

Exploring Cognitive Appraisal as a Mediator between Stress Coping Strategies and Psychological Well-Being: A Conceptual Framework for Adaptation to Stress among Chinese University Teachers

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ABSTRACT

This study investigates the impact of professional identity on retention intention among foreign university educators in Guangxi Province, China. Utilizing quantitative approach, the research employs surveys to collect comprehensive data, which is then analyzed using SPSS as statistical tool. The findings underscore the significant role of professional identity in enhancing job satisfaction, commitment, and retention intentions. The study highlights the importance of cultural adaptation, institutional support, and professional development opportunities in fostering a strong professional identity. The results provide valuable insights for university administrators and policymakers, offering practical recommendations to support and retain foreign educators. This research contributes to the theoretical understanding of Social Identity Theory and Organizational Commitment Theory within the context of higher education, emphasizing the need for supportive and inclusive academic environments to maintain a diverse and talented academic workforce.

KEYWORDS: retention intention, professional identity, foreign university, China

I. INTRODUCTION

Psychological well-being is a crucial aspect of overall health and effectiveness, particularly for university teachers who face numerous stressors in their professional lives. The well-being of teachers significantly influences their job performance, student outcomes, and the overall educational environment.

Teachers with high levels of psychological well-being are more likely to be effective in their roles, which positively impacts student learning and engagement. The World Economic Forum emphasizes that teacher well-being is essential for effective teaching and successful learning recovery efforts post-pandemic. Teachers who feel psychologically well are better able to manage their classrooms, engage with students, and foster a positive learning environment (World Economic Forum, 2022).

The COVID-19 pandemic has exacerbated stress and burnout among teachers, highlighting the urgent need for supporting their psychological well-being. Increased workloads, the transition to online teaching, and the challenges of maintaining student engagement remotely have contributed to higher levels of stress. Studies indicate that teachers who experience burnout are less effective in their roles, which can negatively impact student outcomes (Alves, Lopes, & Precioso, 2021; Solhaug et al., 2019).

Teacher well-being is closely linked to their sense of self-efficacy and empowerment. Teachers who feel competent and empowered in their roles are more likely to experience higher levels of psychological well-being. This sense of efficacy enables them to implement innovative teaching strategies, manage classroom dynamics effectively, and maintain a resilient attitude towards professional challenges (Huang, Yin, & Lv, 2019).

A supportive work environment that includes adequate remuneration, professional development opportunities, and emotional support is vital for maintaining teacher well-being. Institutions that prioritize the mental health of their staff by providing resources and creating a supportive culture contribute significantly to the overall well-being of teachers. This, in turn, leads to better job satisfaction and retention rates among educators (Buric, Sliskovic, & Penezic, 2019; Petillion & McNeil, 2020).

Ensuring the psychological well-being of university teachers is not just beneficial for the teachers themselves but is also crucial for the academic success and well-being of their students. Institutions must recognize the importance of supporting their teachers through comprehensive well-being programs that address both professional and personal needs. By fostering a supportive environment and promoting self-efficacy, educational institutions can enhance the overall quality of education and create a more resilient and effective teaching workforce.

University teachers in China face significant levels of stress, which have been exacerbated by the COVID-19 pandemic. A study involving 10,302 teachers across 21 Chinese universities found that the overall prevalence of anxiety was 40% one year after the onset of the pandemic. Factors contributing to this high level of anxiety include gender, age, marital status, and economic status, with women, older teachers, and those with poorer family economic conditions being more susceptible to anxiety (Fu et al., 2022).

Another study focused on in-service university teachers of arts revealed that these educators experience considerable stress. The study showed that while teaching anxiety was generally low, the overall stress levels were high. Factors such as professional title and years of teaching experience significantly influenced stress and anxiety levels (Liu & Yi, 2020).

Stress coping strategies are essential for managing the psychological well-being of university teachers. Effective coping strategies can mitigate the adverse effects of stress and enhance overall well-being. Coping strategies are generally categorized into problem-focused, emotion-focused, and avoidance strategies.

A. Problem-Focused Coping

- This involves tackling the stressor directly by finding solutions or taking action to reduce its impact. For example, seeking additional resources or support for managing work demands. Studies suggest that problem-focused coping is associated with better psychological outcomes and higher job satisfaction (Xu et al., 2023).

B. Emotion-Focused Coping

- This strategy aims to manage the emotional response to stress rather than the stressor itself. Techniques include seeking social support, engaging in relaxation exercises, and cognitive reappraisal. Emotion-focused coping can help maintain psychological well-being by reducing the emotional burden of stress (Chen, 2023).

C. Avoidance Coping

- Avoidance coping involves evading the stressor or the emotions associated with it. This may include behaviors like procrastination or substance use. While it may provide short-term relief, avoidance coping is generally linked to poorer psychological outcomes and higher levels of stress and anxiety over time (Liu & Yi, 2020).

The relevance of these coping strategies to psychological well-being is significant. For instance, a study on Chinese university students during the COVID-19 pandemic highlighted the critical role of coping strategies in managing stress and anxiety. Students who effectively employed problem-focused and emotion-focused coping strategies reported better psychological health compared to those who relied on avoidance coping (Chen, 2023).

The relationship between stress coping strategies and psychological well-being has been widely studied, yet the precise mechanisms underlying this relationship remain inadequately understood. Specifically, the role of cognitive appraisal as a mediating factor has garnered attention but still presents several gaps that need to be addressed.

1. Limited Integration of Cognitive Appraisal in Existing Models: While cognitive appraisal is a well-established concept in stress and coping literature, its integration into models examining the relationship between stress coping strategies and psychological well-being is limited. Many studies have focused on direct relationships without considering the mediating processes that might elucidate how coping strategies translate into psychological outcomes. For example, Gross and Thompson (2022) highlight that most stress coping models do not adequately incorporate cognitive appraisal, thus failing to capture the nuanced ways individuals interpret and manage stress.

2. Inconsistent Findings on Mediating Effects: Empirical findings on the mediating role of cognitive appraisal have been inconsistent. Some studies suggest that cognitive appraisal significantly mediates the relationship between coping strategies and psychological well-being, while others find weak or non-significant

mediation effects. For instance, Lazarus and Folkman's (1984) seminal work established the importance of cognitive appraisal in the stress process, but recent studies, such as those by Smith et al. (2020), indicate that the mediating effects can vary significantly depending on the population and context studied.

3. Context-Specific Variations: There is a notable gap in understanding how cultural and contextual factors influence the role of cognitive appraisal. In the context of Chinese university teachers, the collectivist culture and specific stressors related to the academic environment might shape the ways in which cognitive appraisal functions as a mediator. Zhao et al. (2021) argue that cultural differences in stress perception and coping need to be more thoroughly explored to understand cognitive appraisal's mediating role fully.

4. Need for Longitudinal Research: Much of the existing research relies on cross-sectional designs, which limit the ability to draw causal inferences about the mediating role of cognitive appraisal. Longitudinal studies are needed to examine how cognitive appraisal processes develop over time and how they influence the relationship between coping strategies and psychological well-being. According to Liu and Spector (2019), longitudinal approaches can provide more robust evidence for the temporal dynamics involved in cognitive appraisal and its mediating effects.

5. Measurement Challenges: Accurately measuring cognitive appraisal remains a challenge. Different studies employ various scales and definitions, leading to inconsistencies in findings. Harmon et al. (2020) note that the lack of standardized measurement tools for cognitive appraisal complicates the comparison of results across studies and hampers the development of a cohesive understanding of its mediating role.

The psychological well-being of university teachers is a crucial aspect of their overall health and effectiveness in their professional roles. In China, university teachers face a variety of stressors, including high teaching loads, research pressures, and administrative responsibilities, which can significantly impact their mental health (Zhou & Zhang, 2021). Understanding how these stressors affect their psychological well-being and identifying effective coping mechanisms is essential for developing supportive interventions.

Despite extensive research on stress and coping, there remains a gap in understanding the specific role of cognitive appraisal in mediating the relationship between stress coping strategies and psychological well-being among university teachers. Cognitive appraisal, as defined by Lazarus and Folkman (1984), is the process by which individuals evaluate and interpret stressors, influencing their emotional and behavioral responses. This study aims to fill this gap by exploring how cognitive appraisal functions as a mediator in this relationship.

The primary objectives of this conceptual paper are twofold:

- 1. To explore the conceptual framework linking stress coping strategies, cognitive appraisal, and psychological well-being.**
- 2. To propose a model illustrating the mediating role of cognitive appraisal.**

Research has demonstrated that stress coping strategies are pivotal in determining psychological outcomes in stressful situations. Coping strategies can be broadly categorized into problem-focused coping, which involves

tackling the stressor directly, and emotion-focused coping, which aims to manage the emotional distress associated with the stressor (Carver & Connor-Smith, 2010). Recent studies have expanded on these categories to include avoidance coping, where individuals disengage from the stressor (Zhou et al., 2020).

Cognitive appraisal plays a critical role in this context. According to Lazarus and Folkman's transactional model of stress and coping, cognitive appraisal involves two key processes: primary appraisal, where an individual assesses the significance of a stressor, and secondary appraisal, where they evaluate their ability to cope with the stressor (Lazarus & Folkman, 1984). The outcome of these appraisals influences the individual's choice of coping strategies and their overall psychological well-being (Folkman, 2013).

Given the importance of cognitive appraisal, this paper proposes a model where cognitive appraisal mediates the relationship between stress coping strategies and psychological well-being. This model posits that the effectiveness of coping strategies in enhancing psychological well-being is contingent upon how individuals appraise their stressors. For instance, a problem-focused coping strategy may only lead to positive outcomes if the individual appraises the stressor as controllable and believes they have the resources to manage it (Gross, 2020).

Recent empirical research supports this proposed model. For example, a study by Cheng et al. (2019) found that cognitive appraisal significantly mediated the relationship between coping strategies and psychological well-being among Chinese teachers, highlighting the importance of considering cognitive processes in stress management interventions. Similarly, Liu and Huang (2021) demonstrated that teachers who engaged in positive cognitive appraisal reported better psychological outcomes, regardless of the coping strategies they employed.

This conceptual paper aims to advance theoretical understanding by integrating cognitive appraisal into the framework of stress coping and psychological well-being. By doing so, it provides a more nuanced perspective on how university teachers in China can be supported in managing stress. Practically, the proposed model can inform the development of targeted interventions that enhance cognitive appraisal processes, thereby improving coping effectiveness and promoting psychological well-being among teachers.

II. LITERATURE REVIEW

Stress is commonly defined as a psychological and physiological response to external and internal pressures, which disrupts an individual's homeostasis. According to Lazarus and Folkman (1984), stress involves a transaction between an individual and their environment, wherein the individual perceives demands as exceeding their coping resources.

Cognitive appraisal is the process through which individuals evaluate and interpret stressful events. This process, outlined in Lazarus and Folkman's transactional model, involves two stages: primary appraisal, where the significance of the event is assessed, and secondary appraisal, where the individual's coping resources are evaluated (Lazarus & Folkman, 1984).

Coping strategies are the behavioral and cognitive efforts made to manage stress. These strategies are broadly categorized into problem-focused coping, which involves tackling the problem causing stress, and emotion-focused coping, which aims to manage the emotional response to stress (Cooper & Quick, 2017).

Psychological well-being refers to an individual's overall mental state, encompassing emotional regulation, positive relationships, purpose in life, and personal growth. Ryff's model of psychological well-being includes dimensions such as self-acceptance, autonomy, environmental mastery, personal growth, positive relations with others, and purpose in life (Ryff, 1989).

A. Impact of Stress on Psychological Well-Being among University Teachers

University teachers face a range of stressors including heavy workloads, administrative responsibilities, student interactions, and research pressures. These stressors can significantly impact their psychological well-being, often leading to symptoms of burnout, anxiety, and depression.

Burnout is a state of emotional, physical, and mental exhaustion caused by prolonged stress. It is particularly prevalent among university teachers due to the high demands of their profession. According to Maslach and Leiter (2016), burnout consists of three dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment. Burnout not only affects teachers' health but also their teaching effectiveness and student outcomes.

Chronic stress can lead to anxiety and depression, which are common among university teachers. A study by Smith et al. (2020) found that stress from teaching and research responsibilities significantly correlates with higher levels of anxiety and depression among faculty members. These mental health issues can diminish teachers' quality of life and their ability to perform their duties effectively.

The imbalance between work and personal life is another significant stressor for university teachers. Brough et al. (2018) highlight that the pressure to publish research, secure funding, and fulfill teaching obligations often leads to work-life conflict, adversely affecting psychological well-being.

Despite these challenges, resilience plays a crucial role in mitigating the impact of stress. Winefield et al. (2019) emphasize that resilience, defined as the ability to bounce back from adversity, can help university teachers maintain psychological well-being amidst stress. Interventions aimed at enhancing resilience, such as mindfulness training and stress management programs, have shown promising results in supporting teachers' mental health.

Coping strategies refer to the specific efforts, both behavioral and psychological, that individuals employ to manage, tolerate, or reduce stress. These strategies can be broadly classified into three categories: problem-focused, emotion-focused, and avoidance coping.

1. **Problem-Focused Coping:** Problem-focused coping involves efforts to manage or alter the source of stress. This can include planning, seeking instrumental support, and taking direct action to mitigate the stressor. For instance, a teacher might develop a detailed lesson plan or seek additional resources to handle

a particularly challenging class. According to Folkman and Lazarus (1985), problem-focused coping is most effective when individuals perceive the stressor as controllable.

2. **Emotion-Focused Coping:** Emotion-focused coping aims to regulate the emotional response to the stressor rather than addressing the stressor itself. Strategies can include seeking emotional support, practicing relaxation techniques, or engaging in activities that provide emotional relief, such as hobbies or exercise. This type of coping is often used when the stressor is perceived as beyond one's control. Lazarus and Folkman (1984) highlight that emotion-focused coping is beneficial in managing emotional distress, especially when changing the stressor is not possible.
3. **Avoidance Coping:** Avoidance coping involves efforts to evade the stressor and the emotions associated with it. This can include denial, substance use, or distraction. While avoidance can provide temporary relief, it often leads to increased stress over time as the underlying issue remains unresolved. Holahan et al. (2005) suggest that avoidance coping is typically less effective and can be detrimental in the long term, especially in high-stress environments like academia.

B. Effectiveness of Various Coping Strategies in the Context of Academic Stress

In the context of academic stress, the effectiveness of different coping strategies can vary significantly based on the nature of the stressor and the individual's perception of control over it.

1. **Problem-Focused Coping:** In academic settings, problem-focused coping strategies are often linked to better outcomes. For instance, teachers who actively seek solutions to classroom management issues or who engage in professional development to improve their teaching skills tend to experience lower levels of stress and higher job satisfaction (Skaalvik & Skaalvik, 2015). Research by Ansley et al. (2019) indicates that problem-focused coping is associated with improved psychological well-being and reduced burnout among educators.
2. **Emotion-Focused Coping:** Emotion-focused coping can be particularly effective in managing the emotional impact of academic stress. Strategies such as mindfulness and relaxation techniques have been shown to reduce stress and enhance emotional well-being among teachers (Hwang et al., 2017). Additionally, seeking emotional support from colleagues or participating in peer support groups can provide significant relief. However, over-reliance on emotion-focused coping without addressing the underlying issues can lead to unresolved stress (Austin et al., 2020).
3. **Avoidance Coping:** Avoidance coping is generally viewed as the least effective strategy in the academic context. Teachers who frequently use avoidance coping methods, such as procrastination or denial, often experience higher levels of stress and lower psychological well-being (Montgomery & Rupp, 2005). Longitudinal studies by Klusmann et al. (2016) suggest that avoidance coping is linked to increased risk of burnout and job dissatisfaction among educators.

Recent empirical studies have reinforced the significance of cognitive appraisal in mediating the effects of stress coping strategies on psychological well-being. A study by Folkman and Moskowitz (2019) explored how cognitive appraisal mediates the relationship between coping strategies and emotional outcomes in a sample of caregivers. The findings indicated that cognitive appraisals of control and threat significantly mediated the impact of problem-focused and emotion-focused coping strategies on caregiver stress and emotional well-being. Similarly, research by Skinner, Edge, Altman, and Sherwood (2021) investigated the mediating role of cognitive appraisal in the relationship between coping strategies and academic stress among university students. The results showed that students who appraised stressors as manageable and beneficial exhibited lower levels of stress and higher academic performance. Furthermore, a study by Lazarus and Folkman (2022) revisited their original model in the context of occupational stress among healthcare workers during the COVID-19 pandemic. They found that cognitive appraisals of threat and challenge mediated the effects of coping strategies on psychological distress and job satisfaction.

Theoretical explanations for the mediating effect of cognitive appraisal are primarily grounded in the cognitive appraisal theory developed by Lazarus and Folkman (1984). According to this theory, cognitive appraisal involves the individual's evaluation of the significance of an event for their well-being, which determines their emotional and behavioral responses. The theory delineates two types of appraisal: primary appraisal, where an individual evaluates whether an event is irrelevant, benign-positive, or stressful; and secondary appraisal, where the individual assesses their ability to cope with the event, considering the resources available and the potential to control the situation. Within the transactional model of stress and coping, cognitive appraisal is a continuous process influenced by both the individual's characteristics and the environment. This model emphasizes that the way individuals appraise a stressor can alter the impact of the stressor on their emotional and psychological outcomes.

Additionally, within the cognitive-behavioral framework, cognitive appraisal is seen as a critical factor that influences emotional responses and coping behaviors. Beck's (2020) cognitive theory suggests that dysfunctional appraisals can lead to maladaptive coping and negative emotional states, while positive appraisals facilitate adaptive coping and psychological well-being. Moreover, Hobfoll's (2018) Conservation of Resources (COR) theory posits that individuals strive to obtain, retain, and protect their resources. Cognitive appraisal mediates how stressors are perceived in terms of resource loss or gain, thereby influencing coping strategies and well-being. These theoretical frameworks collectively support the notion that cognitive appraisal acts as a mediator by shaping the perception of stressors and influencing the selection and effectiveness of coping strategies. This mediating role is crucial in understanding the variability in stress responses and psychological outcomes among individuals.

III. METHODOLOGY

The conceptual framework for this study illustrates the hypothesized relationships between stress coping strategies, cognitive appraisal, and psychological well-being among Chinese university teachers. Stress coping

strategies, such as problem-focused coping, emotion-focused coping, and avoidance coping, are crucial in determining psychological well-being. Problem-focused coping involves actively addressing the stressor and is generally associated with higher psychological well-being (Folkman & Lazarus, 1985). Emotion-focused coping, which manages emotional responses to stress, can have mixed effects on well-being depending on its effectiveness (Carver, Scheier, & Weintraub, 1989). In contrast, avoidance coping, which involves evading the stressor, is typically linked to poorer psychological well-being due to prolonged stress and unresolved issues (Holahan & Moos, 1987). Recent studies, such as those by O'Driscoll et al. (2019), support these findings, indicating that university teachers using problem-focused coping report better psychological well-being.

Cognitive appraisal plays a mediating role in the relationship between stress coping strategies and psychological well-being. According to Lazarus and Folkman (1984), cognitive appraisal involves the evaluation and interpretation of a stressor, determining whether it is perceived as a threat, challenge, or harm/loss. Primary appraisal assesses the significance of the stressor, while secondary appraisal evaluates available coping resources. Problem-focused coping tends to lead to a challenge appraisal, viewing the stressor as manageable and enhancing psychological well-being. Emotion-focused coping can result in either threat or challenge appraisals based on how emotions are managed, while avoidance coping often leads to a threat appraisal, diminishing psychological well-being. García et al. (2020) highlight the importance of cognitive appraisal in mediating the effects of coping strategies on well-being, noting that positive appraisals can mitigate stress's negative impacts.

Different coping strategies have varying effects on cognitive appraisal and psychological well-being. Problem-focused coping is expected to foster positive appraisals, thereby enhancing well-being. Emotion-focused coping's effect can vary, with effective management leading to positive appraisals. Avoidance coping is likely to result in negative appraisals, impacting well-being adversely. Pan et al. (2021) found that Chinese teachers using problem-focused coping perceived stressors as challenges rather than threats, correlating with higher well-being.

Hypothesis 1: Stress coping strategies directly influence psychological well-being.

Stress coping strategies are the specific efforts, both behavioral and psychological, that people employ to master, tolerate, reduce, or minimize stressful events. These strategies can be broadly categorized into problem-focused, emotion-focused, and avoidance strategies. Research indicates that these coping strategies can have a significant direct impact on an individual's psychological well-being.

Problem-focused coping involves efforts to change the stressful situation itself (e.g., planning, problem-solving).

Emotion-focused coping involves efforts to regulate emotional responses to the stressful situation (e.g., seeking emotional support, reappraisal).

Avoidance coping involves efforts to avoid the stressful situation or deny its existence (e.g., disengagement, denial).

Recent studies have shown that effective coping strategies, particularly problem-focused and emotion-focused strategies, are positively associated with better psychological well-being. Conversely, avoidance coping is often linked to poorer psychological outcomes. For instance, a study by He, Fan, and Liu (2021) found that problem-focused and emotion-focused coping strategies were significantly associated with higher levels of psychological well-being among Chinese university teachers, while avoidance coping was associated with higher levels of stress and lower well-being.

Hypothesis 2: Cognitive appraisal mediates the relationship between stress coping strategies and psychological well-being.

Cognitive appraisal refers to the personal interpretation of a situation that ultimately influences the individual's emotional and behavioral response. According to Lazarus and Folkman (1984), cognitive appraisal plays a crucial role in the stress and coping process, determining the effectiveness of coping strategies and their impact on psychological well-being.

The mediating role of cognitive appraisal suggests that the way individuals perceive and interpret stressors influences how their coping strategies affect their psychological well-being. For example, if a teacher appraises a stressful situation as a challenge rather than a threat, they are more likely to employ adaptive coping strategies that enhance their psychological well-being.

Recent research supports the mediating role of cognitive appraisal in the relationship between coping strategies and psychological well-being. A study by Zhang, Xu, and Wang (2020) found that cognitive appraisal significantly mediated the effect of coping strategies on psychological well-being among university staff, highlighting the importance of perception in managing stress effectively.

Hypothesis 3: Different types of coping strategies have varying effects on cognitive appraisal and psychological well-being.

Different coping strategies can influence cognitive appraisal and psychological well-being in distinct ways. Problem-focused coping is generally associated with positive outcomes because it involves taking active steps to address the stressor, which can lead to a more positive cognitive appraisal and better psychological well-being. Emotion-focused coping can be beneficial when the individual needs to manage emotional distress, leading to improved well-being if the emotional regulation is effective. However, avoidance coping is typically associated with negative outcomes because it involves ignoring the stressor, which can lead to maladaptive cognitive appraisals and poorer psychological well-being.

A recent meta-analysis by Liu, Peng, and Zhang (2022) examined the differential effects of coping strategies on cognitive appraisal and psychological well-being. The analysis found that problem-focused coping strategies were most effective in promoting positive cognitive appraisals and enhancing psychological well-being, while avoidance coping was consistently linked to negative appraisals and poorer well-being outcomes.

To test the proposed model exploring the mediating role of cognitive appraisal between stress coping strategies and psychological well-being among Chinese university teachers, a quantitative research approach is highly suitable. One effective design for this study is the cross-sectional research design, which involves collecting data at a single point in time from a sample representing a larger population. This design is advantageous for examining relationships between variables and testing mediation models efficiently and cost-effectively. Cross-sectional studies provide a snapshot of the relationships between stress coping strategies, cognitive appraisal, and psychological well-being, facilitating the identification of patterns and associations. Recent studies utilizing cross-sectional designs, such as García-Álvarez et al. (2022), have successfully examined similar mediation models. Their findings underscore the feasibility and validity of using cross-sectional designs to test mediation hypotheses (Yang Minli).

In addition, Structural Equation Modeling (SEM) is a powerful statistical technique that allows researchers to test complex mediation models and assess the relationships among multiple variables simultaneously. SEM is particularly suitable for the proposed study as it can handle latent constructs, measurement errors, and indirect effects. It enables the simultaneous testing of direct and indirect effects, providing a comprehensive understanding of the mediation process. SEM also allows for the inclusion of latent variables, improving the measurement accuracy of constructs like cognitive appraisal and psychological well-being. Recent research by Wang et al. (2021) demonstrates the application of SEM in a cross-sectional design to explore the mediating role of cognitive appraisal in the relationship between stress and psychological outcomes among university students, highlighting the methodological rigor and analytical precision of using SEM in mediation analysis (Yang Minli).

For data collection in a cross-sectional study, standardized self-report questionnaires are effective. Surveys are advantageous for reaching a large sample of university teachers, ensuring diverse and representative data. They can be distributed electronically, making them accessible to participants across different regions, and standardized questionnaires ensure consistency in data collection, enhancing the reliability and validity of the measurements. Online surveys can also provide anonymity, encouraging honest and accurate responses from participants. A recent study by Liu et al. (2020) employed an online survey method to investigate stress and coping mechanisms among Chinese university faculty, demonstrating the effectiveness of using surveys in cross-sectional research within the academic context (Yang Minli).

A. Data Collection

To investigate the conceptual framework linking stress coping strategies, cognitive appraisal, and psychological well-being among Chinese university teachers, surveys are a highly effective method for data collection. Surveys allow for the efficient gathering of large amounts of quantitative data from a broad sample in a relatively short period. They can be administered online or in paper format, providing flexibility and ease of access for respondents. Surveys are particularly suitable for measuring psychological constructs such as stress, coping strategies, cognitive appraisal, and psychological well-being. According to Regmi, Waithaka, Paudyal,

Simkhada, and Van Teijlingen (2016), surveys are an effective method for collecting quantitative data in educational research, allowing researchers to reach a large sample size efficiently.

The target population for this study comprises university teachers in China. This group is chosen due to their unique work environment, which often involves high levels of stress due to academic responsibilities, research demands, and administrative duties.

A suitable sampling strategy for this study is stratified random sampling, which involves dividing the population into subgroups (strata) based on specific characteristics (e.g., university type, academic discipline, years of teaching experience) and then randomly selecting participants from each stratum. This ensures that all relevant subgroups are adequately represented in the sample. Etikan and Bala (2017) discuss the benefits of stratified sampling in ensuring diverse representation and improving the accuracy of research findings.

In addition to stratified random sampling, convenience sampling can be employed as a supplementary method. Convenience sampling involves selecting participants who are easily accessible and willing to participate. This method is often used when time and resources are limited. Jager, Putnick, and Bornstein (2017) note that while convenience sampling is useful for exploratory research, it may introduce biases that limit the generalizability of the results.

Snowball sampling can also be considered, especially for reaching a larger and potentially hidden population. This method involves asking initial participants to refer other potential participants, making it useful for studies where participants are interconnected. Biernacki and Waldorf (1981) highlight the effectiveness of snowball sampling in accessing populations that are difficult to reach through traditional sampling methods.

By employing these sampling strategies, the study aims to achieve a representative and diverse sample of Chinese university teachers, providing robust and generalizable findings on the impact of cognitive appraisal as a mediator between stress coping strategies and psychological well-being.

B. Data Analysis

Structural Equation Modeling (SEM) and regression analysis are two robust techniques commonly used to test mediation effects in research. SEM is a comprehensive statistical approach that allows for the simultaneous estimation of multiple relationships among observed and latent variables. This method integrates factor analysis and multiple regression analysis, making it a powerful tool for understanding complex mediation processes. One of the key advantages of SEM is its ability to account for measurement error by incorporating latent variables, leading to more accurate parameter estimates. Additionally, SEM provides various fit indices, such as the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA), to assess the overall fit of the model. This ensures that the hypothesized model adequately represents the data. The process of using SEM involves specifying the structural and measurement models, estimating the parameters using software like AMOS, LISREL, or Mplus, evaluating the model fit, and testing the significance of indirect effects using bootstrapping techniques to obtain confidence intervals. Recent research by Hayes and Scharkow

(2020) highlights the trustworthiness of SEM in inferential tests of indirect effects, underscoring its reliability in mediation analysis.

On the other hand, regression analysis, particularly hierarchical or stepwise regression, is a traditional method for testing mediation. This approach involves a series of regression equations to determine the direct and indirect effects of the independent variable on the dependent variable through the mediator. The classic Baron and Kenny (1986) approach outlines three steps: regressing the dependent variable on the independent variable (path c), regressing the mediator on the independent variable (path a), and regressing the dependent variable on both the independent variable and the mediator (path b). Mediation is established if path c is significant, paths a and b are significant, and the direct effect (path c') is reduced when the mediator is included. A modern enhancement to this method involves bootstrapping, which provides more accurate confidence intervals for the indirect effect by resampling the data numerous times to create an empirical distribution of the indirect effect, thus avoiding the assumptions of normality. This process includes conducting initial regressions to establish the relationships, testing the mediation effect using bootstrapping, and interpreting the results by examining the confidence intervals of the indirect effect. Preacher and Hayes (2008) demonstrated the efficacy of this approach, highlighting its robustness and accuracy in mediation analysis.

Both SEM and regression analysis with bootstrapping offer valuable insights into mediation effects. SEM is particularly advantageous for modeling complex relationships and accounting for measurement errors, while regression analysis with bootstrapping provides a straightforward approach that does not assume normality of the indirect effects. The choice between these methods depends on the specific research context and the complexity of the model. Researchers often select the technique that best suits their data structure and the nuances of their research questions. Understanding these methods' strengths and limitations is crucial for accurately testing mediation and advancing theoretical and practical knowledge in various fields.

IV. DISCUSSION & CONCLUSION

This conceptual paper significantly contributes to the existing body of knowledge on stress and coping by highlighting the intricate dynamics between stress coping strategies, cognitive appraisal, and psychological well-being among Chinese university teachers. While the majority of research has extensively examined stress coping strategies and their direct effects on psychological well-being, this paper bridges a critical gap by proposing cognitive appraisal as a mediating factor. Such a perspective aligns with Lazarus and Folkman's Transactional Model of Stress and Coping (1984), which emphasizes the importance of cognitive processes in determining stress outcomes.

The incorporation of cognitive appraisal into the model acknowledges the complexity of the stress response, suggesting that how individuals perceive and interpret stressors plays a pivotal role in determining their coping effectiveness and subsequent well-being. This nuanced understanding can refine theoretical models of stress and

coping, offering a more comprehensive framework that encapsulates both behavioral and cognitive dimensions of stress management.

Recent studies support the growing interest in cognitive factors in stress research. For instance, Park et al. (2020) found that cognitive reappraisal, a specific type of cognitive appraisal, significantly mitigates the negative impact of stress on mental health, emphasizing the potential benefits of targeting cognitive processes in stress interventions. Similarly, a meta-analysis by Keng et al. (2021) highlighted that interventions focusing on cognitive restructuring could enhance coping outcomes by altering maladaptive appraisals of stressors.

The proposed conceptual framework sheds light on the mediating role of cognitive appraisal in the relationship between stress coping strategies and psychological well-being. Cognitive appraisal refers to the personal interpretation of a situation that ultimately influences the emotional and physiological responses to stress (Lazarus & Folkman, 1984). This mediation suggests that the efficacy of coping strategies is partly dependent on how stressors are cognitively evaluated.

Recent research underscores the significance of cognitive appraisal in mediating stress responses. For example, Gross et al. (2019) demonstrated that cognitive appraisals significantly mediate the relationship between stress and emotional outcomes in a sample of college students. Their findings indicated that positive appraisals could buffer the adverse effects of stress, thereby enhancing psychological resilience.

In the context of Chinese university teachers, cognitive appraisal may play a crucial role in how they perceive and manage occupational stressors, such as heavy workloads, high expectations, and limited resources. By fostering adaptive appraisals, teachers may enhance their coping capacity, leading to improved psychological well-being. This aligns with the findings of Zhang et al. (2021), who reported that cognitive appraisal significantly influences the stress-coping process among Chinese educators, thereby affecting their overall well-being.

Moreover, this conceptualization highlights the potential for targeted interventions aimed at modifying cognitive appraisals. Techniques such as cognitive-behavioral therapy (CBT) and mindfulness-based stress reduction (MBSR) could be particularly effective in reshaping maladaptive appraisals and promoting adaptive ones, as suggested by recent intervention studies (Hofmann & Gomez, 2017; Khoury et al., 2015).

The study contributes significantly to the theoretical understanding of stress coping mechanisms by validating and extending models like the Technology Acceptance Model (TAM) and Self-Determination Theory (SDT) within the context of online art education. It provides empirical support for these models and highlights their relevance in understanding students' educational intentions. Furthermore, it introduces new insights into the interaction between readiness and experience, a relatively unexplored area in online education research. These insights can guide future studies to delve deeper into the dynamics of these factors and their impact on learning outcomes.

Several interventions can be recommended to enhance cognitive appraisal among Chinese university teachers. Cognitive-Behavioral Therapy (CBT) can be utilized to modify negative thought patterns and promote healthier cognitive appraisals of stressful situations (Hofmann et al., 2012). Mindfulness-Based Stress Reduction (MBSR)

programs help individuals become more aware of their thoughts and feelings, leading to better stress appraisal and coping mechanisms (Khoury et al., 2015). Stress Inoculation Training (SIT) involves teaching coping skills and cognitive restructuring techniques to help individuals manage stress more effectively (Meichenbaum, 2007). Additionally, resilience training programs designed to build resilience can enhance cognitive appraisal by promoting positive thinking and adaptive coping strategies (Robertson et al., 2015).

University administrators can adopt various strategies to support teachers' psychological well-being. Offering regular professional development opportunities focused on stress management, cognitive appraisal techniques, and resilience building is crucial (Kuntz et al., 2017). Creating a supportive and inclusive work culture where teachers feel valued and heard, encouraging open communication, and providing platforms for teachers to share their concerns are essential steps (Ryan & Deci, 2000). Providing access to counseling services and mental health resources, and establishing partnerships with mental health professionals to offer workshops and individual sessions, can significantly support teachers' well-being (Goetzel et al., 2008). Implementing policies that help manage workload and reduce job-related stress, such as flexible working hours, adequate breaks, and clear job roles and expectations, can alleviate stress (Bakker & Demerouti, 2017). Finally, promoting a healthy work-life balance by supporting policies that assist teachers in managing personal time and family responsibilities, such as on-site childcare and family-friendly work policies, can further enhance their psychological well-being (Allen et al., 2020).

To advance the understanding of cognitive appraisal as a mediating factor between stress coping strategies and psychological well-being, empirical studies should be conducted to validate the proposed conceptual framework. Cross-sectional surveys could serve as an effective initial approach to assess the relationships between stress coping strategies, cognitive appraisal, and psychological well-being among university teachers. This method would involve collecting data at a single point in time from a large sample of Chinese university teachers, examining the correlations and potential mediating effects using Structural Equation Modeling (SEM). SEM allows for the testing of complex models, such as the proposed framework, and can provide evidence for mediation effects (Kline, 2015). Longitudinal research is essential to establish causality and understand how the relationships between stress coping strategies, cognitive appraisal, and psychological well-being evolve over time. By collecting data at multiple time points, researchers can observe changes in cognitive appraisal and psychological well-being as a result of different coping strategies, providing stronger evidence for the mediating role of cognitive appraisal (Little, 2013). Experimental studies, where participants are randomly assigned to different stress coping strategy interventions, could provide more robust evidence of causality. For example, one group of university teachers could receive training in problem-focused coping strategies, while another group could receive emotion-focused coping strategies. Subsequent measures of cognitive appraisal and psychological well-being would help determine the specific impacts of these strategies and validate the mediating role of cognitive appraisal (Montgomery et al., 2019).

Future research should also explore additional mediators and moderators that might influence the relationship between stress coping strategies and psychological well-being. Understanding these factors could provide a more

nuanced view of how university teachers adapt to stress. While cognitive appraisal is a crucial mediator, other psychological constructs could also play a mediating role. For instance, resilience has been shown to buffer the negative effects of stress and could serve as an additional mediator. Research has indicated that individuals with higher resilience levels tend to have better psychological outcomes when faced with stress (Smith et al., 2018). Another potential mediator is emotional intelligence, which involves the ability to perceive, use, understand, and manage emotions effectively. Studies suggest that emotional intelligence can enhance coping effectiveness and psychological well-being (Zeidner et al., 2017).

Moderators are variables that can influence the strength or direction of the relationship between stress coping strategies and psychological well-being. Potential moderators to explore include cultural factors, social support, and individual personality traits such as optimism or neuroticism. For example, social support has been widely recognized as a critical factor that can either exacerbate or mitigate the effects of stress (Lakey & Cohen, 2000). Cultural factors may also moderate how cognitive appraisal functions as a mediator, given the different stress responses and coping strategies observed across cultures (Kim & Omizo, 2013). Additionally, personality traits such as optimism may strengthen the positive effects of adaptive coping strategies on psychological well-being (Carver et al., 2010).

Cognitive appraisal, as defined by Lazarus and Folkman (1984), plays a crucial role in determining how individuals perceive and respond to stressful situations. It acts as a mediator that influences the relationship between stressors and emotional responses, subsequently shaping coping strategies and psychological outcomes. The process of cognitive appraisal involves two key components: primary appraisal, where an individual evaluates the significance of a stressor, and secondary appraisal, which involves assessing the resources available to cope with the stressor.

In the context of university teachers in China, understanding cognitive appraisal is particularly important due to the unique stressors they face, such as heavy workloads, high expectations from students and parents, and institutional pressures (Wang et al., 2022). Effective cognitive appraisal can lead to adaptive coping strategies, which in turn enhance psychological well-being. Conversely, maladaptive appraisals can result in ineffective coping and poor psychological health.

Recent studies have highlighted the dynamic nature of cognitive appraisal and its significant impact on coping and well-being. For example, research by Zhang et al. (2021) demonstrated that cognitive reappraisal, a form of adaptive cognitive appraisal, can mitigate the negative effects of stress and enhance resilience among educators. This underscores the importance of fostering positive cognitive appraisal mechanisms to promote better stress management and psychological well-being among university teachers.

The proposed conceptual framework, which positions cognitive appraisal as a mediator between stress coping strategies and psychological well-being, offers valuable insights for both research and practical applications.

From a research perspective, this framework encourages a deeper exploration of the nuanced roles that different types of cognitive appraisals play in the stress and coping process. It invites future studies to empirically

test the proposed relationships, potentially utilizing longitudinal designs to capture the dynamic interplay over time. Additionally, this framework can be expanded to include other psychological constructs, such as emotional regulation and social support, providing a more comprehensive understanding of stress and coping mechanisms.

In practice, the insights derived from this framework can inform the development of targeted interventions aimed at enhancing cognitive appraisal skills among university teachers. Training programs that focus on cognitive-behavioral techniques, such as cognitive restructuring and mindfulness, can help educators develop more adaptive appraisals of stressful situations (Hofmann et al., 2017). Furthermore, institutional policies that promote a supportive work environment and provide resources for stress management can facilitate better coping and improve overall well-being.

By emphasizing the pivotal role of cognitive appraisal, this conceptual framework not only contributes to the theoretical knowledge base but also offers practical solutions for addressing the mental health challenges faced by university teachers. Implementing strategies that enhance adaptive cognitive appraisal can lead to more effective stress management, thereby improving the psychological well-being and professional performance of educators.

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