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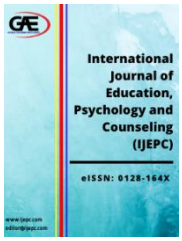

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RESILIENCE TO FLOURISHING: EXAMINING THE MEDIATING MECHANISM OF FUTURE ORIENTATION IN CHINESE PRESERVICE TEACHERS

Yi Xing[1], Siaw Yan-Li [2*], Loh Sau-Cheong [3], Li Shu Xian [4], Md Harun Rashid[5]

1 Department of Educational Psychology and Counselling, Faculty of Education, Universiti Malaya, Malaysia
Email: freeyi1127@gmail.com
2 Department of Educational Psychology and Counselling, Faculty of Education, Universiti Malaya, Malaysia
Email: yanli@um.edu.my
3 Department of Educational Psychology and Counselling, Faculty of Education, Universiti Malaya, Malaysia
Email: lohsch@um.edu.my
4 Department of Educational Psychology and Counselling, Faculty of Education, Universiti Malaya, Malaysia
Email: shuxianli.avery@gmail.com
5 Department of Educational Psychology and Counselling, Faculty of Education, Universiti Malaya, Malaysia
Email: harun.sh96@gmail.com
* Corresponding Author

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Abstract:

Objectives: This study examined the psychological mechanisms linking resilience and flourishing among Chinese preservice teachers, a group that experiences substantial stress during the transition from academic training to the professional teaching environment. The objective was to determine whether future orientation functions as a mediating pathway connecting resilience to flourishing. **Methods:** Using a cross-sectional survey of 352 preservice teachers, partial least squares structural equation modelling (PLS-SEM) was employed to evaluate both the measurement and structural models. **Results:** Results showed that the model fit was acceptable (SRMR = 0.069) and revealed significant positive direct effects between resilience and future orientation ($\beta = 0.547$, $T = 13.772$, $p < 0.000$), resilience and flourishing ($\beta = 0.235$, $T = 4.201$, $p < 0.000$), and future orientation and flourishing ($\beta = 0.456$, $T = 8.974$, $p < 0.000$). Future orientation also exerted a significant partial mediating effect on the resilience–flourishing relationship ($\beta = 0.249$, $T = 7.012$, $p < 0.000$). These findings indicate that resilience promotes goal-directed planning and optimistic thinking, which subsequently enhance flourishing. **Conclusions:** Conceptually, the study extends psychological capital and well-being theories within a collectivist Chinese context, and practically, it offers an evidence-based foundation for teacher education programs that aim to strengthen

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preservice teachers' well-being by integrating resilience-building with future-oriented goal-setting training.

Keywords:

Flourishing; Future Orientation; Mediation; Resilience; Preservice Teachers

Introduction

Flourishing, indicative of the pinnacle of well-being and characterised by optimal psychological functioning (the PERMA model; Seligman, 2011), is a vital research domain, particularly among preservice teachers who contend with the dual challenges of rigorous academic requirements and the forthcoming high-stakes professional transition (Squires et al., 2022). This demographic often encounters psychological distress (Mansfield et al., 2016) and foresees the stress and burnout challenges intrinsic to the teaching profession (Agyapong et al., 2022), rendering the examination of thriving crucial for SDG 3 (Good Health and Well-being). The circumstances surrounding Chinese preservice teachers exacerbate these pressures due to significant societal expectations, competitive job markets, and centralised qualification procedures (Li et al., 2022; Ye et al., 2024; Ye et al., 2021), frequently leading to adverse emotional conditions such as anxiety and burnout (Ao et al., 2024; Qin et al., 2022). Contemporary research frequently disregards the distinct developmental requirements of this group or concentrates solely on adverse indicators, failing to acknowledge the necessity for a positive, comprehensive psychological perspective essential for realising SDG 4 (Quality Education). Flourishing is crucial in this high-pressure environment, as it cultivates long-term resilience, augments career satisfaction, enhances teaching self-efficacy, and mitigates distress (Balgiu, 2022; Freire et al., 2020; Park et al., 2024), attributes vital for SDG 10 (Reduced Inequalities) by providing improved support for diverse learners; however, empirical research on flourishing specifically among Chinese preservice teachers remains limited. This study identifies essential mechanisms for effectively enhancing this state: Resilience, defined as the capacity to overcome adversity and adapt (Herrman et al., 2011), is posited as a fundamental asset that directly fosters flourishing (Yildirim & Belen, 2019), and future orientation, characterised by cognitive, emotional, and behavioural commitment to long-term goals (Liu et al., 2011), facilitates motivation and adaptation (Bergdahl & Sjöberg, 2023). This research importantly fills a notable gap by proposing and examining that the influence of resilience on flourishing is both direct and indirect, mediated by the development of future orientation (Chen et al., 2021; Fusco et al., 2019), which offers essential guidance and motivation for optimal well-being. This study employs structural equation modelling (SEM) to examine the mediating mechanisms among Chinese preservice teachers, thereby enhancing theoretical understanding and informing the development of evidence-based intervention programs in teacher education.

Literature Review

Resilience and Flourishing

Resilience, an essential element of psychological capital (Luthans & Youssef-Morgan, 2017), is characterised as an adaptive ability that allows individuals to effectively manage adversity and overcome challenges to achieve positive developmental results. It is posited to be crucial for attaining flourishing, a condition of optimal well-being marked by elevated positive emotions and functioning (Seligman, 2011). Empirical studies have consistently demonstrated a direct correlation between resilience and favourable psychological outcomes, including

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markedly increased life satisfaction and diminished depressive symptoms (Cohn et al., 2009; Loh et al., 2014). The relationship between resilience and flourishing is not fixed; it is clearly affected by contextual and interpersonal factors, including social support and culture. Even exceptionally resilient individuals may find it challenging to achieve a state of flourishing without sufficient social resources (van Harmelen et al., 2016). Moreover, in collectivist societies such as China, the understanding and influence of resilience may be influenced by the prioritisation of social harmony and relational obligations. Although the significance of resilience for positive psychological development is acknowledged, limited research has empirically investigated the mechanism through which resilience fosters flourishing, particularly within the high-pressure demographic of Chinese preservice teachers. This study addresses this notable deficiency by proposing the following hypothesis:

***H*^{1}** Resilience positively and significantly predicts flourishing among Chinese preservice teachers.

Resilience and Future Orientation

Both resilience and future orientation emphasise overcoming challenges and goal setting in shaping one's outlook on the future (Santilli et al., 2017). Numerous theoretical frameworks and empirical research support their connection. In future orientation models, resilient individuals are more likely to engage in future-orientated thinking, as they develop skills to navigate difficulties, set goals, and plan for long-term outcomes (Johnson et al., 2014; Seginer, 2008). This planning capability is central to future orientation (Johnson et al., 2014). Empirical studies indicate that resilience promotes future planning and accomplishment; for instance, students with greater resilience tend to have clearer academic goals and career aspirations (Khampirat, 2020). Another study discovered that resilient individuals sustain a positive outlook, which significantly impacts academic achievement and goal formulation (Lin et al., 2024). While interest in this link has grown, studies specifically targeting preservice teachers remain limited. Moreover, culture shapes temporal orientation differently, emphasising the past, present, or future (Hou et al., 2024). Collectivist values foster resilience through shared meaning and responsibility. Thus, resilience and future orientation, both shaped by cultural context, merit exploration among Chinese preservice teachers. Based on this, Hypothesis 2 is proposed:

***H*^{2}** Resilience significantly predicts future orientation among preservice teachers in China.

Future Orientation and Flourishing

Future orientation and flourishing are closely linked, as previous studies indicate that future orientation encourages goal setting, fosters optimism, and supports overall well-being (Seginer, 2017). This link can be explained through hope theory. Future orientation involves setting long-term goals and creating a vision for the future, which aligns with hope's emphasis on goal-directed thinking, fosters perseverance and optimism, and ultimately contributes to long-term well-being and fulfilment (Jeffrey & Mehari, 2023). Empirical studies prove that future orientation positively correlates with behaviours that enhance life satisfaction and mental well-being. For example, research indicates that individuals with a future orientation are better at delaying gratification, focusing on sustainable, long-term outcomes rather than short-term gains; as a result, this orientation leads to higher life satisfaction, fulfilment, and well-being (Felaco & Parola, 2022). While these studies robustly establish the association between future orientation and flourishing, critical gaps remain in understanding how this relationship operates

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within specific populations and cultural contexts. Despite evidence that future orientation enhances goal setting and well-being among adolescents (Seginer, 2017), its role in transitional groups, such as preservice teachers navigating dual identities as students and professionals, remains underexplored. This critical career transitional context may amplify or alter the function of future orientation; however, no studies have empirically examined this dynamic. Therefore, the current study has the following hypothesis:

H3 Future orientation significantly predicts flourishing among preservice teachers in China.

Future Orientation as a Mediator

Many studies have shown that emotions, cognition, and coping styles can mediate the relationship between resilience and well-being (Cohn et al., 2009; Hu et al., 2015). Future orientation, a variable encompassing emotions, cognition, and behaviour (S. R. L. Johnson et al., 2014; Liu et al., 2011), is likely to serve as a mediator between resilience and flourishing. From a theoretical perspective, hope theory posits that future orientation drives flourishing through goal-directed agency (Jeffrey & Mehari, 2023), and psychological capital theory (Luthans & Youssef-Morgan, 2017) posits that future orientation may mediate resilience and well-being. Additionally, future orientation is associated with both psychological resilience and factors related to well-being (S. R. L. Johnson et al., 2014). Existing studies predominantly focus on direct effects (Yildirim & Belen, 2019) or simplistic mediation models (Hu et al., 2015), neglecting the complex cognitive–emotional pathways captured by future orientation. Notably, no SEM-based research has tested this mediation in transitional populations such as preservice teachers, despite evidence that campus-vocation transitions heighten reliance on future-orientated planning (Bergdahl & Sjöberg, 2023). Moreover, the current literature prioritises theoretical associations over actionable insights. For example, while resilience training programs are widely recommended (Mansfield et al., 2016), few studies incorporate future orientation as a target for intervention. This gap is particularly concerning in teacher education, where curricula rarely focus on developing long-term goal-setting skills, despite their established association with well-being. Hence, the final hypothesis is proposed as follows:

H4 Future orientation significantly mediates the relationship between resilience and flourishing among preservice teachers in China

Based on the above literature review and hypotheses, a research model was proposed. This study aimed to test the causal relationships among resilience, future orientation, and flourishing among preservice teachers in China. Moreover, the study also aimed to test whether future orientation mediates the relationship between resilience and flourishing. The proposed model is illustrated in Figure 1.

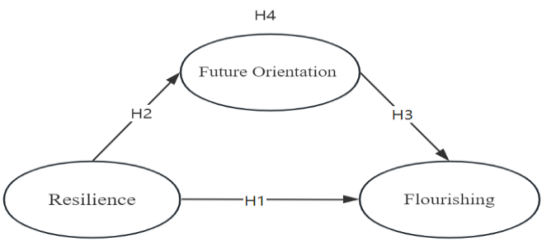

Figure 1. Conceptual Framework

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Research Methodology

This study employed a cross-sectional survey design to evaluate the proposed structural model with a sample of 352 Chinese preservice teachers (159 male, 193 female). Participants were selected from five universities across varied geographical and socioeconomic regions, Jiangxi, Heilongjiang, Hebei, Guangxi, and Chongqing using a stratified purposive sampling method. The sample consisted of final-year education majors who had exhibited dedication to the teaching profession by completing internships or obtaining job placements. Data collection was conducted through online questionnaires, guaranteeing informed consent and the elimination of incomplete or invalid responses to uphold data integrity. The fundamental psychological constructs were evaluated using recognised psychometric tools in the Chinese language. Flourishing was evaluated using the 15-item PERMA-Profiler (Butler & Kern, 2016), grounded in Seligman's (2011) framework (alpha = 0.944); future orientation was measured with the 31-item Future Orientation Questionnaire for Adolescents (Liu et al., 2011), which assesses future perceptions, emotions, and planning execution (alpha = 0.919); and resilience was quantified through the six-item Brief Resilience Scale (BRS) (Smith et al., 2008), which emphasises the capacity to recover from stress (alpha = 0.705). Before analysis, variance inflation factors (VIFs) were assessed to prevent multicollinearity or common method bias (CMB), and visual inspections (skewness, kurtosis, and scatter plots) validated the data's distributional properties. The proposed relationships were examined using partial least squares structural equation modelling (PLS-SEM), executed with SmartPLS 4.0. PLS-SEM was selected for its appropriateness in complex modelling, particularly due to the hierarchical structure of the constructs, as well as the sample size and data characteristics (Hair et al., 2021).

The analysis adhered to a two-stage methodology (Sarstedt et al., 2021): commencing with the evaluation of the measurement model (reliability and validity), succeeded by the assessment of the structural model. The hypotheses concerning direct paths (H1–H3) were evaluated through the structural model path coefficients, while the mediation hypothesis (H4) was meticulously examined using a bootstrapping procedure. Flourishing and future orientation were conceptualised as hierarchical component models (HCMs) of a reflective-reflective nature, necessitating a two-stage estimation approach in which the latent scores of lower-order components (LOCs) functioned as indicators for the higher-order constructs (HOCs) (Hair et al., 2021).

Result

Validate the Measurement Models

Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed to evaluate measurement models in this study. The assessment focused on four key aspects: convergent validity, internal consistency, discriminant validity, and multicollinearity (Hair Jr et al., 2020). Convergent validity reflects how well an item aligns with other indicators measuring the same construct and is typically examined using average variance extracted (AVE) and item loadings. A satisfactory AVE should exceed 0.50, suggesting that the construction captures more than half of the variance in its indicators. Ideally, item loadings should be higher than 0.708, although in social science research, values between 0.40 and 0.708 are often retained if they improve AVE or composite reliability (Hair Jr et al., 2021). Items with loadings below 0.4 are generally excluded to enhance model fitness and validity. The construct of the conceptual model can be tested via two methods: composite reliability (CR) and Cronbach’s alpha (α). For

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all reliability requirements, the numbers must be above 0.70 and less than 0.95 (Hair Jr et al., 2020). The next phase is to assess the measurement model's discriminant validity. Discriminant validity indicates whether the constructions in the model are substantially linked. There are many ways to identify whether discriminant validity is present, for example, no cross-loaded indicators or HTMTs are less than an acceptable value of 0.90 for conceptually related terms, there is no discriminant validity concern, or the average variance extracted is greater than the shared variance (AVE-SV approach) (Hair Jr, Hult, Ringle, Sarstedt, Danks, & Ray, 2021). Among these approaches, HTMT has been recommended the most by other researchers in recent years (Cheung et al., 2023).

Finally, collinearity was checked to detect if some indicators were conceptually or statistically redundant, and a VIF less than 5 was generally considered acceptable (Hair Jr et al., 2020). In the first stage, the authors examined the first-order model, and lower-order components (LOCs) were analyzed to obtain their latent variable scores. After the data were computed, some items were removed to ensure the threshold value of convergent validity and reliability: items 2, 4, and 6 in resilience; items 1, 2, 3, 4, and 5 in Emotion for the Future; items 8, 9, and 10 in Will Execute a Plan; and item 5 in Perception about the Future under Future Orientation. As all the constructions were under satisfying AVEs, loadings, and reliability, the discriminant validity between achievement and meaning and positive emotion and positive relationship was still higher than 0.9, and the VIF values were higher than 5 among the achievement constructs. The authors removed item 3 in meaning, item 1 in achievement, item 2 in positive emotions, and item 1 in positive relationships; then, all the criteria in terms of convergent validity, reliability, and discriminant validity were met in the first-order model, and no collinearity issues occurred. Table 1 presents the loadings of the remaining items and the Cronbach's alpha, CR, and AVE values of the variables and their constructs in the first-order model.

Table 1. Convergent Validity and Reliability of The First-Order Model

Variables	Constructs	Items	Loadings	Cronbach Alpha	CR	AVE
FL	PE	PE1	0.883	0.787	0.903	0.823
		PE3	0.930			
	PR	PR2	0.899	0.793	0.906	0.828
		PR3	0.921			
	E	E1	0.857	0.734	0.846	0.650
		E2	0.869			
		E3	0.677			
	M	M1	0.967	0.942	0.971	0.944
		M2	0.977			
	A	A2	0.896	0.770	0.897	0.813
		A3	0.907			
FO	PF	PF1	0.811	0.887	0.911	0.563
		PF2	0.845			
		PF3	0.822			
		PF4	0.798			
		PF6	0.747			
		PF7	0.664			
		PF8	0.657			

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		PF9	0.628			
	EP	EP1	0.790	0.909	0.925	0.580
		EP2	0.808			
		EP3	0.781			
		EP4	0.770			
		EP5	0.742			
		EP6	0.770			
		EP7	0.752			
		EP11	0.782			
		EP12	0.649			
	EF	EF6	0.864	0.924	0.943	0.768
		EF7	0.867			
		EF8	0.918			
		EF9	0.887			
		EF10	0.845			
Re		Re1	0.877	0.781	0.873	0.697
		Re3	0.871			
		Re5	0.750			

FL Flourishing, *PE* Positive Emotion, *PR* Positive Relationship, *E* Engagement, *M* Meaning, *An* Achievement, *FO* Future Orientation, *PF* Perception about the Future, *EF* Emotion for the Future, *EP* Will Execute a Plan, *Re* Resilience.

The current study adopted HTMT to measure discriminant validity among the measurement models, and the overall HTMT values in the first-order model were less than 0.9 (ranging from 0.33-0.898). The value of the variance inflation factor (VIF) between the constructs in the first-order model ranged from 1.315-4.794; therefore, the first-order model was attained. The Figure 2 presented the first-order model.

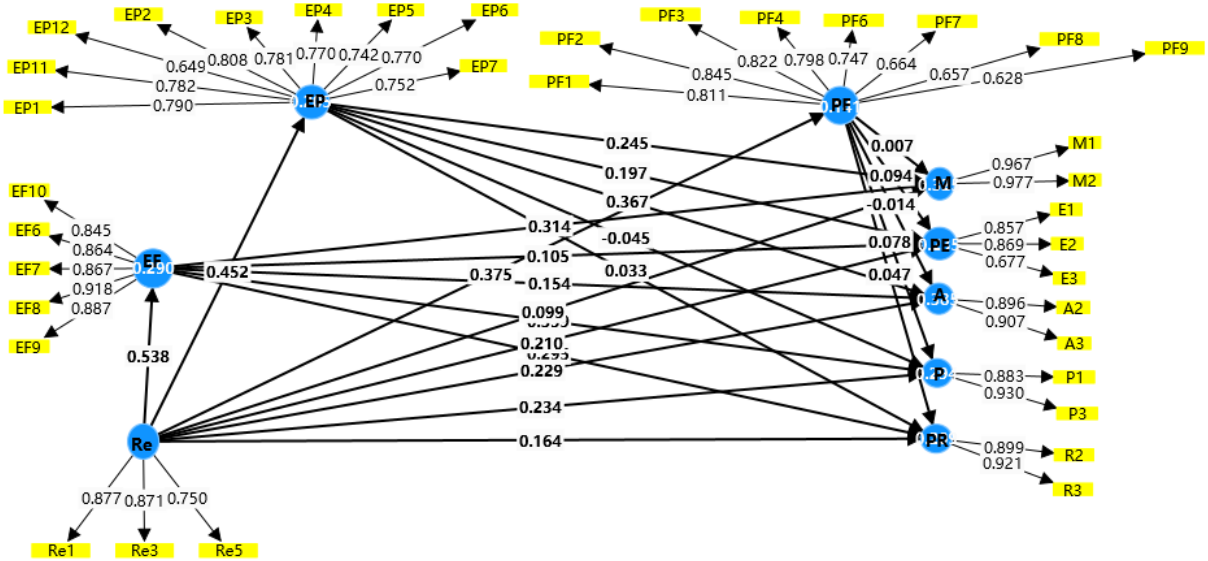

Figure 2. First-Order Model

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The second-order model was then checked, and the latent variable scores of the LOCs were used as indicators for estimating the HOC. Convergent validity, reliability, discriminant validity, and collinearity were also examined in the second-order model. Table 2 presents the loadings, Cronbach's alphas, CRs and AVEs in the second-order model. Like the criteria mentioned in the first-order model, all the loadings were above 0.708, the AVEs were above 0.5, the reliability of the variables were all higher than 0.7, the HTMT values were all lower than 0.9 (ranging from 0.508-0.672), and the VIFs ranged from 1-2.874, which were lower than 5. Hence, the proposed measurement model was deemed appropriate, with verification of sufficient reliability, convergent validity, and discriminating validity.

Table 2. Convergent Validity and Reliability of the Second-Order Model

Variables	constructs	Loadings	Cronbach Alpha	CR	AVE
Fl	PE	0.869	0.900	0.926	0.715
	PR	0.788			
	E	0.858			
	M	0.823			
	A	0.887			
FO	PF	0.789	0.801	0.882	0.714
	EP	0.858			
	EF	0.885			

FL Flourishing, *PE* Positive Emotion, *PR* Positive Relationship, *E* Engagement, *M* Meaning, *A* Achievement, *FO* Future Orientation, *PF* Perception about the Future, *EF* Emotion for the Future, *EP* Will Execute a Plan

Evaluation of the Structural Model

Once the measurement model was validated, the next step involved evaluating the structural model to determine the strength and significance of the hypothesized relationships (Hair et al., 2021). This process included analyzing coefficients of determination (R^2), path coefficients (β), and associated T statistics to assess the magnitude and significance of each path. Additionally, predictive relevance was examined using Q^2 values, and effect sizes (f^2) were calculated to understand the relative impact of each predictor on its outcome variable. Together, these indicators provide a comprehensive evaluation of the model's explanatory and predictive capacity.

Hypotheses Analysis (Direct Effect)

To test Hypotheses 1 through 3, structural path analysis was conducted by examining the standardized beta coefficients (β), which represent the expected change in the dependent (endogenous) variable for each unit change in the independent (exogenous) variable. Larger β values indicate stronger predictive effects. All three hypothesized paths yielded statistically significant results, with p-values below 0.001. In addition to p-values, T statistics derived from SmartPLS were analyzed to determine the robustness of each path coefficient, thereby confirming the statistical support for the proposed hypotheses.

H^1 Resilience can significantly predict flourishing among preservice teachers in China.

H^2 Resilience can significantly predict future orientation among preservice teachers in China.

H^3 Future orientation can significantly predict flourishing among preservice teachers in China.

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Research findings (in Table 3) suggest significant causal relationships between resilience, future orientation, and flourishing. Specifically, there is a significant positive prediction from resilience to future orientation (β = 0. 547, T = 13.772, p < 0.000), the β value shows that a one-unit change in resilience would result in 0.547 changes in future orientation. There is a significant positive prediction from resilience to flourishing (β = 0.235, T = 4.201, p < 0.000), and a one-unit change in resilience would result in a 0.235 change in future orientation. Additionally, there is a significant positive prediction from future orientation to flourishing (β = 0.456, T = 8.974, p < 0.000), and one unit change in future orientation would result in 0.456 changes in flourishing. The results of path analysis are presented in Table 3. The findings of the present study indicate that hypotheses 1 to 3 are verified and accepted. The structural model with its path is presented in Figure. 3.

Table 3. Path Analysis Results

Hypothesized Path	Standardized Beta	SD	t	p	Decision
H1 Re -> FL	0.235***	0.056	4.201	0.000	Supported
H2 Re -> FO	0.547***	0.040	13.772	0.000	Supported
H3 FO -> FL	0.456***	0.051	8.974	0.000	Supported

FL Flourishing, *FO* Future Orientation, *Re* Resilience

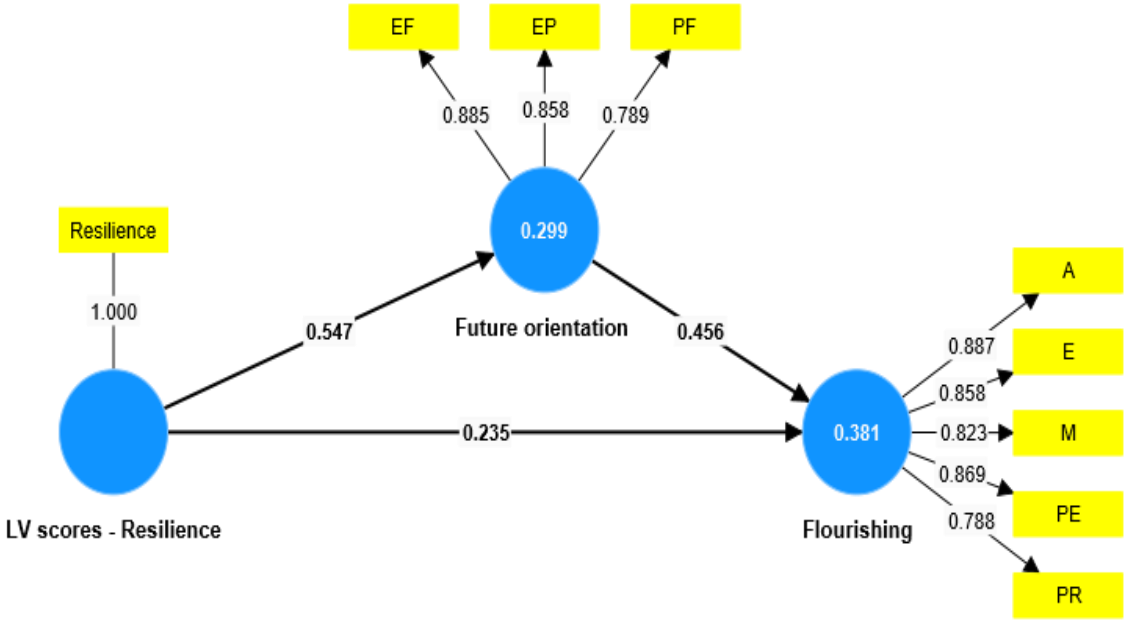

Figure 3. Path Estimates

The coefficient of determination (R^2) was calculated for all endogenous constructs to assess the predictive power of the structural model based on the amount of variance in the dependent variables (Shmueli & Koppius, 2011), also referred to as in-sample predictive power. According to Hair et al. (2021), R^2 values above 0.75 are substantial, those between 0.50 and 0.75 are moderate, and those between 0.25 and 0.5 are weak. Blindfolding procedures were used to assess the predictive significance of Model Q^2. In the SEM, for a specific endogenous latent construct, the measured Q2 values should be greater than zero. The values of 0.02, 0.15, and 0.35 for weak, moderate, and strong degrees, respectively, predict the relevance of each effect (Hair et al., 2021). The effect size f^2 was used to evaluate how each latent exogenous

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component affected the latent endogenous constructs. Hair et al. (2021) define the effect size as 0.02 for a small effect, 0.15 for a moderate effect, and 0.35 for a considerable effect.

The R^2 and Q^2 values of the future orientation are 0.299 and 0.294, respectively; additionally, the R^2 and Q^2 values of the flourishing orientation are 0.381 and 0.230, respectively, which suggests that when the weak model strength, Q^2, is greater than 0, the model can effectively predict the observed variables. The f^2 values for the three paths (Re -> FO; FO -> FL; Re -> FL) are 0.427, 0.236 and 0.063, suggesting that the effect sizes from resilience to flourishing, future orientation to flourishing and resilience to flourishing are substantial, moderate and weak, respectively. The mean absolute value of the correlation residuals is calculated via the SRMR method. SRMR values of <0.08 indicate an excellent fit for the research model (Hair et al., 2021). The SRMR in the current study is 0.069, which is lower than 0.08. The unweighted least squares (d_ULS) and generalized least squares (d_G) values suggest that both models effectively capture the data covariance structure and are comparable to the saturated model. Additionally, the normed fit index (NFI) of 0.857 for both models indicates a similar level of explanatory power, implying that the estimated model fits the data reasonably well, akin to the saturated model (Hair et al., 2021). Therefore, the structural model was achieved.

Hypotheses Analysis (mediation analysis)

After ensuring that the measurement model and structural model were valid, the present study also conducted a mediation analysis, utilizing bootstrapping in SmartPLS 4.0 to test the mediation effect of future orientation between resilience and flourishing.

H^4 Future orientation significantly mediates the relationship between resilience and flourishing among preservice teachers in China.

The results are presented in Table 4. The bootstrapping analysis revealed that the indirect effect b = 0.249 was significant, with a t value of 7.012, p<0.001. The 95% bootstrap CI bias of the indirect effects was corrected, LL = 0.186, UL = 0.325, and the interval did not include zero, indicating that there is a significant mediating role of future orientation between resilience and flourishing. Additionally, the direct effect, b = 0.235, is significant, with a t value of 4.201, p<0.001, and the total effect, b = 0.484, t=10.899. VAF (variance accounted for) =52.4%; therefore, future orientation partially and significantly mediated the relationship between resilience and flourishing, and H4 was supported.

Table 4. Mediation Analysis Results

Hypothesized path	Direct Effect (t)	Indirect effect (t)	Total effect (t)	VAF%	Analysis result	Decision
Re>FO->FL	0.235(4.201)	0.249(7.012)	0.484(10.899)	52.4%	Partial mediation	Supported

FL Flourishing, *FO* Future Orientation, *Re* Resilience

Discussion

This study aimed to identify the links between resilience, future orientation, and flourishing. Specifically, we hypothesized that (1) resilience would significantly predict flourishing; (2) resilience would significantly predict future orientation; (3) future orientation would significantly predict flourishing; and (4) future orientation would mediate the association between resilience and flourishing among preservice teachers in China. According to the

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results, all the hypotheses were supported. These findings support the predictive relationship between resilience and flourishing. This result aligns with those of previous studies. For instance, resilience greatly encourages flourishing among adult survivors of childhood trauma, according to Munoz et al. (2020). Likewise, Yildirim and Belen (2019) demonstrated the predictive role of resilience in flourishing among Turkish adults. This is because resilient people use stress responses that help them stay mentally healthy. Resilience can help to keep positive feelings even when things are tough, which expands individuals' cognitive and behavioral options and builds long-lasting personal resources (Davydov et al., 2010). Our findings build on this evidence regarding preservice teachers experiencing campus-vocation transitions, indicating that individuals with greater resilience are more efficient at managing stress and cultivating effective coping mechanisms, thereby facilitating their flourishing.

Furthermore, the findings are in line with Segner's (2008) research and support the relationship between resilience and future orientation. This result lines up with hope theory (Rand & Cheavens, 2009), which holds that resilience helps people become more future-focused by enabling them to overcome challenges and cultivate an optimistic and forward-looking mindset. The results of this study offer evidence to the idea that preserve teachers who are resilient exhibit a higher degree of future orientation. This result can be explained through the conservation of resources theory (Hobfoll, 1989), which claims that resilient individuals cope with stress by preserving and expanding their resources, and these resources can be used to prepare for future challenges, making them more future oriented. The findings indicated that preservice teachers' future orientation was positively associated with their flourishing. This outcome is consistent with prior research by Webster et al. (2014), who reported that time perspective is associated with greater well-being across the life span.

They suggest that encouraging future orientation in teenagers can help them transition smoothly into adulthood and improve the efficacy of current risk behavior interventions. Previous studies suggest that flourishing teachers exhibit resilience (Richardson, 2002), and Fredrickson (2013) claims that resilience is amplified by positive thinking and emotions and ultimately increases well-being. This perspective is supported by the current study, which suggests that future orientation, characterized by a positive view and emotions toward the future, mediates the relationship between resilience and flourishing. In other words, resilience influences flourishing through future orientation. In addition, other studies have suggested that future orientation buffers against stress and depression among college students (Zheng et al., 2019). Similarly, Hamilton et al. (2015) reported that future orientation lead to decrease development of hopelessness and depressive symptoms among early adolescents. While these studies show that future orientation can buffer ill-being, the current study fills a gap by confirming the key role of future orientation in promoting well-being among preservice teachers.

Limitations and Recommendations for Future Study

This study has some limitations. First, the use of self-report questionnaires may lead to bias, some participants could give socially desirable answers. Future studies may combine surveys with interviews or other methods to improve accuracy. Second, because the design is cross-sectional, it cannot show changes over time or causal relations, so longitudinal studies are suggested (Hamaker et al., 2020). Third, the sample only included preservice teachers in China, which makes it difficult to apply the findings to other groups. Future research should also consider in-service teachers and participants from different cultural backgrounds.

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Theoretical and Practical Implications

This study explored the relationships between resilience, flourishing, and future orientation, and tested whether future orientation mediates the link between resilience and flourishing among Chinese preservice teachers. Structural equation modeling (SEM) was used to examine these associations. The results support the connection between resilience and flourishing during the transition from campus to vocation in educational settings. They also suggest that it is important to include time-related factors, such as future orientation, in theoretical discussions. Empirically, the use of SEM demonstrates how culturally contextualized research, particularly within non-Western settings such as China, can address gaps in universalist assumptions about psychological constructs. This study also deepens our understanding of the relationship between resilience and flourishing by examining these constructs among Chinese preservice teachers from a cultural perspective.

This approach underscores the need for future studies to adapt measurement tools and research designs to reflect collectivist values, such as communal goal setting. Practically, the results offer actionable strategies for intervention design. Teacher trainers and institutions can integrate resilience-building techniques with future-oriented practices to enhance preservice teachers' well-being and professional preparedness, equipping them with setbacks through adaptive cognition and emotion regulation. For policymakers, the study advocates holistic teacher development policies in China that prioritize mental health support systems and curricula fostering long-term planning, ensuring that educators thrive both personally and professionally, particularly during critical campus-vocation transitions. By bridging empirical rigor, cultural nuance, and practical applicability, this research not only refines theoretical models of resilience and flourishing but also provides a blueprint for scalable, culturally aligned interventions to cultivate a thriving educational workforce.

Conclusions

This study showed that both resilience and future orientation are important for improving preservice teachers' flourishing. Previous research has stressed the role of resilience in teachers' career development, but our results add to this by showing a direct positive effect of resilience on flourishing and by identifying the mediating role of future orientation. This offers a new perspective, since many earlier studies treated resilience as a separate trait and paid less attention to how future-oriented thinking links resilience with overall well-being. The findings also question the view that external interventions are more important than building inner resources, such as future planning, in preservice training. For future research, longitudinal and cross-cultural designs are needed to see how resilience and future orientation work together in different contexts. In addition, using classroom simulations together with real-world tasks could make evaluations more realistic. For teacher education, it is important to include resilience training and future-oriented learning in the curriculum, and policymakers should also consider these skills when setting program standards. These insights can help promote the holistic growth of preservice teachers in China.

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DOI 10.35631/IJEPC.1061066

References

Ao, N., Zhang, M., & Tian, G. (2024). Examining pre-service teachers' teaching anxiety during student teaching: A Chinese perspective. *European Journal of Education*, *59*(4). https://doi.org/10.1111/ejed.12734

Agyapong, B., Obuobi-Donkor, G., Burback, L., & Wei, Y. (2022). Stress, burnout, anxiety and depression among teachers: a scoping review. *International Journal of Environmental Research and Public Health*, *19*(17), 10706. https://doi.org/10.3390/ijerph191710706

Balgiu, B. A. (2022). Teachers' Self-Efficacy As a Mediator Between Job Satisfaction And Flourishing. *European Proceedings of Educational Sciences*. https://doi.org/10.15405/epes.22032.8

Bergdahl, N., & Sjöberg, J. (2023). New minds, new methods: Preservice teachers envision the educational future. *In K. Arai (Ed.), Proceedings of the Future Technologies Conference (FTC) 2023, Volume 4* (pp. 314–322). Springer. https://doi.org/10.1007/978-3-031-47448-4_22

Beutel, D., Crosswell, L., & Broadley, T. (2019). Teaching as a 'take-home'job: Understanding resilience strategies and resources for career change preservice teachers. *The Australian Educational Researcher*, *46*, 607–620. https://doi.org/10.1007/s13384-019-00327-1

Butler, J., & Kern, M. L. (2016). The PERMA-Profiler: A brief multidimensional measure of flourishing. *International Journal of Wellbeing*, *6*(3), 1–48. https://doi.org/10.5502/ijw.v6i3.526

Chen, J. J., Jiang, T. N., & Liu, M. F. (2021). Family socioeconomic status and learning engagement in Chinese adolescents: The multiple mediating roles of resilience and future orientation. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.714346

Cheung, G. W., Cooper-Thomas, H. D., Lau, R. S., & Wang, L. C. (2023). Reporting reliability, convergent and discriminant validity with structural equation modeling: A review and best-practice recommendations. *Asia Pacific Journal of Management*, 1–39. https://doi.org/10.1007/s10490-023-09871-y

Cohn, M. A., Fredrickson, B. L., Brown, S. L., Mikels, J. A., & Conway, A. M. (2009). Happiness unpacked: positive emotions increase life satisfaction by building resilience. *Emotion*, *9*(3), 361–368. https://doi.org/10.1037/a0015952

Davydov, D. M., Stewart, R., Ritchie, K., & Chaudieu, I. (2010). Resilience and mental health. *Clinical Psychology Review*, *30*(5), 479–495. https://doi.org/10.1016/j.cpr.2010.03.003

Felaco, C., & Parola, A. (2022). Subjective well-being and future orientation of NEETs: evidence from the Italian sample of the European social survey. *Social Sciences, 11*(10), 482.https://doi.org/10.3390/socsci11100482

Finefter-Rosenbluh, I., & Power, K. (2023). Exploring preservice teachers' professional vision: Modes of isolation, ethical noticing, and anticipation in research communities of practice. *Teaching and teacher education, 132*, 104245. https://doi.org/https://doi.org/10.1016/j.tate.2023.104245

Fredrickson, B. L. (2013). Positive emotions broaden and build. In *Advances in experimental social psychology* (Vol. 47, pp. 1–53). Elsevier. https://doi.org/10.1016/B978-0-12-407236-7.00001-2

Freire, C., Ferradas, M. d. M., García-Bértoa, A., Núñez, J. C., Rodríguez, S., & Piñeiro, I. (2020). Psychological capital and burnout in teachers: The mediating role of flourishing. *International journal of environmental research and public health, 17*(22), 8403. https://doi.org/10.3390/ijerph17228403

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 961-976
DOI 10.35631/IJEPC.1061066

Fusco, L., Sica, L., Boiano, A., Esposito, S., & Aleni Sestito, L. (2019). Future orientation, resilience and vocational identity in southern Italian adolescents. *International Journal for Educational and Vocational Guidance*, *19*, 63–83. https://doi.org/10.1007/s10775-018-9369-2

Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., Ray, S., Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). Evaluation of reflective measurement models. *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook*, 75–90. Springer Nature. https://doi.org/10.1007/978-3-030-80519-7_4

Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, *109*, 101–110. https://doi.org/10.1016/j.jbusres.2019.11.069

Hamaker, E. L., Mulder, J. D., & van IJzendoorn, M. H. (2020). Description, prediction and causation: Methodological challenges of studying child and adolescent development. *Developmental Cognitive Neuroscience*, *46*, 100867. https://doi.org/10.1016/j.dcn.2020.100867

Hamilton, J. L., Connolly, S. L., Liu, R. T., Stange, J. P., Abramson, L. Y., & Alloy, L. B. (2015). It gets better: Future orientation buffers the development of hopelessness and depressive symptoms following emotional victimization during early adolescence. *Journal of Abnormal Child Psychology*, *43*, 465–474. https://doi.org/10.1007/s10802-014-9913-6

Herrman, H., Stewart, D. E., Diaz-Granados, N., Berger, E. L., Jackson, B., & Yuen, T. (2011). What is resilience? *The Canadian Journal of Psychiatry*, *56*(5), 258–265. https://doi.org/10.1177/070674371105600504

Hobfoll, S. E. (1989). Conservation of resources: a new attempt at conceptualizing stress. *American Psychologist*, *44*(3), 513. https://doi.org/10.1037/0003-066X.44.3.513

Hou, X. D., Guntuku, S. C., Cho, Y.-M., Sherman, G., Zhang, T., Li, M., Ungar, L., & Tay, L. (2024). A cross-cultural examination of temporal orientation through everyday language on social media. *Plos One*, *19*(3). https://doi.org/10.1371/journal.pone.0292963

Hu, T., Zhang, D., & Wang, J. (2015). A meta-analysis of the trait resilience and mental health. *Personality and Individual Differences*, *76*, 18–27. https://doi.org/10.1016/j.paid.2014.11.039

Huppert, F. A., & Therefore, T. T. (2013). Flourishing across Europe: Application of a new conceptual framework for defining well-being. *Social Indicators Research*, *110*, 837–861. https://doi.org/10.1007/s11205-011-9966-7

Jeffrey, A., & Mehari, K. (2023). The Primacy of Hope for Human Flourishing. *The Monist*, *106*(1), 12–24. https://doi.org/10.1093/monist/onac019

Ji, Y., Oubibi, M., Chen, S., Yin, Y., & Zhou, Y. (2022). Preservice teachers' emotional experience: Characteristics, dynamics and sources amid the teaching practicum. *Frontiers in Psychology, 13,* 968513. https://doi.org/https://doi.org/10.3389/fpsyg.2022.968513

Johnson, S. R. L., Blum, R. W., & Cheng, T. L. (2014). Future orientation: A construct with implications for adolescent health and wellbeing. *International Journal of Adolescent Medicine and Health*, *26*(4), 459–468. https://doi.org/10.1515/ijamh-2013-0333

Khampirat, B. (2020). The relationship between paternal education, self-esteem, resilience, future orientation, and career aspirations. *Plos One*, *15*(12). https://doi.org/10.1371/journal.pone.0243283

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 961-976
DOI 10.35631/IJEPC.1061066
Li, B., Li, Z., & Fu, M. (2022). Understanding beginning teachers' professional identity changes through job demands-resources theory. *Acta psychologica, 230*, 103760. https://doi.org/10.1016/j.actpsy.2022.103760

Lin, S., Mastrokoukou, S., Longobardi, C., & Bozzato, P. (2024). The influence of resilience and future orientation on academic achievement during the transition to high school: the mediating role of social support. *International Journal of Adolescence and Youth*, *29*(1). https://doi.org/10.1080/02673843.2024.2312863

Liu, X., Huang, X., & Bi, C. (2011). Development of the future orientation questionnaire for adolescents. *Journal of Southwest University: Social Sciences Edition*, *37*(6). https://doi.org/10.1177/0961463X16662669

Loh, J. M., Schutte, N. S., & Thorsteinsson, E. B. (2014). Be happy: The role of resilience between characteristic affect and symptoms of depression. *Journal of Happiness Studies*, *15*, 1125–1138. https://doi.org/10.1007/s10902-013-9467-2

Luthans, F., & Youssef-Morgan, C. M. (2017). Psychological capital: An evidence-based positive approach. *Annual Review of Organizational Psychology and Organizational Behavior*, *4*(1), 339–366. https://doi.org/10.1146/annurev-orgpsych-032516-113324

Mansfield, C. F., Beltman, S., Broadley, T., & Weatherby-Fell, N. (2016). Building resilience in teacher education: An evidenced informed framework. *Teaching and Teacher Education*, *54*, 77–87. https://doi.org/10.1016/j.tate.2015.11.016

Marais-Opperman, V., Rothmann, S. I., & van Eeden, C. (2021). Stress, flourishing and intention to leave of teachers: Does coping type matter? *SA Journal of Industrial Psychology, 47*(1), 1-11. https://doi.org/10.4102/sajip.v47i0.1834

Munoz, R. T., Hanks, H., & Hellman, C. M. (2020). Hope and resilience as distinct contributors to psychological flourishing among childhood trauma survivors. *Traumatology*, *26*, 177–184. https://doi.org/10.1037/trm0000224

Park, S., Choi, H., Park, H., & Shin, Y. K. H. (2024). The Effects of Flourishing, Self-Efficacy, and Grit on Job Satisfaction in Special Education Teachers. *Journal of Speech, 33*(1), 157-166. https://doi.org/10.15724/jslhd.2024.33.1.157

Qin, L., Lu, J., Zhou, Y., Wijaya, T. T., Huang, Y., & Fauziddin, M. (2022). Reduction of academic burnout in preservice teachers: PLS-SEM approach. *Sustainability, 14*(20). **https://doi.org/10.3390/su142013416**

Rand, K. L., & Cheavens, J. S. (2009). Hope theory. *Oxford handbook of positive psychology*, *2*, 323–333.

Rehal, B., & van Nieuwerburgh, C. (2022). Understanding the factors that contribute to educator flourishing. *International Journal of Wellbeing, 12*(2). https://doi.org/10.5502/ijw.v12i2.1931

Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology*, *58*(3), 307–321. https://doi.org/10.1002/jclp.10020

Santilli, S., Ginevra, M. C., Sgaramella, T. M., Nota, L., Ferrari, L., & Soresi, S. (2017). Design my future: An instrument to assess future orientation and resilience. *Journal of Career Assessment*, *25*(2), 281–295. https://doi.org/10.1177/1069072715621524

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial least squares structural equation modeling. In *Handbook of market research* (pp. 587–632). Springer. https://doi.org/10.1007/978-3-319-57413-4_15

Seginer, R. (2008). Future orientation in times of threat and challenge: How resilient adolescents construct their future. *International Journal of Behavioral Development*, *32*(4), 272–282. https://doi.org/10.1177/0165025408090970

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 961-976
DOI 10.35631/IJEPC.1061066
Seginer, R. (2017). Future orientation and psychological well-Being in adolescence: Two multiple-step models. *Time perspective: Theory and Practice*, 339–363. https://doi.org/10.1057/978-1-137-60191-9_15

Seligman, M. (2011). Flourish: A new theory of positive psychology, Authentic happiness. *Flourish (edited). Retrieved from https://www. authentichappiness. sas. upenn. edu/newsletters/flourishnewsletters/newtheory*.

Shang, W., Yu, T., Liang, X., Wang, J., & Su, J. (2022). How does career calling influence preservice Teachers' learning engagement? A multiple mediating roles of occupational self-efficacy and vocational outcome expectation. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.874895

Sharma-Brymer, V., & Brymer, E. (2020). Flourishing and eudaimonic well-being. *Good Health and Well-Being*, 205–214. https://doi.org/10.1007/978-3-319-95681-7_4

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: assessing the ability to bounce back. *International Journal of Behavioral Medicine*, *15*, 194–200. https://doi.org/10.1080/10705500802222972

Squires, V., Walker, K., & Spurr, S. (2022). Understanding self perceptions of wellbeing and resilience of preservice teachers. *Teaching and Teacher Education*, *118*. https://doi.org/10.1016/j.tate.2022.103828

Tsai, J., & Morissette, S. B. (2022). Introduction to the special issue: Resilience and perseverance for human flourishing. *Psychological Trauma: Theory, Research, Practice, and Policy*, *14*(S1), S1-S3. https://doi.org/10.1037/tra0001215

Van Harmelen, A.-L., Gibson, J. L., St Clair, M. C., Owens, M., Brodbeck, J., Dunn, V., Lewis, G., Croudace, T., Jones, P. B., & Kievit, R. A. (2016). Friendships and family support reduce subsequent depressive symptoms in at-risk adolescents. *Plos One*, *11*(5), e0153715. https://doi.org/10.1371/journal.pone.0153715

Van Katwijk, L., Jansen, E., & Van Veen, K. (2023). Preservice teacher research: a way to future-proof teachers? *European Journal of Teacher Education, 46*(3), 435-455. https://doi.org/10.1080/02619768.2021.1928070

Wang, X.-q., Zhu, J.-c., Huo, J.-y., Liu, M.-f., & Ye, B.-j. (2022). Implicit professional identity: assessment and relation with explicit professional identity and well-being of preservice teachers. *European Journal of Teacher Education, 45*(3), 338-355. https://doi.org/10.1080/02619768.2020.1827385

Webster, J. D., Bohlmeijer, E. T., & Westerhof, G. J. (2014). Time to flourish: The relationship of temporal perspective to well-being and wisdom across adulthood. *Aging & mental health*, *18*(8), 1046–1056. https://doi.org/10.1080/13607863.2014.908458

Ye, W., Ding, Y., Han, X., & Ye, W. (2024). Preservice teachers' teaching motivation and perceptions of teacher morality in China. *Educational Studies, 50*(2), 243-260. https://doi.org/10.1080/03055698.2022.2037406

Ye, W., Wang, Z., Zhang, X., Ding, Y., & Ye, W. (2021). Comparing motivations of preservice and beginning teachers in China: impact of culture and experience. *Journal of Education for Teaching, 47*(4), 576-589. https://doi.org/10.1080/02607476.2021.1898911

Yildirim, M., & Belen, H. (2019). The role of resilience in the relationships between externality of happiness and subjective well-being and flourishing: A structural equation model approach. *Journal of Positive Psychology and Wellbeing*, *3*(1), 62–76.

Zheng, L., Lippke, S., Chen, Y., Li, D., & Gan, Y. (2019). Future orientation buffers depression in daily and specific stress. *PsyCh journal*, *8*(3), 342–352. https://doi.org/10.1002/pchj.283