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Psychological Adaptation in International Students' Migration: Social Support, Meaning in Life, And Resilience in China

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ABSTRACT: As international student mobility increases, psychological adaptation has become a central concern, particularly in contexts where cultural unfamiliarity intersects with academic pressure. This study investigates how social support shapes the psychological well-being of international students in China, examining both direct effects and indirect pathways through meaning in life and resilience. Drawing on debates on migrant integration and the stress-

buffering framework, a cross-sectional survey was conducted with 503 international students from 61 countries. Partial least squares structural equation modeling (PLS-SEM) was employed to test the proposed relationships. The findings indicate that social support significantly predicts resilience and meaning in life, which, in turn, enhance psychological well-being. Mediation analyses confirm significant indirect effects, and the model demonstrates strong explanatory power. These results position psychological well-being as a core dimension of migrant integration rather than a secondary outcome. The study underscores the importance of migration-sensitive support systems, including mentoring, counseling, and recognition of transnational pressures, in fostering sustainable psychological adaptation.

Keywords: International student migration, psychological adaptation, social support, meaning in life, resilience, integration

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INTRODUCTION

Global migration has undergone a substantial transformation in recent decades, with over 6 million students anticipated to have studied abroad by 2023 (UNESCO, 2024). International students are increasingly conceptualized as a distinct form of temporary skilled migration embedded within wider global mobility flows, knowledge economies, and migration infrastructures shaped by state policies, scholarships, and visa regimes (King & Raghuram, 2013; Brooks & Waters, 2011). However, their mobility also raises questions central to migration research, including integration, belonging, and adaptation (Ager & Strang, 2008; Smith & Khawaja, 2011). Frequently, students cope with substantial psychological stress when they are placed in new learning and living environments (Razgulin et al., 2023; Sullivan & Kashubeck-West, 2015). Common issues among international students include language barriers, homesickness, feelings of isolation, and academic pressures, all of which may cause emotional stress and acculturative pressure (Kristiana et al., 2022). These challenges reflect broader processes of adaptation in which psychological well-being becomes central to successful mobility.

Social support (SS) includes practical help, encouraging emotions, and feeling connected in families, with peers, the faculty, and through support services (Myers-Walls et al., 2011). Various studies continue to show that having SS helps with academic success and psychological well-being (PWB) (McLean et al., 2023; Xin, 2022). SS is conceptualized not merely as interpersonal aid but as a

relational mechanism that enables migrants to navigate host-society institutions and maintain transnational ties (Beech, 2015; Robertson, 2013). These two qualities are especially important as they guide students through the emotional and academic challenges of learning and living in a new atmosphere. RSE, or the ability to recover from setbacks, equips students with self-regulation and perseverance, allowing them to manage cultural and academic adversity (Erdogan et al., 2015; Rudwan & Alhashimia, 2018). Students with higher RSE tend to exhibit lower rates of mental health concerns, engage more positively with their environment, and avoid behaviors detrimental to well-being (Abulfaraj et al., 2024; Oshio et al., 2018). In parallel, MIL, the cognitive appraisal of one's life as structured and purposeful, has been shown to protect against depression, loneliness, and emotional distress (He et al., 2023; Steger et al., 2006). Recent scholarship shows how student-migrants draw on meaning and resilience to navigate bordering practices and visa precarity, with documented mental health costs of insecure status (Gallo & Adams Corral, 2023; Ullah, 2025).

Together, these concepts show how research has shifted from problem-focused to strength-based methodologies guided by positive psychology (Fredrickson, 2004; Ryff, 1989). By emphasizing intrapersonal capacities as well as interpersonal support, this theoretical approach aims to improve well-being. This framing aligns both with migration study debates on integration and with the Cohen and Wills (1985) stress-buffering hypothesis, demonstrating that social relationships can alleviate the negative psychological effects of migration stress, especially when complemented by intrapersonal strengths such as MIL and RSE. By embedding these constructs in migration frameworks, the present study rethinks psychological adaptation as a core dimension of international student migration. Although these factors, SS, MIL, and RSE, have been explored independently (Kristiana et al., 2022), limited research integrates them into a cohesive model, especially in non-Western contexts (Zhang & Goodson, 2011). Existing research has primarily focused on the direct effects of social support on psychological outcomes (Kristiana et al., 2022), without fully examining indirect pathways via MIL and RSE. Migration studies critiques show that international student mobility research often privileges educational framings, overlooking how well-being and psychological resources are central to migrant adaptation, integration trajectories, and long-term outcomes (King & Raghuram, 2013).

China, now home to over 500,000 students from abroad (MOE, China, 2023), remains underrepresented in the literature despite offering extensive academic opportunities. Many students in Chinese universities report persistent psychological strain due to cultural unfamiliarity and institutional differences (Raja et al., 2023). This study addresses that gap by proposing a dual-mediation model**:** it explores how SS contributes to PWB**,** both directly and indirectly, through RSE and MIL**.** It advances the literature by shifting focus from distress to adaptation, showing how students use internal resources to interpret, endure, and thrive in their environments. By situating this inquiry within migration studies, the study demonstrates that psychological adaptation and well-being are integral to understanding international student migration, not as a marginal education issue but as part of global migration systems.

This study contributes theoretically and empirically by demonstrating how social and psychological resources jointly support international students' mental health. It reconceptualizes psychological adaptation not as a secondary outcome of academic adjustment but as a central dimension of the migration experience. Moving beyond dominant Western-centric frameworks, the study situates student well-being within broader processes of mobility, social integration, and institutional context. Focusing on international students in China highlights how adaptation unfolds within distinct cultural and structural environments. Integrating the stress-buffering framework with migration perspectives, the findings show that social support functions not merely as emotional assistance but also as a structural resource enabling meaning-making and resilience. Drawing on data from a diverse international student population, the study underscores that psychological well-being is a core component of migrant adaptation, shaped by the dynamic interaction between social relationships, institutional conditions, and individual sense-making processes.

LITERATURE REVIEW

THE IMPACT OF SS ON MIL

From a cross-cultural adaptation perspective, Ward and Geeraert (2016) conceptualize social support functions as a critical resource enabling individuals to manage academic and sociocultural transitions. Beyond offering emotional reassurance, social support facilitates meaning-making by helping individuals interpret stressors, regulate emotions, and sustain psychological stability (Frankl, 1963; Zimet et al., 1988). MIL refers to an individual's sense of purpose and coherence in their lived experiences (Steger et al., 2006). Both are essential during times of transition, such as studying abroad. Students who perceive support are more prone to establish a sense of purpose, particularly while confronting academic stress and emotional ambiguity (Kristiana et al., 2022; Onyekachi et al., 2024).

Within migration studies, SS has also been understood as a mechanism of migrant adaptation, linking international students' search for meaning to integration and belonging across host and transnational contexts (Ager & Strang, 2008). Institutional support gives students a feeling of warmth and something to guide their understanding of different situations (Liu et al., 2022). According to research by García-Alandete (2015), students with strong personal goals can build close relationships, feel in control of their lives, and preserve their emotional balance when things become stressful and unstable. This suggests that SS operates simultaneously at psychological and migration levels, helping students interpret their experiences as purposeful and adaptive. Based on these studies, the present study develops the following hypothesis:

H1. International students who receive higher SS will report higher levels of MIL.

THE RELATIONSHIP BETWEEN SS AND RSE

Consistent with Chirkov (2020) agentic perspective, adaptation is understood not as a passive response but as an active process shaped by individuals' capacity to interpret and respond to contextual demands. Social support facilitates this process by strengthening autonomy and psychological engagement, enabling individuals to transform challenges into meaningful experiences. Resilience (RSE), rather than a fixed trait, is increasingly viewed as a dynamic capacity shaped by social and environmental contexts (Oshio et al., 2018). Prior research shows that stronger resilience enhances individuals' ability to manage stress and adapt effectively to adversity (Yeager & Dweck, 2012). Social networks play a critical role in fostering resilience during periods of cultural and academic transition. Singh and Jack (2022) found that postgraduate students in Malaysia who had consistent support from peers, faculty, and family members showed stronger academic resilience. Luthar (2015) similarly notes that RSE grows over time, especially when individuals are given space and support to learn from challenges. SS, whether emotional or practical, provides a protective framework that enhances students' confidence and capacity to adapt to unfamiliar contexts (Taylor, 2011; Wills et al., 2016). Past research supports this connection: Students with strong social networks tend to show higher RSE and better coping (Labrague et al., 2021; Van der Hallen et al., 2020). From a migration-studies perspective, resilience reflects not only individual coping but also migrants' ability to sustain adaptation under shifting institutional conditions, visa precarity, and sociocultural uncertainty, with social support functioning as a crucial enabling resource for integration (Brooks & Waters, 2011). This study addresses this gap by examining resilience as an adaptive resource shaped through social support among international students. Together, these perspectives position social support not only as a protective resource but also as a central mechanism through which international students actively construct meaning, resilience, and psychological well-being. Consequently, the following hypothesis is posited:

H2. International students who are more socially supported will report higher levels of RSE.

THE DIRECT EFFECT OF SS ON PWB

The direct relationship between social support (SS) and psychological well-being (PWB) is among the most extensively documented associations in the mental health literature. Social support, defined as the perception or experience of receiving care, respect, and belonging within a supportive social network (Zimet et al., 1988), is consistently associated with greater emotional resilience, reduced psychological distress, and higher life satisfaction. By enhancing coping capacities and reducing psychological strain, social support buffers individuals against the adverse effects of stress (Cohen & Wills, 1985; Scott et al., 2020). Empirical evidence strongly supports this relationship. Harandi et al. (2017), in a comprehensive meta-analysis, demonstrated that both perceived and received SS

exert significant positive effects on PWB across diverse age groups and cultural contexts. These findings align with self-determination theory (Ryan & Deci, 2024), which emphasizes that fulfilling the need for relatedness supports psychological well-being. Within migration contexts, social support functions as a key resource that enables international students to maintain emotional stability and adapt to unfamiliar social and institutional environments (Beech, 2015; Gallo & Adams Corral, 2023). Addressing this gap, the present study examines the direct contribution of social support to psychological well-being among international students. Accordingly, the following hypothesis is proposed:
H3. International students who perceive higher SS will demonstrate greater PWB.

MIL AS A PREDICTOR OF PWB

A sense of meaning in life (MIL) is deeply connected to how individuals experience emotional well-being and manage life challenges. Frankl (1963) argued that when individuals perceive their lives as meaningful, they are better able to maintain psychological balance, clarify life goals, and confront adversity more effectively. In the Ryff (1989) framework, mental health is believed to include "purpose in life" as a core dimension of psychological well-being. In their study, Reeve (2024) found that students with a stronger sense of purpose exhibit greater emotional stability, motivation, and life satisfaction**,** while Arslan and Allen (2022) showed that MIL enhances individuals' capacity to cope with stressful situations**.** Collectively, these findings suggest that MIL is a multifaceted and critical resource that supports emotional regulation and sustained well-being during periods of challenge and transition. From a migration perspective, meaning-making functions not only as a psychological resource but also as an adaptive strategy through which international students reinterpret displacement and cultural transition as purposeful experiences, thereby facilitating integration and transnational belonging (King & Raghuram, 2013). Addressing this gap, the present study examines the predictive role of MIL in shaping international students' psychological well-being. Therefore, the following hypothesis is proposed:

H4. International students who possess a greater sense of MIL will report higher levels of PWB.

THE ROLE OF RSE IN ENHANCING PWB

RSE plays a crucial role in maintaining PWB, particularly for international students who must navigate the emotional demands of cultural adjustment and heightened academic expectations. Rather than representing a stable personality trait, resilience is increasingly conceptualized as a dynamic and adaptive capacity that enables individuals to recover from adversity, adjust to change, and maintain emotional balance (Aliyev et al., 2021; de los Reyes et al., 2022). Contemporary mental health frameworks consistently recognize resilience as a core component of psychological well-being, as reflected in Ryff's multidimensional model of

well-being and the positive psychology framework advanced by Seligman and Csikszentmihalyi (2000). Empirical evidence strongly supports the protective role of resilience in student mental health. Onyekachi et al. (2024) found that international students in the United States with higher levels of resilience reported significantly lower psychological distress, even under conditions of acculturative stress**.** By fostering self-regulation, autonomy, and a sense of mastery, resilience equips students with essential psychological resources for functioning effectively in unfamiliar academic and cultural environment**s** (Luthar, 2015; Neenan, 2017). From a migration studies perspective, resilience extends beyond individual coping to represent a capacity through which student migrants endure uncertainty, navigate institutional barriers, and sustain adaptation across transnational contexts (Brooks & Waters, 2011). Accordingly, the following hypothesis is proposed:
H5. International students with higher RSE will report greater PWB.

THE MEDIATING ROLE OF MIL

The proposition that MIL mediates the relationship between SS and PWB reflects a growing intersection between existential psychology and stress-coping theory. Drawing on logotherapy, Frankl (1963) argued that the discovery of meaning enables individuals to transform suffering into purpose, thereby sustaining psychological functioning during adversity. Within the Lazarus and Folkman (1984) stress–coping framework, social support promotes positive cognitive reappraisal, including the construction of meaning, thereby enhancing psychological well-being. Empirical research provides strong support for this mediating pathway. Jeong et al. (2010) demonstrated that meaning in life fully mediated the association between SS and both depressive symptoms and suicidal ideation**,** underscoring the role of meaning as a key psychological mechanism linking support to mental health outcomes. Similarly, Glaw et al. (2017) and Hooker et al. (2018) conceptualized MIL as an emotional and cognitive bridge through which supportive relationships foster life satisfaction and psychological health. From a migration-studies perspective, meaning-making functions not only as a psychological resource but also as an adaptive process through which international students reinterpret cultural disruption as an opportunity for growth and identity reconstruction, embedding psychological adjustment within broader integration trajectories (Beech, 2015). Addressing this gap, the present study proposes the following hypothesis:

H6. MIL mediates the connection between SS and PWB among international students.

THE MEDIATING ROLE OF RSE

RSE helps explain how SS is translated into PWB. Rather than functioning as a fixed personal trait, resilience is widely conceptualized as a dynamic capacity shaped by social environments and supportive relationships, which play a critical role in individuals' responses to stress (Masten, 2012). When individuals perceive

consistent social support, they are more likely to develop emotional stability, self-regulation, and adaptive coping capacities that protect psychological well-being under adverse conditions.

Empirical research supports the mediating role of resilience in linking social support to well-being outcomes. Singh and Jack (2022) found that international graduate students in Malaysia who reported stronger support from peers, faculty, and personal networks demonstrated higher academic resilience, which in turn supported their mental health. Similarly, Yoo et al. (2013) demonstrated that resilience mediates the positive effects of social support on well-being by reducing acculturative stress and emotional distress. From a migration studies perspective, resilience functions as an adaptive capacity through which international student migrants transform social resources into sustained integration amid cultural adjustment, institutional constraints, and visa precarity (Brooks & Waters, 2011). Accordingly, the present study proposes the following hypothesis:

H7. RSE mediates the connection between SS and PWB.

METHOD

This study employs a theory-driven, cross-sectional design to examine how social support influences the psychological well-being of international students in China. It proposes that SS affects well-being both directly and indirectly through RSE and MIL. Grounded in acculturation theory and positive psychology, the study explores how international students mobilize psychological resources to navigate academic and cultural adjustment. Situated within migration studies, it conceptualizes international students as a mobile population whose psychological adaptation constitutes a central component of broader integration processes (Ager & Strang, 2008; Beech, 2015).

PATICIPANT AND SAMPLING

International students were recruited using a purposive convenience sampling strategy across multiple Chinese universities. This approach, commonly used in social science research, enabled access to participants with relevant lived experiences despite geographic dispersion (Etikan et al., 2016; Palinkas et al., 2015). Eligibility was limited to students who had completed at least one semester in China, ensuring sufficient exposure to the host environment. Consistent with cross-cultural research, this criterion supports meaningful assessment of psychological and sociocultural adaptation (Russell et al., 2010; Ahmad et al., 2024).

All responses were collected anonymously to ensure confidentiality and reduce social desirability bias. Of the 530 responses received, 27 were excluded due to incomplete data or failure to meet the inclusion criteria, resulting in a final sample of 503 international students. This sample size exceeds the recommended

thresholds for structural equation modeling, supporting the robustness and reliability of the analyses (Kline, 2023).

The majority of participants identified as male (69.78%), followed by female participants (30.02%), with one respondent identifying as transgender. Most participants were aged between 26 and 35 years, reflecting a graduate-dominated sample, with doctoral (53.88%) and master's students (31.81%) comprising the majority. Academically, students were primarily enrolled in STEM-related disciplines, particularly engineering and technology (38.97%), followed by social sciences (18.69%) and business and management (13.92%). A large proportion of participants were funded through Chinese Government Scholarships (78.33%), while others were self-financed (19.88%).

ETHICAL CONSIDERATION

Ethical approval (S156) was obtained from Huazhong University of Science and Technology, Wuhan, China. Participation in the study was entirely voluntary and based on informed consent. Prior to participation, respondents received a clear explanation of the study's purpose, procedures, and their rights and were encouraged to ask questions. No personally identifiable information was collected, and confidentiality and anonymity were strictly maintained throughout the research process. Ethical approval was obtained from the relevant institutional review board, and all procedures adhered to established ethical guidelines. Participants were informed of their right to withdraw at any stage without penalty. A small token of appreciation was provided solely as compensation for time, without coercion or obligation. These ethical safeguards align with standards in migration research, where protecting the rights and well-being of potentially vulnerable populations is essential.

DATA COLLECTION PROCEDURE

Data were collected continuously between June 2023 and March 2025 using an online survey distributed to international students across 28 universities in 16 major cities in China. The survey was administered via digital platforms such as WeChat, WhatsApp, and university mailing lists and was supplemented by in-person outreach during campus visits to enhance participation and engagement. This mixed recruitment strategy allowed access to a geographically diverse student population and reduced potential sampling bias associated with online-only recruitment. Participants were recruited from universities across multiple regions of China, with the majority drawn from South and Central China, including major academic hubs such as Wuhan, Guangzhou, and Changsha. Additional participants were based in East, West, and North China, including cities such as Shanghai, Chengdu, Xi'an, and Beijing. The sample represented 61 countries, predominantly from Asia (76.94%) and Africa (19.48%). While this wide geographic coverage enhanced sample diversity, the reliance on purposive and convenience sampling resulted in greater representation from certain regions

and national groups, a limitation that should be considered when interpreting the findings. Data collection was conducted anonymously, and all participants were informed of the study's purpose, confidentiality safeguards, and voluntary nature. The combination of online and in-person recruitment enhanced inclusivity by reaching students with varying levels of digital access and institutional engagement. This multisite, multimethod approach strengthened the sample's representativeness and ensured broad coverage of international student experiences across diverse regional and institutional contexts.

DEVELOPMENT OF MEASUREMENT SCALE

The survey instrument consisted of five components: demographic information, SS, RSE, MIL, and PWB. All survey materials were administered in English, consistent with the participants' English-medium instruction in their academic programs. The demographic part comprised inquiries regarding gender, age, origin continent, educational level, and residence duration in China. For geographical analysis, the continent of origin was divided into six worldwide categories. Confirmatory factor analysis (CFA) was applied to examine the factor structure, followed by structural equation modeling (SEM) to test the hypothesized relationships. This study applied well-established, standardized instruments (Brown, 2015; Kline, 2023). All participants were enrolled in English-medium academic programs, ensuring adequate comprehension of the survey items.

Social support (SS) was measured using the Multidimensional Scale of Perceived Social Support (MSPSS) by Zimet et al. (1988), which has been validated among Chinese student populations (Wu et al. 2025; Ahmed, Liu, et al., 2026). The scale includes two items for each source of support—family, friends, and significant others—rated on a 7-point Likert scale (1 = strongly disagree to 7 = strongly agree). The measure demonstrated strong internal consistency (Cronbach's α = .91) and measurement invariance across gender groups, supporting its suitability for cross-cultural research contexts.

Resilience (RSE) was measured using the Brief Resilience Scale (BRS), developed by Smith et al. (2008). The scale comprises six items, each evaluated using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). To minimize acquiescence bias, three of the items were reverse-coded.

Meaning in life (MIL) was measured through the Presence dimension of the Meaning in Life Questionnaire (MLQ), which assesses the level to which individuals feel their lives are purposeful, as proposed by Steger et al. (2006). This subscale comprises four items reflecting the extent to which individuals perceive their lives as meaningful. Responses were rated on a 7-point Likert scale (1 = absolutely untrue to 7 = absolutely true).

Psychological well-being (PWB) was evaluated using the 12-item version of Ryff's Psychological Well-Being Scale (Ryff, 1989), incorporating two items for each of the six dimensions: autonomy, self-acceptance, personal growth, environmental mastery, positive relationships, and purpose in life. This abbreviated version has been widely used in cross-cultural studies and offers a

balanced approach to assessing multidimensional well-being while minimizing respondent fatigue (Springer & Hauser, 2006) (see Appendix).

DATA ANALYSIS

Partial least squares structural equation modeling (PLS-SEM) was conducted using SmartPLS (v4.1.1.2) due to its appropriateness for models with multiple latent variables and indirect pathways (Hair Jr et al., 2014). Following the two-step approach, the measurement model was first assessed for reliability and validity using outer loadings, Cronbach's alpha, composite reliability, AVE, and discriminant validity through the Fornell and Larcker (1981) criterion and HTMT ratio (Henseler et al., 2015). In the second stage, structural relationships were evaluated through path coefficients and significance levels using 5,000-sample bootstrapping. R^2 values indicated the model's explanatory power, while f^2 and Q^2 statistics assessed effect size and predictive relevance. Model fit was confirmed through SRMR and NFI indices, aligning with recommended benchmarks for PLS-SEM.

TESTING MODEL FIT

SmartPLS, which uses a variance-based SEM approach, evaluates model fit through indices such as SRMR and NFI. Consistent with Henseler et al. (2015), the observed SRMR values (0.057 and 0.059) fall below the 0.08 benchmark, and the NFI exceeds 0.90, indicating a well-fitting model with strong alignment between predicted and observed data. Additionally, the NFI reached 0.982, exceeding the 0.90 threshold and indicating a high level of model adequacy. As expected in a saturated model, where all paths among constructs are estimated, the saturated and estimated model fit indices closely align. Collectively, these indicators affirm that the proposed measurement and structural models exhibit a satisfactory fit to the empirical data, supporting their appropriateness for subsequent hypothesis testing.

RESULTS

DESCRIPTIVE AND CORRELATION ANALYSIS

Descriptive statistics for the primary constructs are presented in Table 2. The participants showed moderate to moderately high levels of SS (M = 2.997, SD = 0.546), MIL (M = 3.019, SD = 0.608), PWB (M = 3.047, SD = 0.590), and RSE (M = 3.490, SD = 0.591). RSE had the highest mean, indicating strong emotional and psychological adaptability. Skewness and kurtosis values were within ±1, suggesting a normal distribution (Hair Jr et al., 2014;Ahmed, Mahmood, et al., 2026). These descriptive patterns suggest that, despite navigating academic and cultural transitions, participants generally demonstrated stable psychological resources. This finding highlights the relevance of examining protective psychosocial mechanisms, such as SS, MIL, and RSE, in understanding

international students' adaptive functioning. These findings affirm the dataset's adequacy for SEM (see Table 1).

Table 1: Demographic information

Demographics	Category	Frequency	Percentage (%)
Gender	Male	351	69.78
	Female	152	30.22
Age Group	21–25 Years	114	22.66
	26–30 Years	196	38.97
	31–35 Years	131	26.04
	More than 35 Years	62	12.33
Degree Program	Masters	160	31.81
	Doctoral	271	53.88
	Postdoctoral	21	4.17
	Bachelor	46	9.15
	Language Program	5	0.99
Academic Discipline	STEM	310	61.63
	NON-STEM	193	38.37
Studies Finance Source	Chinese Govt. Scholarship	394	78.33
	Own Country Govt. Scholarship	9	1.79
	Self-Finance	100	19.88
Monthly Expenditure	Less than 2000 RMB	165	32.8
	2001–3000 RMB	237	47.12
	3001–4000 RMB	56	11.13
	More than 4000 RMB	45	8.95
Region in China	East	49	9.74
	North	11	2.19
	South & Central	382	75.94
	West & Northeast	61	12.13
Home Continent	Asia	387	76.94
	Europe	8	1.59
	Africa	98	19.48
	America	7	1.39
	Australia/Oceania	3	0.6
Marital Status	Single	319	63.42
	Married	184	36.58

Overall, these descriptive results indicate that international students in the sample reported relatively stable psychological resources, with resilience emerging as the most pronounced internal strength. This pattern suggests that despite navigating

cultural and academic transitions, many participants possessed adaptive capacities that may buffer migration-related stress and support psychological adjustment. Table 2 also presents the Pearson correlation coefficients among the key variables in the study. SS demonstrated strong positive correlations with PWB ($r = .778$, $p < .01$), MIL ($r = .755$, $p < .01$), and RSE ($r = .706$, $p < .01$), indicating that higher SS is consistently linked with enhanced psychological resources and outcomes. Similarly, MIL showed a strong correlation with PWB ($r = .790$, $p < .01$) and a moderate correlation with RSE ($r = .625$, $p < .01$), reinforcing its significance as a psychological mediator. RSE also displayed a strong positive correlation with PWB ($r = .758$, $p < .01$), underscoring the connection between internal psychological strengths and mental health. As demographic variables such as age, gender, and academic status did not exhibit significant associations with the core constructs, they were excluded from the structural model as control variables. This approach enhances the model's parsimony while supporting the generalizability of findings across participant subgroups (see Table 2).

Table 2: Loadings, composite reliability (CR), average variance extracted (AVE), and variance inflation factor (VIF)

Items	Outer loading	Cronbach's alpha	CR (rho_c)	(AVE)	Variance Inflation Factor (VIF)
SS1	0.712	0.853	0.891	0.576	1.471
SS2	0.769				1.765
SS3	0.781				1.839
SS4	0.759				1.736
SS5	0.771				1.826
SS6	0.758				1.721
RSE1	0.790	0.891	0.917	0.647	1.937
RSE2	0.799				2.027
RSE3	0.806				2.03
RSE4	0.807				2.062
RSE5	0.824				2.187
RSE6	0.801				2.01
MIL1	0.794	0.822	0.882	0.652	1.642

MIL2	0.807				1.711
MIL3	0.805				1.73
MIL4	0.824	0.923	0.935	0.548	1.79
PWB1	0.786				2.481
PWB2	0.784				2.582
PWB3	0.776				2.36
PWB4	0.779				2.582
PWB5	0.778				2.472
PWB6	0.795				2.748
PWB7	0.78				2.646
PWB8	0.798				2.509
PWB9	0.769				2.373
PWB10	0.79				2.303
PWB11	0.771				2.231
PWB12	0.758				2.064

MEASUREMENT MODEL ASSESSMENT

All observed indicators demonstrated adequate reliability, with outer loadings ranging from 0.767 to 0.854, exceeding the 0.60 threshold recommended by Hair Jr et al. (2014), and all loadings were statistically significant at $p < .001$. Internal consistency was confirmed, as Cronbach's alpha values ranged from 0.822 (SS) to 0.923 (PWB), and composite reliability (CR) values ranged from 0.882 (MIL) to 0.935 (PWB), all above the 0.70 criterion (Fornell & Larcker, 1981). Convergent validity was supported by AVE values for all constructs, ranging from 0.548 (MIL) to 0.652 (PWB), exceeding the 0.50 minimum (Fornell & Larcker, 1981) (see Table 2).

Discriminant validity was established through the Fornell–Larcker criterion, as the square root of each construct's AVE exceeded its correlations with other constructs: SS (0.740), MIL (0.740), RSE (0.749), and PWB (0.807). HTMT values ranged from 0.632 to 0.878, remaining below the conservative threshold of 0.90 (Henseler et al., 2015). These results indicate that the measurement model possesses satisfactory reliability and validity, supporting the appropriateness of proceeding with structural model testing (see Table S2). Detailed measurement

properties and discriminant validity statistics are provided in the Supplementary Materials (Tables S1–S3)

STRUCTURAL MODEL ASSESSMENT

The structural model was assessed using partial least squares structural equation modeling (PLS-SEM) in SmartPLS (version 4.1.1.2. Model fit was evaluated using the standardized root mean square residual (SRMR) and normed fit index (NFI), with thresholds of <0.08 and >0.90, respectively. The estimated model yielded an SRMR of 0.059, while the saturated model showed an even lower SRMR of 0.057, both indicating acceptable model fit. The NFI value was 0.982, exceeding the recommended minimum of 0.90 (Henseler et al., 2015), thereby confirming the adequacy of the model fit. The model also demonstrated strong explanatory power, with R^2 values of 0.572 for MIL, 0.501 for RSE, and 0.693 for PWB, indicating substantial variance explained in each outcome variable. These values suggest that the model captures meaningful variance in key psychological outcomes and provides strong empirical support for the proposed theoretical framework. To evaluate the structural model, we analyzed the estimated path coefficients and their corresponding *t* values using a bootstrapping resampling method with 5,000 subsamples and 95% confidence intervals. The results presented in Table 3 and illustrated in Figure 2 confirm all proposed direct hypotheses (see Table 3 and Figure 2).

Table 3: Results of the Structure Model

	β	SD	*t*- value	*p* values	Result
Direct Relationships					
MIL -> PWB	0.385	0.033	11.676	.000	Significant
SS -> MIL	0.758	0.02	37.715	.000	Significant
SS -> PWB	0.779	0.018	43.065	.000	Significant
SS -> RSE	0.708	0.023	31.062	.000	Significant
RSE -> PWB	0.336	0.034	9.876	.000	Significant
Indirect Relationships					
SS -> MIL -> PWB	.292	0.026	11.069	.000	Significant
SS -> RSE -> PWB	.238	0.026	9.302	.000	Significant

*p < .05; **p < .01; ***p < .001

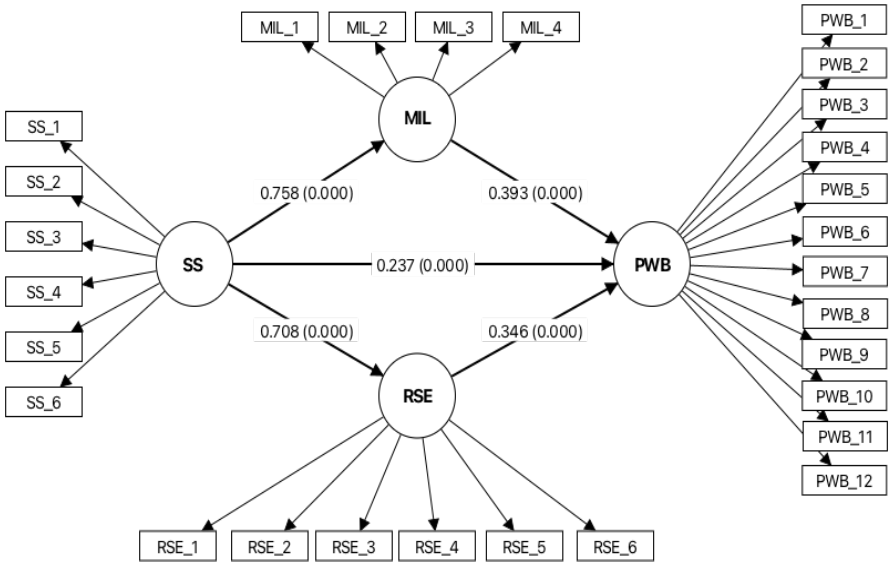

Figure 2: Path analysis of the structural model

Specifically, SS exhibited strong positive effects on MIL (β = 0.758, p < .001), RSE (β = 0.708, p < .001), and PWB (β = 0.779, p < .001). Additionally, both MIL (β = 0.385, p < .001) and RSE (β = 0.336, p < .001) significantly predicted PWB.

Importantly, diagnostic checks indicated no concerns regarding multicollinearity, as variance inflation factor (VIF) values for all constructs remained well below the recommended threshold. Together, these findings provide robust support for the proposed structural model and confirm the hypothesized pathways linking social support, psychological resources, and well-being. In terms of indirect effects, SS had a significant indirect influence on PWB through both psychological mediators. Specifically, SS → MIL → PWB (β = 0.292, p < .001) and SS → RSE → PWB (β = 0.238, p < .001) confirm the dual-pathway mediation mechanism. These findings highlight the essential roles of MIL and RSE in linking SS to the PWB of international students (see Table 3).

DISCUSSION

This study builds upon earlier studies by exploring international student populations' well-being and offering a theoretically informed framework that positions SS as a central mechanism in fostering PWB. Drawing on positive psychology and coping theory, the findings illustrate that SS not only alleviates emotional distress but also nurtures the internal conditions necessary for meaning-

making and adaptive functioning during cultural transition. In line with previous studies, emotional and instrumental support emerged as powerful protective factors in students' everyday lives abroad. This finding aligns with recent evidence showing that psychosocial support plays a central role in enhancing wellbeing and emotional adjustment among international and expatriate students (Al-Ja'afreh et al., 2025)

Prior research emphasized that students who feel supported, whether through peer interactions, institutional networks, or family contact, are more capable of withstanding the pressures of academic and cultural dislocation (Schmitz & Schmitz, 2022; Taylor, 2011; Yıldırım & Tanrıverdi, 2021). This study, however, views SS as a structural foundation for migrant adaptation rather than a superficial form of comfort. Family and friends' care frequently inspires students to see their academic career as a lifelong journey of discovery and growth, linking individual resilience to broader integration processes in the host society (Ager & Strang, 2008; Beech, 2015). Recent empirical evidence further demonstrates that resilience plays a central role in sustaining psychological well-being among international students navigating academic and cultural transitions (Chaliawala et al., 2025).

In conceptual terms, this study distinguishes social support as an external, relational resource embedded within social networks, whereas resilience is understood as an internal psychological capacity that develops in response to supportive environments. According to the framework, deriving MIL is primarily a psychological condition rather than an outcome. This assists students in navigating new norms and regulations (Kristiana et al., 2022; Liu et al., 2022; Onyekachi et al., 2024). Understanding that MIL is a psychological orientation rather than a result helps students manage foreign norms and expectations. They actively rewrite their narratives, aligning their problems with personal ideals and long-term ambitions. From a migration lens, meaning-making operates as a form of narrative belonging, enabling students to reinterpret displacement as purposeful and to sustain identity across transnational spaces (King & Raghuram, 2013; Mahmood, Ahmed, Mahmood, et al., 2026).

RSE has been proven to be one of the most important psychological resources; having a robust support system enables a person to cope and recover from difficult challenges (Sabouripour & Roslan, 2015; Smith et al., 2008; Yoo et al., 2013;Mahmood,Ahmed, & Mahmood, 2026). In our approach, we focus on the relational and developmental aspects of RSE instead of defining it as a trait or characteristic that someone possesses. Resilient individuals are nurtured in sensitive, emotionally rich contexts. Furthermore, the integration of support allows students to internalize a feeling of proficiency, worth, and adaptability that preserves well-being in the face of chronic stress. By showing how RSE is socially cultivated, this study advances migration debates that highlight resilience as an adaptive capacity shaped by visa precarity, institutional rules, and transnational obligations (Brooks & Waters, 2011).

Integration has recently been called for in the study of adaptation, and this advocacy is advanced in this demonstration of how MIL and RSE combine to function instead of separately (Singh & Jack, 2022; Zhang & Goodson, 2011). It

shows that PWB, or health, must be understood not only as the absence of stress but also as the presence of coherent, value-based techniques for addressing difficulties. These findings reframe psychological well-being as a migration outcome, moving debates beyond employment or linguistic proficiency to include emotional stability and resource-building in host-country contexts.

It is evident from the findings that universities must rethink the forms of support they provide as part of broader, migration-sensitive infrastructures. While many institutions offer academic and logistical assistance, far fewer address the emotional and psychological dimensions of students' lived experiences. The present findings highlight the need for support systems that nurture resilience and meaning-making through mentoring, culturally responsive programming, and reflective engagement (Singh & Jack, 2022; Zhang & Goodson, 2011; Mahmood et al., 2022). By doing so, institutions can better support international students in integrating their academic experiences with broader life trajectories. In this way, social support functions not only as a microlevel coping resource but also as a macrolevel mechanism of migrant adaptation, enabling coherence, resilience, and a sense of belonging within global educational spaces.

THEORETICAL IMPLICATIONS

This study expands the existing international student adaptation theories by proposing an explanatory multipathway model that combines SS theory with elements of positive psychology. This underscores that SS affects PWB both directly and in an indirect manner through MIL and RSE. First, it extends the theory by validating MIL as a key mechanism linking SS to mental health within international education. This culturally grounded application of the meaning-making framework addresses acculturative challenges. Second, the study confirms RSE as a dynamic capacity shaped by interpersonal environments, showing that SS significantly predicts RSE. This supports the idea of RSE as both a personal characteristic and a socially nurtured process. By including MIL and RSE as mediators, the study demonstrates how interpersonal and intrapersonal resources jointly underpin adaptation, advancing migration studies debates that call for psychological well-being to be recognized as a core integration outcome. By demonstrating how psychological resources operate within broader structural and institutional contexts, these findings strengthen the conceptual bridge between microlevel adaptation processes and macrolevel migration frameworks. The findings move beyond traditional migration frameworks that privilege labor market participation or linguistic adjustment, instead showing how meaning-making and resilience function as vital forms of migrant capacity. This integrative model therefore bridges psychological and migration theories, contributing to interdisciplinary understandings of how student-migrants negotiate belonging and stability in transnational education contexts.

PRACTICAL IMPLICATIONS

The results of this study provide institutions, psychologists, and politicians with useful information to improve international students' mental health. Universities should offer tools to help students make friends, such as welcome networks, peer tutoring, and culturally sensitive advice. Second, meaning-focused seminars or reflective activities that help students explore personal goals and cultural identity should be part of support services. Third, counseling services should offer RSE programs and tools to manage stress, failure, and homesickness. Fourth, academic departments can support well-being through inclusive pedagogy and addressing emotional challenges in the classroom. At the policy level, national education organizations, migration offices, and international student agencies should develop migration-sensitive infrastructures that integrate mental health with broader settlement support. Visa regulations, scholarship structures, and institutional responsibilities must be designed to reduce precarity and provide continuity of support for student-migrants. Policies that frame international students only as temporary learners risk overlooking their adaptation needs as migrants navigating host country institutions. By focusing on interpersonal support and intrapersonal strengths, universities and host-country migration systems can jointly enable academic success and psychological adaptation. This integrated approach positions student well-being not as an ancillary service but as a central component of migrant integration strategies. Although grounded in the Chinese context, these findings offer transferable insights for other host countries where international students face similar institutional, cultural, and migration-related pressures.

STRENGTHS AND LIMITATIONS

This research demonstrates numerous key strengths. First, it employs structural equation modeling (SEM) to assess the complex interrelationships among SS, RSE, MIL, and PWB within one cohesive model. The model's strong fit indices (SRMR = 0.057, NFI = 0.982) support its theoretical soundness. Second, the research is grounded in a large and diverse sample of 503 international students in China, encompassing various disciplines, programs, and regions, enhancing external validity. Third, the study maintains psychometric rigor with high factor loadings, composite reliability, AVE, and discriminant validity (HTMT), ensuring measurement reliability. Conceptually, it advances the literature by framing psychological well-being as shaped by both external and internal factors. The significant indirect effects of SS on well-being through MIL and RSE further illustrate this integrative approach. However, the research is constrained. Its cross-sectional design hinders causal interpretations despite SEM's strength in testing complex relationships. Self-report instruments can trigger social desirability bias or recall inaccuracies. Although the sample is diverse, the findings are context-specific to Chinese universities and may not apply elsewhere. Cultural variations may also influence responses. Furthermore, while this study situates international students as migrants, its single-country

focus limits comparative insights into how different migration regimes shape psychological well-being. Future work should test the model across varied host contexts to determine whether integration policies, visa systems, or institutional structures influence the identified pathways.

RECOMMENDATION AND FUTURE DIRECTIONS

Future research should consider longitudinal or diary method interventions to study the trajectory of international students' PWB over time. These methods may demonstrate the integration of SS, internal resources, and mental health throughout the academic year. Adding a qualitative or mixed-methods approach would enhance the understanding of how students interpret and withstand cultural and academic challenges. Such accounts can contribute to the model by illustrating the coping and adaptation strategies that individual students employ. It is also suggested that the model's validity across cultures and regions be tested by replicating the study in diverse locations. Additional research should investigate moderating factors such as gender, cultural background, academic field, and financial situation. These factors may influence how support and psychological resources interact. Additionally, researchers could integrate constructs such as self-efficacy, hope, or social identity to build a more comprehensive framework. This would help identify other protective mechanisms supporting emotional and academic adjustment. Ultimately, these directions can inform the creation of empirically grounded support strategies for international students.

CONCLUSION

This study examined how SS influences international students' PWB in Chinese universities, both directly and through MIL and RSE. Drawing on SS theory and positive psychology, it emphasizes the dynamic between external support and internal coping. SEM analysis confirmed the indirect effects, underscoring the role of meaning and resilience in sustaining adaptation. By framing international students as migrants, the study shows that psychological well-being is not a peripheral concern but a central outcome of integration. SS functions as more than comfort; it provides the structural base for building coherence, resilience, and belonging in host-country contexts.

Practically, institutions must prioritize services that foster psychological resources alongside academic and linguistic support. Migration-sensitive policies covering scholarships, visas, and counseling infrastructures should complement university services to ensure the continuity of support. As international student mobility grows, strengthening both interpersonal support and intrapersonal resources is essential for inclusive and sustainable educational environments.

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In the preparation of this manuscript, we did not utilize artificial intelligence (AI) tools.

REFERENCES

Abulfaraj, G. G., Upsher, R., Zavos, H. M., & Dommett, E. J. (2024). The impact of resilience interventions on university students' mental health and well-being: a systematic review. *Education Sciences*, *14*(5), 510. https://doi.org/10.3390/educsci14050510

Ager, A., & Strang, A. (2008). Understanding integration: A conceptual framework. *J. Refugee Stud.*, *21*, 166. https://doi.org/10.1093/jrs/fen016

Ahmad, W., Liu, C., Mahmood, R., & Suleman, R. M. F. (2024). An Exploration of the Desistance Process of Male Substance Offenders in Pakistan: Influence of Family Relationships. *The Family Journal*, *32*(4), 531-541. https://doi.org/10.1177/10664807241289145

Ahmed, W., Liu, C., Suleman, R. M. F., Mahmood, R., & Mahmood, S. (2026). Work, Identity, and Desistance: A Narrative Analysis of Justice-Involved Youth Through Desistance Theory. *Criminal Justice and Behavior*, *53*(1), 40-62. https://doi.org/10.1177/00938548251368352

Ahmed, W., Mahmood, R., & Mahmood, S. (2026). Silent wounds: modelling masculinity ideology, emotional suppression, and psychological distress in male survivors of familial sexual abuse. *Journal of Sexual Aggression*, 1-25. https://doi.org/10.1080/13552600.2026.2630702

Aliyev, R., Akbaş, U., & Özbay, Y. (2021). Mediating role of internal factors in predicting academic resilience. *International Journal of School & Educational Psychology*, *9*(3), 236-251. https://doi.org/10.1080/21683603.2021.1904068

Al-Ja'afreh, S. A.-H., Al-Krenawi, A., Al-Habies, F. A., Abudoush, A. N., & Alourani, O. I. H. (2025). The impact of psychosocial support and psychological well-being among expatriate students. *Journal of International Students*, *15*(3), 183-202. https://doi.org/10.32674/aypbfj52

Arslan, G., & Allen, K.-A. (2022). Exploring the association between coronavirus stress, meaning in life, psychological flexibility, and subjective well-being. *Psychology, health & medicine*, *27*(4), 803-814. https://doi.org/10.1080/13548506.2021.1876892

Beech, S. E. (2015). International student mobility: the role of social networks. *Social & Cultural Geography*, *16*(3), 332-350. https://doi.org/10.1080/14649365.2014.983961

Brooks, R., & Waters, J. (2011). *Student mobilities, migration and the internationalization of higher education*. Springer.

Brown, T. A. (2015). *Confirmatory factor analysis for applied research*. Guilford publications.

Chaliawala, K. S., Vidourek, R. A., King, K. A., & Merianos, A. L. (2025). Investigating Psychological Well-Being and Resilience among International College Students in the United States. *Journal of International Students*, *15*(8), 77-93. https://doi.org/10.32674/jkv65t83

Chirkov, V. (2020). The sociocultural movement in psychology, the role of theories in sociocultural inquiries, and the theory of sociocultural models. In (Vol. 23, pp. 119-134): Wiley Online Library.

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological bulletin*, *98*(2), 310. https://doi.org/10.1037/0033-2909.98.2.310

de los Reyes, E. J., Blannin, J., Cohrssen, C., & Mahat, M. (2022). Resilience of higher education academics in the time of 21st century pandemics: a narrative review. *Journal of Higher Education Policy and Management*, *44*(1), 39-56. https://doi.org/10.1080/1360080X.2021.1989736

Erdogan, E., Ozdogan, O., & Erdogan, M. (2015). University students' resilience level: The effect of gender and faculty. *Procedia-social and behavioral sciences*, *186*, 1262-1267. https://doi.org/10.1016/j.sbspro.2015.04.047

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, *5*(1), 1-4. https://doi.org/10.11648/j.ajtas.20160501.11

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, *18*(1), 39-50. https://doi.org/10.1177/002224378101800104

Frankl, V. E. (1963). *Man's search for meaning: An introduction to logetheraphy*. Beacon press.

Fredrickson, B. L. (2004). The broaden–and–build theory of positive emotions. *Philosophical transactions of the royal society of London. Series B: Biological Sciences*, *359*(1449), 1367-1377. https://doi.org/10.1098/rstb.2004.1512

Gallo, S., & Adams Corral, M. (2023). Transborder Literacies of (In)Visibility. *Journal of Literacy Research*, *55*(1), 101-123. https://doi.org/10.1177/1086296x231163127

García-Alandete, J. (2015). Does meaning in life predict psychological well-being? *The European Journal of Counseling Psychology*, *3*(2), 89-98. https://doi.org/10.5964/ejcop.v3i2.27

Glaw, X., Kable, A., Hazelton, M., & Inder, K. (2017). Meaning in life and meaning of life in mental health care: An integrative literature review. *Issues in mental health nursing*, *38*(3), 243-252. https://doi.org/10.1080/01612840.2016.1253804

Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM). *European business review*, *26*(2), 106. https://doi.org/10.1108/EBR-10-2013-0128

Harandi, T. F., Taghinasab, M. M., & Nayeri, T. D. (2017). The correlation of social support with mental health: A meta-analysis. *Electronic physician*, *9*(9), 5212. https://doi.org/10.19082/5212

He, X.-X., Wang, X.-q., Steger, M. F., Ji, L.-J., Jing, K., Liu, M.-f., & Ye, B.-j. (2023). Meaning in life and psychological distress: A meta-analysis. *Journal of Research in Personality*, *104*, 104381. https://doi.org/10.1016/j.jrp.2023.104381

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, *43*, 115-135. https://doi.org/10.1007/s11747-014-0403-8

Hooker, S. A., Masters, K. S., & Park, C. L. (2018). A meaningful life is a healthy life: A conceptual model linking meaning and meaning salience to health. *Review of general psychology*, *22*(1), 11-24. https://doi.org/10.1037/gpr0000115

Jeong, Y., Kim, J. Y., Ryu, J. S., eun Lee, K., Ha, E. H., & Park, H. (2010). The associations between social support, health-related behaviors, socioeconomic status and depression in medical students. *Epidemiology and health*, *32*, e2010009. https://doi.org/10.4178/epih/e2010009

King, R., & Raghuram, P. (2013). International student migration: Mapping the field and new research agendas. *Population, space and place*, *19*(2), 127-137. https://doi.org/ 10.1002/psp.1746

Kline, R. B. (2023). *Principles and practice of structural equation modeling*. Guilford publications.

Kristiana, I. F., Karyanta, N. A., Simanjuntak, E., Prihatsanti, U., Ingarianti, T. M., & Shohib, M. (2022). Social support and acculturative stress of international students. *International journal of environmental research and public health*, *19*(11), 6568. https://doi.org/10.3390/ijerph19116568

Labrague, L. J., De los Santos, J. A. A., & Falguera, C. (2021). Social and emotional loneliness among college students during the COVID-19 pandemic: the predictive role of coping behaviours, social support, and personal resilience. https://doi.org/10.21203/rs.3.rs-93878/v2

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer publishing company.

Liu, S., He, L., Wei, M., Du, Y., & Cheng, D. (2022). Depression and anxiety from acculturative stress: Maladaptive perfectionism as a mediator and mindfulness as a moderator. *Asian American Journal of Psychology*, *13*(2), 207.

Luthar, S. S. (2015). Resilience in development: A synthesis of research across five decades. *Developmental psychopathology: Volume three: Risk, disorder, and adaptation*, 739-795. https://doi.org/10.1002/9780470939406.ch20

Masten, A. S. (2012). Resilience in individual development: Successful adaptation despite risk and adversity. In *Educational resilience in inner-city America* (pp. 3-25). Routledge.

Mahmood, R., Ahmed, W., & Mahmood, S. (2026). The Impact of Faith-Based Rehabilitation in Prisons: Identity Transformation, Virtue Development, and Emotional–Behavioral Outcomes. *Criminal Justice*

and Behavior, *53*(4), 520-538. https://doi.org/10.1177/00938548251394638

Mahmood, R., Ahmed, W., Mahmood, S., Suleman, R. M. F., Shabbir, M., & Wang, F. Y. (2026). From Challenges to Coping Strategies: A Study on Academic Integration and Psychological Well-being among International Students in Chinese Universities. *Journal of International Students*, 35-62. https://doi.org/10.32674/rcg6jt52

Mahmood, S., Knerr, B., Khan, I. A., Shabbir, M., & Mahmood, R. (2022). A Gender-Sensitive Analysis of Social Integration Challenges. Evidence from the Pakistani Diaspora in Germany. *Migration Letters*, *19*(4), 437-448.

McLean, L., Gaul, D., & Penco, R. (2023). Perceived social support and stress: A study of 1st year students in Ireland. *International journal of mental health and addiction*, *21*(4), 2101-2121. https://doi.org/10.1007/s11469-021-00710-z

Myers-Walls, J. A., Frias, L. V., Kwon, K.-A., Ko, M.-J. M., & Lu, T. (2011). Living life in two worlds: Acculturative stress among Asian international graduate student parents and spouses. *Journal of comparative family studies*, *42*(4), 455-478. https://doi.org/10.3138/jcfs.42.4.455

Neenan, M. (2017). *Developing resilience: A cognitive-behavioural approach*. Routledge.

Onyekachi, B. N., Aliche, C. J., Mefoh, P. C., & Ogbu, O. (2024). Relationship between social support, meaning in life, depression and suicide behaviour among medical students. *Current Psychology*, *43*(11), 10330-10338. https://doi.org/10.1007/s12144-023-05153-4

Oshio, A., Taku, K., Hirano, M., & Saeed, G. (2018). Resilience and Big Five personality traits: A meta-analysis. *Personality and individual differences*, *127*, 54-60. https://doi.org/10.1016/j.paid.2018.01.048

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and policy in mental health and mental health services research*, *42*, 533-544. https://doi.org/10.1007/s10488-013-0528-y

Raja, R., Ma, J., Zhang, M., Li, X. Y., Almutairi, N. S., & Almutairi, A. H. (2023). Social identity loss and reverse culture shock: Experiences of international students in China during the COVID-19 pandemic. *Frontiers in Psychology*, *14*, 994411. https://doi.org/10.3389/fpsyg.2023.994411

Razgulin, J., Argustaitė-Zailskienė, G., & Šmigelskas, K. (2023). The role of social support and sociocultural adjustment for international students' mental health. *Scientific reports*, *13*(1), 893. https://doi.org/10.3389/fpsyg.2023.994411

Reeve, J. (2024). *Understanding motivation and emotion*. John Wiley & Sons.

Robertson, S. (2013). *Transnational student-migrants and the state: The education-migration nexus*. Springer.

Rudwan, S., & Alhashimia, S. (2018). The relationship between resilience & mental health among a sample of university of nizwa students-sultanate of oman. *European Scientific Journal*, *14*(2), 288-303. https://doi.org/10.19044/esj.2018.v14n2p288

Russell, J., Rosenthal, D., & Thomson, G. (2010). The international student experience: Three styles of adaptation. *Higher education*, *60*, 235-249. https://doi.org/10.1007/s10734-009-9297-7

Ryan, R. M., & Deci, E. L. (2024). Self-determination theory. In *Encyclopedia of quality of life and well-being research* (pp. 6229-6235). Springer. https://doi.org/10.1007/978-3-031-17299-1

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of personality and social psychology*, *57*(6), 1069. https://doi.org/10.1037/0022-3514.57.6.1069

Sabouripour, F., & Roslan, S. B. (2015). Resilience, optimism and social support among international students. *Asian Social Science*, *11*(15), 159. https://doi.org/10.5539/ass.v11n15p159

Schmitz, P. G., & Schmitz, F. (2022). Correlates of acculturation strategies: Personality, coping, and outcome. *Journal of Cross-Cultural Psychology*, *53*(7-8), 875-916. https://doi.org/10.1177/00220221221109939

Scott, H. R., Pitman, A., Kozhuharova, P., & Lloyd-Evans, B. (2020). A systematic review of studies describing the influence of informal social support on psychological wellbeing in people bereaved by sudden or violent causes of death. *BMC psychiatry*, *20*, 1-20. https://doi.org/10.1186/s12888-020-02639-4

Seligman, M. E., & Csikszentmihalyi, M. (2000). *Positive psychology: An introduction* (Vol. 55). American Psychological Association.

Singh, J. K. N., & Jack, G. (2022). The role of language and culture in postgraduate international students' academic adjustment and academic success: Qualitative insights from Malaysia. *Journal of International Students*, *12*(2). https://doi.org/10.32674/jis.v12i2.2351

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

Smith, R. A., & Khawaja, N. G. (2011). A review of the acculturation experiences of international students. *International Journal of Intercultural Relations*, *35*(6), 699-713. https://doi.org/10.1016/j.ijintrel.2011.08.004

Springer, K. W., & Hauser, R. M. (2006). An assessment of the construct validity of Ryff's scales of psychological well-being: Method, mode, and measurement effects. *Social science research*, *35*(4), 1080-1102. https://doi.org/10.1016/j.ssresearch.2005.07.004

Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: assessing the presence of and search for meaning in life. *Journal of counseling psychology*, *53*(1), 80.

Sullivan, C., & Kashubeck-West, S. (2015). The interplay of international students' acculturative stress, social support, and acculturation modes. *Journal of International Students*, *5*(1), 1-11. https://doi.org/10.32674/jis.v5i1.438

Taylor, S. E. (2011). Social support: A review. *The Oxford handbook of health psychology*, *1*, 189-214.

Ullah, A. (2025). Improving International Students' Success: Institutional Strategies for Overcoming Barriers and Optimizing Learning Outcomes Using a Hybrid Approach. *Available at SSRN 5343055*. https://doi.org/10.2139/ssrn.5343055

UNESCO, I. f. S. (2024). Global flow of tertiary-level students. https://uis.unesco.org/en/uis-student-flow

Van der Hallen, R., Jongerling, J., & Godor, B. P. (2020). Coping and resilience in adults: a cross-sectional network analysis. *Anxiety, Stress, & Coping*, *33*(5), 479-496. https://doi.org/10.1080/10615806.2020.1772969

Ward, C., & Geeraert, N. (2016). Advancing acculturation theory and research: The acculturation process in its ecological context. *Current opinion in psychology*, *8*, 98-104. https://doi.org/10.1016/j.copsyc.2015.09.021

Studies in higher education, *30*(6), 707-722. https://doi.org/10.1080/03075070500340036

Wills, T. A., Bantum, E., & Ainette, M. G. (2016). Social support. *The assessment in health psychology*, 131-146.

Wu, Y., Tang, J., Du, Z., Chen, K., Wang, F., Sun, X., Zhang, G., & Wu, Y. (2025). Development of a short version of the perceived social support scale: based on classical test theory and ant colony optimization. *BMC Public Health*, *25*(1), 232. https://doi.org/10.1186/s12889-025-21399-y

Xin, Z. (2022). Perceived social support and college student engagement: moderating effects of a grateful disposition on the satisfaction of basic psychological needs as a mediator. *BMC psychology*, *10*(1), 298. https://doi.org/10.1186/s40359-022-01015-z

Yeager, D. S., & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational psychologist*, *47*(4), 302-314. https://doi.org/10.1080/00461520.2012.722805

Yıldırım, M., & Tanrıverdi, F. Ç. (2021). Social support, resilience and subjective well-being in college students. *Journal of Positive School Psychology*, *5*(2), 127-135. https://doi.org/10.47602.xxxxxxxxx

Yoo, M.-R., Choi, S. Y., Kim, Y. M., Han, S.-J., Yang, N.-Y., Kim, H. K., Chang, H. K., Lee, M.-R., & Son, Y.-J. (2013). Acculturative stress, resilience, and depression among Chinese students in Korea. *The*

Journal of Korean Academic Society of Nursing Education, *19*(3), 320-329. https://doi.org/10.5977/jkasne.2013.19.3.320

Zhang, J., & Goodson, P. (2011). Predictors of international students' psychosocial adjustment to life in the United States: A systematic review. *International Journal of Intercultural Relations*, *35*(2), 139-162. https://doi.org/10.1016/j.ijintrel.2010.11.011

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of personality assessment*, *52*(1), 30-41. https://doi.org/10.1207/s15327752jpa5201_2

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Supplementary Material

Table S1: Survey Instruments and Items

Construct and Item		Factor Loadings (a)
Social Support (SS)		**(0.853)**
SS_1	There is a special person who is around when I am in need.	0.712
SS_2	There is a special person with whom I can share joys and sorrows.	0.769
SS_3	My family truly tries to help me	0.781
SS_4	I get the emotional help and support I need from my family.”	0.759
SS_5	I can count on my friends when things go wrong	0.771
SS_6	I have friends with whom I can share my joys and sorrows.	0.758
Meaning in Life (MIL)		**(0.822)**
MIL_1	I understand my life’s meaning.	0.794

MIL_2	My life has a clear sense of purpose.	0.807
MIL_3	I have a good sense of what makes my life meaningful.	0.805
MIL_4	I have discovered a satisfying life purpose.	0.824
Resilience (RSE)		**(0.891)**
RSE_1	I tend to bounce back quickly after hard times.	0.79
RSE_2	I have a hard time making it through stressful events*	0.799
RSE_3	It does not take me long to recover from a stressful event.	0.806
RSE_4	It is hard for me to snap back when something bad happens*	0.807
RSE_5	I usually come through difficult times with little trouble.	0.824
RSE_6	I tend to take a long time to get over setbacks in my life*	0.801
Psychological Well-being (PWB)		**(0.923)**
PWB_1	I have confidence in my own opinions, even if they are different from the way most other people think.	0.786
PWB_2	I tend to be influenced by people with strong opinions*	0.784

PWB_3	In general, I feel I am in charge of the situation in which I live.	0.776
PWB_4	The demands of everyday life often get me down*	0.779
PWB_5	I think it is important to have new experiences that challenge how you think about yourself and the world.	0.778
PWB_6	I gave up trying to make big improvements or changes in my life a long time ago*	0.795
PWB_7	People would describe me as a giving person, willing to share my time with others.	0.78
PWB_8	I have not experienced many warm and trusting relationships with others*	0.798
PWB_9	Some people wander aimlessly through life, but I am not one of them.	0.769
PWB_10	I sometimes feel as if I've done all there is to do in life*	0.79
PWB_11	When I look at the story of my life, I am pleased with how things have turned out.	0.771
PWB_12	In many ways, I feel disappointed about my achievements in life*	0.758

**Reverse-coded item*

Table S2: Heterotrait-Monotrait (HTMT) Ratio

	MIL	SS	PWB	RSE
MIL				
SS	0.727			
PWB	0.632	0.878		
RSE	0.726	0.81	0.839	

Table S3: Descriptive and Correlation Analysis Results

Variable	Mean	Std. Deviation	Skewness	Kurtosis	SS	MIL	PWB	RSE
SS	2.997	0.546	0.200	0.177	1.000	0.755	0.778	0.706
MIL	3.019	0.608	0.118	-0.011	0.755	1.000	0.790	0.625
PWB	3.047	0.590	0.076	0.063	0.778	0.790	1.000	0.758
RSE	3.49	0.591	0.128	0.024	0.706	0.625	0.758	1.000