, CFI=0.955, SRMR=0.066, and RMSEA=0.041(0.038, 0.044). We have tangible evidence to conclude that in this study, the structural and measurement model supports the proposed hypotheses (H9, H10a and H11). GFI, AGFI, RFI, TLI, and CFI scores of 0.90 or more indicate a good model fit. This study, supported by Hair et al. (2019) and Kline (2016), recommended GFI, AGFI, RFI, TLI, and CFI values above 0.90 for the structural model fit to test the mediated effects; the χ^2/df value ≤ 5 is acceptable, whereas the value ≥ 0.95 and χ^2/df value < 3 should be a good fit.

Table 5. A standardised indirect effect of PsyCap on teacher well-being (total and dimensions) mediated through CWS, coping with acceptance, change, and withdrawal

Mediator	DV	Standardised indirect effect	Bootstrap 95% CI		
			LBC	UBC	p-value
PsyCap → Acceptance, Change and Withdrawal →	SIWB	-0.772	-2.732	-0.400	0.01
	OWB	-0.693	-1.161	-0.122	0.01
	WWB	-0.428	-0.690	-0.080	0.05
PsyCap → Acceptance →	SIWB	-0.212	-0.466	-0.056	0.05
	OWB	-0.202	-0.506	-0.082	0.01
	WWB	-0.116	-0.319	-0.030	0.05
PsyCap → Change →	SIWB	-0.260	-0.643	-0.106	0.01
	OWB	-0.175	-0.455	-0.065	0.01
	WWB	-0.132	-0.346	-0.045	0.01
PsyCap → Withdrawal →	SIWB	-0.004	-0.064	0.007	NS
	OWB	-0.002	-0.035	0.006	NS
	WWB	-0.002	-0.032	0.006	NS
PsyCap → CWS →	TWB	0.051	0.10	0.10	0.05

Note: * $p < 0.05$; ** $p < 0.01$, NS=statistically not significant; CI=confidence interval; LBC=lower bound; UBC=upper bound; CWS=coping with stress; SIWB=student interaction wellbeing; OWB=organizational wellbeing; WWB=workload wellbeing

Discussion

The main aim of the present study was to test the mediation role of coping with stress using PsyCap as a predictor variable and teacher well-being as a criterion variable based on positive psychology theory, COR theory, and a broaden-and-build approach. Before testing the mediation model, we performed the validity and reliability of the instruments, followed by the mediation models (testing the measurement and structural) models. The main findings of this study are discussed below.

As hypothesised, the structural model in this study tested the direct and indirect (mediated) effects of PsyCap and coping with stress on teacher well-being (see Figure 1) and examined the direct and indirect effects of PsyCap on the dimensions of teacher well-being mediated by coping through acceptance, change and withdrawal (see Figure 2). We found a significant and positive relationship between PsyCap and organisational well-being, student interaction well-being, total teacher well-being, and a positive correlation with coping through acceptance, coping through change, and total coping with stress (supporting H1). However, PsyCap has no significant correlations with workload well-being and coping through withdrawal. Studies demonstrate a substantial and significant positive relationship between PsyCap and well-being (Rabenu et al., 2016) and negatively associated with negative outcomes (Avey, Luthans, Smith, et al, 2010).

In this study, coping through acceptance positively correlates with student interaction well-being and teacher well-being, but it has no significant correlation with workload and organisational well-being. A significant and positive correlation was found between coping through change and organisational well-being, student interaction well-being and teacher well-being, but not workload well-being. Surprisingly, coping through withdrawal positively correlates with student interaction well-being and total teacher well-being. A positive correlation was found between coping with stress and workload, organisational, student interaction well-being and teacher well-being. In contrast, Rabenu et al. (2016) did not find coping through acceptance and coping through withdrawal significantly correlated with well-being and coping through change only positively correlated with well-being. These differences between the current study and the previous findings may be due to cultural differences, strategies used to handle stressors in the working life, and other context-based variables. These results are consistent with the studies by Rabenu et al. (2016) and Rabenu and Yaniv (2017).

Coping with stress significantly mediates between PsyCap and teachers' well-being (see Figure 3), supporting H4. Supporting H2a, PsyCap has a positive and significant direct effect on CWS. PsyCap also has a significant and positive direct effect on teachers' well-being, supporting H2b. The direct effect of CWS (H3) also significant and positively affects teachers' well-being. Several findings support our results. For example, coping with stress mediates the relationship between PsyCap and employees' well-being (Rabenu et al., 2016). The study design is based on positive psychology theory (Seligman, 2011), conservation (Hobfoll, 1989), and the broaden-and-build theory (Fredrickson, 2004) and is of paramount significance to university teachers.

The broaden-and-build theory suggests that positive emotions increase people's attention and thinking, and healthy longevity fuels psychological resilience, builds significant personal resources, triggers and fosters well-being, and seeds human flourishing. Positive psychology is also focused on helping healthy people be happier and more productive and actualising human potential. The COR theory also shows the potential of resources to help individuals attain goals, better cope with difficulty they face in the workplace, and move towards nurturing and optimising their resources.

The analysis model assumed that the PsyCap capacities of optimism, self-efficacy, resilience and hope would function as potential resources for coping with stress since coping evolves from resources that precede and influence coping (Rabenu et al., 2016). Literature has also found that PsyCap's positive role and function can attain optimal functioning in the workplace (Luthans et al., 2006).

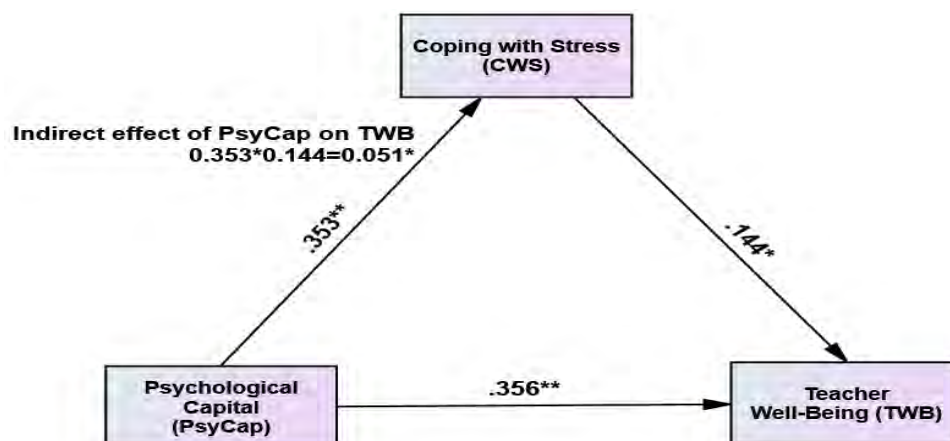


Figure 3. Mediation model of the relations between PsyCap, CWS and TWB

According to Rabenu et al. (2016), psychological resources may boost the individual to adapt their lives, manage things more positively, and expect positive workplace outcomes. Total PsyCap has a potential impact on employee's well-being and performance greater than each sub-dimension. For instance, a study conducted by Luthans et al. (2005) found that PsyCap as a possible resource leads individuals to be more confident, resulting in higher performance; to be

more motivated to perform challenging tasks; to generate solutions, and to choose the best alternative pathways when facing challenges. Li (2018) also argued that teachers' PsyCap is a vital ingredient in the positive relationship between teaching, organisation, and relations with students.

Rabenu et al. (2016) argued that psychological resources are highly associated with greater stress resistance and better employee well-being and performance. In line with this, Ding et al. (2015) noted the mediating role of coping with stress between PsyCap resources and burnout among Chinese nurses.

As shown in Figure 4, coping through acceptance, change and withdrawal together play a significant mediating role between PsyCap and workload well-being, organisational well-being and student interaction well-being. PsyCap also has a significant and positive direct effect on coping through acceptance (supporting H5a) and coping through change (supporting H5b), whereas it has a negative and significant direct effect on coping through withdrawal (supporting H5c). PsyCap also shows a significant and positive direct effect on workload well-being, organisational well-being, and student interaction well-being. The above findings confirm the stated hypothesis H6a-c.

The existing literature indicated that coping played a mediating role between individual resources and outcomes variables. For instance, Luthans et al. (2006) and Youssef and Luthans (2015) argued that self-efficacy, hope, resilience and optimism (PsyCap) significantly and positively predict well-being and are related to desirable outcomes in the workplace. Bryden et al. (2015) studied the mediating role of coping with stress between adverse life events and psychological well-being.

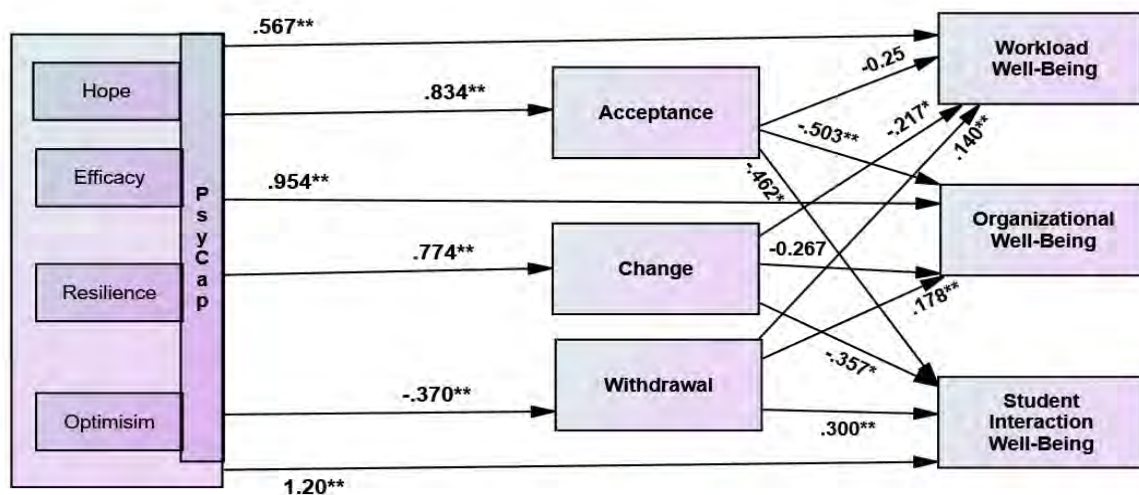


Figure 4. PsyCap's effect on teacher well-being dimensions mediated by coping through acceptance, change and withdrawal.

Surprisingly, coping through acceptance (H7a-c) has a negative and significant direct effect on organisational well-being and student interaction well-being, but not on workload well-being. Coping through change (H7d-f) also directly and negatively affects workload well-being and student interaction well-being. However, it has no significant direct effect on organisational well-being. Coping through withdrawal (H7g-i) positively and significantly affects workload well-being, organisational well-being, and student interaction well-being. This finding is contrary to Rabenu et al. (2016). The indirect effect of PsyCap (H8) through coping with acceptance, change and withdrawal are significant for workload well-being, organisational well-being and student interaction well-being. The model has acceptable and confirmed structural and measurement validity (Hair et al., 2019; Kline, 2016; Tabachnick & Fidell, 2018).

Coping with acceptance (H9a-c) and coping with change (H10a-c) significantly mediate PsyCap and workload well-being, organisational well-being, and student interaction well-being. However, coping through withdrawal has no indirect effect on workload well-being (H11a), organisational well-being (H11b) and student interaction well-being (H11c). The structural model and measurement model of the three coping strategies' (coping through acceptance, change and withdrawal) have an acceptable model fit. Hair et al. (2019) and Kline (2016) recommended for a structural model fit to test the mediated effects that GFI, AGFI, RFI, TLI and CFI ≥ 0.90 , and χ^2/df value ≤ 5 , whereas values ≥ 0.95 and less than 3, respectively, should be a good model fit. Similarly, Rabenu et al. (2016) found that coping through change and acceptance mediated the relationship between PsyCap and well-being. Coping with stress also contributes to physical and psychological health (Park & Adler, 2003).

The differences observed in this study and the previous literature may be cultural and institutional. In Ethiopia, university teachers have no opportunity to foster their well-being and cope with the problems they face in their daily lives. According to the World Bank report (2017), teachers suffer from aimless meetings and invest their energy and resources in routine tasks rather than professional issues.

Conclusion

This study explored the mediating role of coping with stress between PsyCap and teachers' well-being and the direct effect of PsyCap and coping with stress on teachers' well-being using the SEM bootstrap method. Furthermore, we examined the mediating roles of coping with acceptance, change, and withdrawal between PsyCap and teachers' well-being and the direct and indirect effects on the dimensions of teacher well-being. Examining the potential role of PsyCap and CWS to foster teachers' well-being is novel research. To the authors' knowledge, there are no findings in the Ethiopian or African context, particularly for university teachers, leading to a knowledge gap. Before assessing the mediation model, this study established the measurement model's validity and reliability to all primary constructs to ensure the psychometric properties. The normality distribution, bivariate correlation, Cronbach's alpha, and construct validities of the TWBS, the PCQ-12, and the CWS-Q scales were examined with good psychometric properties.

The results show that teachers' well-being positively influenced by PsyCap and the core coping with stress strategies would enhance and use as a resource to flourish their work-life and establish the best relationship with their students and institutions. Therefore, education sectors and other stakeholders could potentially use this study as a guide to promote and flourish teachers' well-being.

Recommendation

The present study is relevant for today's higher education teachers and applicable in educational psychology to conduct a study on positive PsyCap and its association with teachers' well-being and coping with stress by establishing an integrated, fresh and novel model following the positive PsyCap of Luthans et al. (2006), conservation resource theory (Hobfoll, 1989, 2002), the emerging theory of teacher well-being (Collie et al., 2015), and the coping with stress and appraisal theory of Lazarus and Folkman (1984).

This study also confirmed PsyCap is a potential resource to help individuals combat the effects of stress using coping, fostering their inner strength, and nurturing their well-being. Fredrickson's (2004) broaden-and-build theory underlined that the form and function of a subset of positive emotions, including interest, joy, contentment, and love, are potent for coping with stress. PsyCap has a determinant role as a resource to cope with stress and enhance teachers' well-being.

Furthermore, the present study should offer a practical intervention in the well-being of university teachers using positive psychology theory (Seligman, 2011), COR theory (Hobfoll, 1989, 2002), and a broaden-and-build approach (Fredrickson, 2004). The results have some implications for the effectiveness of university managers. For example, Li (2018) pointed out that university leaders or managers can enhance teachers' well-being by increasing their meaning in life, and PsyCap. Oades et al. (2011) also suggested that research into positive education needs to be advanced into tertiary education because applied, positive, education-based interventions play a vital role in a positive university environment.

Finally, we thank the previous scientific studies that laid the foundation and paid more attention to organisational settings, mainly in the United States (Luthans et al., 2006) and in the West (e.g. Djourova et al., 2018). However, few scientific studies have been conducted from positive psychology perspectives related to teachers' well-being at work (Collie, 2014; Collie et al., 2015). Therefore, we recommend further research on teacher well-being and coping with stress as a mediator by applying positive psychological resources because both are critical for teachers and students.

Limitations

The use of SEM allowed the examination of an advanced theoretical model as hypothesised in our study. However, there are some limitations that future research should consider.

The first is related to methodological issues: self-report and mono-method bias often threaten the validity of a study in an organisational setting and pose a report bias problem (Donaldson & Grant-vallone, 2002). Therefore, future research should consider quantitative and qualitative data collection systems to get rich and in-depth information.

The second limitation is that teachers' working life is affected by demographic factors, especially in developing countries compared with the developed world (Abebe & Woldehanna, 2013). This research did not address this important issue. There might be a strong association between teacher well-being and demographic factors; hence this area should be incorporated in the future.

The third limitation is that the research findings reported in this article emerged from the data sample of only university teachers. The research did not address elementary and high school teachers. Research findings indicate that elementary and high school teachers experience problems and difficulties in their work-life (Crosby, 2015). Therefore,

future studies should focus on three levels of education—elementary, high school, and university—across various cultures, using positive psychology to enhance teachers' well-being.

Despite these drawbacks, this research has offered practitioners and researchers a manageable, time-saving, and better psychometric properties scale and a mediation model with an advanced methodological approach to measure teachers' working life, seeking to realise the role played by PsyCap and develop positive intervention strategies to enable teachers' well-being to flourish.

Authorship Contribution Statement:

Zewude: Data collection and acquisition, interpretation, concept and design, drafting manuscript, statistical analysis, securing funding, critical revision of the manuscript. Hercz: Contributed concept and design, critical revision of the manuscript, technical or material support, supervision, and final approval.

Data Availability Statement

The datasets generated during and/or analysed during the current study are available from the corresponding author, and willing to share them to the journal.

Ethical Approval

All procedures performed in studies involving human participants were per the ethical standards of the institutional and with the 1964 Helsinki declaration.

Informed Consent

Informed consent was obtained from all participants included in the study.

Conflict of Interest

The author(s) declare no potential conflicts of interest concerning this original research, authorship, and publication of this article.

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