# Perceived Social Support and Psychological Well-Being of International Students: The Mediating Effects of Resiliency and Spirituality

Li Yue Qi<sup>1</sup>, Samsilah Roslan<sup>2,\*</sup>, Zeinab Zaremohzzabieh<sup>3</sup>

123 Faculty of Educational Studies, Universiti Putra Malaysia, Serdang, 42300, Selangor, Malaysia silvialyq309@gmail.com samsilahroslan@upm.edu.my z zienab@upm.edu.my

\*Corresponding Author

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Abstract: International students are a significant resource for many host countries because they increase cultural diversity within the community, offer talent and innovation to universities, and make notable economic contributions. Many studies, however, have shown that international students have lower psychological well-being. Thus, this study aimed to evaluate the associations between psychological well-being as a dependent variable and perceived social support as an independent variable, and test the mediating roles of resiliency and spirituality in the link between perceived social support and psychological well-being. This is a cross-sectional study with a random sampling method. A total of 300 Chinese international students in Universiti Putra Malaysia (UPM) participated in this study and completed four questionnaires, namely the Perceived Social Support scale, Psychological Well-being scale, the Spiritual Values scale, and Connor-Davidson Resilience scale. The results from PLS-SEM showed that greater levels of social support are associated with greater levels of psychological well-being. Resiliency and spirituality partially mediated the relationship between social support and psychological well-being. The findings of this study not only revealed an association between perceived social support and psychological well-being among Chinese international students in Malaysia but also expanded our knowledge of the mediating roles of resilience and spirituality in the relationship.

**Keywords:** International students, Perceived social support, Psychological well-being, Resiliency, Spirituality.

#### 1. Introduction

The presence of international students across higher education institutions globally remains substantial and in an upward trend. With their presence, university campuses become a melting pot of diverse cultures but also a wide range of talent that adds to the collective intellectual capital of the host country. These international students and the host country share mutual benefits; talent assets in exchange for university academic qualifications (Smith & Khawaja, 2011). However, these students realized that they have to deal with a host of socio-psychological challenges when immediate adjustment to the local condition is demanded from them. Considering that the predominant domestic condition is that of an academic setting, these students try to familiarize and assimilate themselves with the culture of the host country, which is usually a stark difference from their own (Glass & Westmont, 2014). Issues that impede their adjustment include language barriers, academic culture, being far from

home, as well as the inability to socially integrate and carry out routine tasks (Yeh & Inose, 2003). This acclimatization process of adapting to the host language, norms, values, and culture may negatively impact students' psychological state as they are vulnerable to acculturative stress, physical and emotional discomforts, and difficulties in performing their function as students (Yang & Clum, 1995).

To enhance students' acclimatization as such, studies were conducted on various predictors where some researchers focused on perceived social support (e.g., Brunsting et al., 2018). Students' social support comes from academic peer groups, informal interactions with faculty members, personal tutorials, social networks, student support services, and close ties with friends and family members (Myers-Walls et al., 2011). These forms of support services act as valuable coping resources for individuals against stress. Therefore, they can psychologically reduce stress and facilitate the ease of adapting to the host environment (Brisset et al., 2010). Bai (2016) reported the potential of social support as an enhancement experience on students' psychological health. In addition, Cohen and Wills (1985) suggested the positive association between social support and general well-being as it offers a consistent dose of positive experiences that can buffer life stressors.

Previous studies have found that resilience explained the underlying mechanism of the link between social support and mental health (e.g., Arslan & Yıldırım, 2021). In studies focusing on migration for education, researchers observed that resilience is an enabling factor for international students when adapting to environmental change which yielded positive outcomes (e.g., Xie & Huijser, 2020). When resilience enhances students' ability to cope with adapting, negative outcomes such as mental health symptomology and health risk behaviors that are adverse to general well-being can be avoided (Friborg et al., 2005; Khairina et al., 2020). Moreover, previous research showed that resilience played a mediating role when social support was linked to mental health outcomes (Koelmel et al., 2017). In the context of international students, social support may positively affect PWB through the resilience pathway.

It has been observed that the spirituality mediator may also play a significant role in enhancing PWB (Temane & Wissing, 2006). Researchers found evidence of spirituality leaving an impact on well-being which was based on the hypothesis of buffering (Philip et al., 2019). This hypothesis states that spirituality acts as an adjustment facilitator in response to life event stressors by influencing one's cognitive appraisals of these events and the ensuing emotions that need to be regulated. Seybold and Hill (2001) further explained that one's spiritual state influences well-being and that this occurs through apparent social mechanisms as observed in communities providing fellowship. Several empirical studies indicated support for the potential of spirituality as a mediator (Yun et al., 2019). Existing literature provides evidence of the importance of spirituality in the investigation of the social support construct (e.g., Alorani & Alradaydeh, 2018) and students' PWB (Augustyn et al., 2017; Fradelos et al., 2019; Lolla, 2017; Pandya, 2017; Saleem & Saleem, 2017; Steiner et al., 2017).

Lazarus' (1991) transactional theory of coping also posits that emotion-regulation abilities are indirectly linked to perceived stress and positive outcomes through a mediating mechanism of coping. Spirituality and resiliency as coping mechanisms can be indirectly used to regulate emotions and overcome challenges experienced by international students to reduce stress-related discomfort (Agrimson & Taft, 2009). On this note, the article seeks empirical proof for the two mediational routes (particularly, spirituality and resilience) that explain the central link between perceived social support and PWB among students in an international setting.

# 2. Study Context

Since the commercialization of tertiary education began in the 1990s, Malaysia has become a popular destination for international students. In recent years, the number of international students traveling to Malaysia to pursue higher education has increased significantly, increasing the number of foreign fee-paying students (Ahrari et al., 2019). The majority of these students came from Southeast Asia, the Middle East, Middle Asia, and Africa, as well as mainland China. In 2019, Malaysia hosted roughly 13.45 thousand international students from mainland China (Hirschmann, 2020). This significant increase has resulted in an increase in issues concerning the adjustment of Chinese students studying at Malaysian universities.

International students bring a diverse set of socio-cultural backgrounds to Malaysian universities, making them more diverse and multicultural. Because of the diversity, international

students must adjust to their new surroundings and culture in their host country. Earlier research has explored the issues of loneliness, homesickness, and culture shock among Muslim Chinese international students in Malaysia (Tuerxun et al., 2020). International Chinese students may face serious challenges to their PWB as a result of these issues. Thus, understanding their PWB is essential for ensuring that they have the greatest possible studying and living experience in Malaysia.

To date, numerous studies explored the cross-national migratory patterns in graduate study. There have been no studies that have looked specifically at the PWB of Chinese international students studying in Malaysia. The majority of research in this area has focused on the experiences of Chinese international students studying at Western universities (Li et al., 2017). The current study aimed to address this gap by taking a closer look at the association between social support and PWB and to explore the potential roles of resiliency and spirituality as mediators which Chinese international students may use to cope with surmountable challenges in Malaysia.

#### 3. Literature Review

#### 3.1 PWB of Chinese International Students

According to Huppert (2009), PWB is the combination of feeling good and being able to function efficiently. Ryff (1989) proposed a multifaceted model for defining PWB, emphasising self-acceptance, autonomy, life satisfaction, good interpersonal connections, life purpose, and personal growth. Additionally, Chinese international students are becoming the most often researched representation of East Asian and Asian international students. According to Jiani (2017), one in every five foreign students worldwide is from Mainland China. China has just surpassed India as the country with the overseas students studying in the United States (Yan, 2017). Furthermore, Chinese students have a diverse variety of Asian cultural identities, including family loyalty, a higher level of collectivism, and emotional reserve (Wu, 2011). Yet, there is little scientific literature that gives a study of this population, particularly their PWB.

Earlier research findings revealed that the PWB of Chinese international students are closely associated with variables of perceived social capital (e.g., Guo et al., 2014), acculturative stress, collective coping (Park et al., 2014), sources of perceived social support, social-emotional experiences (Brunsting et al., 2018), adjustment problems (Can et al., 2021), cultural learning (Zheng, 2017), racial identity, ethnic identity, Asian values, and race-related stress (Iwamoto & Liu, 2010). Although a few novel findings were reported, there is no single study examining the relationship between perceived social support and PWB among Chinese international students in Malaysia, where spirituality and resilience mediate; and this research gap should be filled.

# 3.2 Perceived Social Support

In general, social support is a set of procedures in resource provision and/or exchange between the individual and others, which include family members, peers, and significant others (Gabert-Quillen et al., 2011). An individual receiving decent social support gets relief from post-traumatic stress disorder (PTSD) symptoms as well as depression, in addition to a boost in well-being while maintaining mental health stability (Roslan et al., 2017; Whitley et al., 2016). As social support has been linked to mental health benefits, numerous studies focused on the impact of perceived social support on depression (Kleiman & Riskind, 2013; Kostak et al., 2019; Santini et al., 2015; Shensa et al., 2020). Recent findings showed that domestic student social support was associated positively with international students' PWB at U.S. universities (Luo et al., 2019). In Brunsting et al. (2019) study on 126 graduate and undergraduate international students, the researchers found that the students' perceptions of social support have a significant impact on changes in their PWB. In addition, a past study on international students revealed that the social support they received leads towards their psychological adjustment (Lashari et al., 2018). Thus, the following hypothesis is put forth:

 $H_{1a}$ . There is a positive and significant relationship between perceived social support and the psychological well-being of international students.

# 3.3 The Mediating Role of Resiliency

Resilience was found to be the key element for international students' transition from maladaptation to fitting in well under the context of learners' migration for education (Sa et al., 2013; Yoo et al., 2013). Resilience is defined as the efficacy of one's coping capacity in response to past and present challenges. Similarly, Ryff et al. (1998) extended that capacity to include the maintenance and recovery of quality well-being despite life adversities. Meanwhile, resilience has been observed as a protector against unfavorable life outcomes, and it facilitates the maintenance of one's physical and psychological health (Connor & Davidson, 2003).

Notably, past studies observed that resilience had an indirect effect on PWB. For instance, Yoo et al. (2013) provided evidence to suggest that resilience was a partial mediator between acculturative stress and adverse states of psychological health among students from China-based in Korea. Similarly, a recent study showed that resilience was an indirect predictor of PWB among university students who underwent the peritraumatic phase of unprecedented Covid-19 disruptions and the consequences (Sood & Sharma, 2021). Another recent study found that the resilience mediator, paired with adaptive coping strategies and social support, was significant between Covid-19-induced stress and ASD (Ye et al., 2020). In addition, a recent study reported that resilience partially mediated the influence of perceived social support on the mental well-being of left-behind children (Fan & Lu, 2020).

With regards to the underlying mechanisms, there is a theoretical possibility that social support is linked to PWB through the copying mechanism. This is because these patterns are related to what one believes in and expects about his/her ability to cope with and resist stressors (Mikulincer & Shaver, 2007). A person who is resilient displays a stress-proof disposition, and this is fundamentally a self-appraisal process of one's coping ability towards stressors. Thus, in the process of self-appraisal on stress, resilience can be counted as one supplementary factor with the potential role as a mediator of the social support-PWB relationship. Thus, the following hypothesis is put forth:

**H**<sub>2</sub>. Resiliency will mediate the relationship between perceived social support and the psychological well-being of international students.

### 3.4 The Mediating Role of Spirituality

As indicated by Lun and Bond (2013) spirituality exist in distinct forms for every individual, various cultures, and countries. The Chinese culture is said to be dominated by Confucianism, which may differ from the conventional conception of God from the perspective of the Chinese (for example, the reference in the book of Meng Zi – Jin Tian Xia, "sheng er bu ke zhi zhi zhi wei shen" as stated by Mengzi, he interpreted "sheng" (refers to sacred) as the unfathomable ability and influence of sages, not the "god" of ghosts and gods), emphasizes on the association among life and death, and the harmony of social relationships. Moreover, various studies on college students have linked spirituality's impact on emotional well-being (Berry & York, 2011; Ramachandaran et al., 2017). Specifically, some studies suggested the importance of spirituality in helping international students cope with acculturation demands. Spirituality was also explored as a coping style, and the subsequent well-being outcomes were examined (Khairina et al., 2020). According to Hill and Pargament (2003), individuals who are grounded in spirituality display higher health quality outcomes as compared to the less grounded ones because the former is equipped with a portfolio of coping resources, spiritual- and/or religious-based, which encompasses prayer, meditation, and spiritual transcendence. As a philosophical framework, spirituality enhances the understanding of life and ego strength, thus serving the personality as a protector that prevents its fragmentation (Baumeister, 1991). Therefore, converging conceptual frameworks can explain these phenomena; as spiritual development and well-being advance, they facilitate one to employ spiritual and/or religious coping strategies effectively that can yield positive health outcomes.

Furthermore, in McNulty et al.'s (2004) study on multiple sclerosis patients, the mediating role of spiritual well-being was examined in the relationship between perceived uncertainty and psychosocial adaptation to the illness. The researchers confirmed spiritual well-being as a mediator

between uncertainty and psychological adjustment experiences among these patients. Meanwhile, Utsey et al. 's (2007) study on African Americans indicated that spiritual well-being partially mediated the effects of culture-specific coping on the standard of living. Thus, we propose that:

**H**<sub>3</sub>. Spirituality will mediate the relationship between perceived social support and the psychological well-being of international students.

#### 4. Materials and Methods

# 4.1 Sample

A cross-sectional study was carried out among 300 Chinese international students in Universiti Putra Malaysia (UPM). China is a major source of international students in Malaysia. Based on the data from the Academic Division, the current number of international students enrolling in UPM undergraduate courses is 1,636 where 980 of them are Chinese students, accounting for about 60% of the international undergraduates' population (Yu & Moskal, 2019). This has prompted this study to focus on Chinese international students at UPM as a sample population.

#### 4.2 Procedure

Systematic random sampling was used to select respondents from various faculties in UPM. The sampling procedures were conducted as follows:

- 1. In the first step, with an official support letter by the supervisor, the researchers requested the Academic Division to provide the number of Chinese students studying in the undergraduate programs. Then, the Academic Division provided a sample frame list of names and email addresses of all Chinese undergraduates as specified.
- 2. In the second step, an online random number generator (RNG) was used to select samples based on the specified sample size. RNG is a computational software developed to generate a sequence of numbers. The RNG is used in statistical sampling which generates one or more random numbers from a range of numbers. The list obtained from the Academic Division consists of 980 names of Chinese undergraduates. Each name was assigned a number from 1 to 980. Using RNG, 426 numbers from 1 to 980 were randomly chosen. The names with the randomly picked numbers by RNG were then chosen as a sample of the study. The duplicated numbers were not allowed.
- 3. In the third step, we used the Wenjuan Xin survey platform for data collection. Wenjuan Xin is an online Chinese platform for the creation of professional questionnaires and evaluation forms. Its purpose is to provide users with a powerful and user-friendly questionnaire design, data collection, and results analysis services. The Wenjuan Xin platform has advantages over other traditional survey methods, websites, or systems in terms of speed, convenience, and costs. The anonymity of respondents is ensured. All participants were informed that the study was confidential and anonymous, and that participation was voluntary. In addition, the questionnaire link was sent to the international students through their email. The data collection started in November 2020, and it took approximately two months to complete. In this study, the researcher distributed 426 questionnaires. However, the total number of respondents computed after data cleansing was 300. The study was given ethical approval by the JKEUPM Ethics Review Panel. For data analysis, the partial least square structural equation modelling (PLS-SEM) technique was employed.

#### 4.3 Measures

The self-administered questionnaire comprised demographic profiles, resiliency, social support, spirituality, and PWB. The questionnaire was divided into five sections. A demographics question was created to obtain information on gender and sibling structure. Items in the demographics profile were included based on previous findings (Siddiqa & Jahan, 2018). We used the 25-item Connor-Davidson Resilience (CD-RISC) scale to measure resilience (Connor & Davidson, 2003). Sample items

are "I can adapt when changes occur", "I have a tendency to recover well from sickness, injury, or other adversity", and "I am capable of dealing with negative or traumatic emotions such as sorrow, anxiety, and rage." Cronbach alpha values for the CD-RISC scale yielded 0.849. To measure perceived social support, the 12-item Multidimensional Scale of Perceived Social Support (MSPSS) was employed (Zimet et al., 1988). This scale included the social network of family members, peers, and a significant other. Acceptable Cronbach  $\alpha$  values for the MSPSS were 0.692. Sample items included "There is someone extraordinary with whom I will share my hopes and fears", "My family tries to assist me," and "I will discuss my troubles with my friends". We measured spirituality using the Spiritual Values Scale (SVS; Hatch et al., 1998). This instrument was adapted by Universiti Putra Malaysia in collaboration with the University College of Medical Science, Institute of National High Education Research, Cyberjaya (Kamidin, 2011). This instrument contains 20 items that consist of four negative items for questions 3, 5, 9, and 10. Acceptable Cronbach alpha values for the SVS were 0.750.

To measure PWB, Ryff's (1989) Psychological Well-being Scales was employed. The questionnaire contains six subscales: self-acceptance, autonomy, environmental mastery, positive relationships, purpose in life, and a sense of personal growth. Sample items included: "I am not afraid to express my views, even though they differ from the majority of people's views" and "I believe it is critical to have fresh perspectives that test your perceptions of yourself and the world". The Cronbach's alpha coefficient in this study scored 0.838. We use 6-point Likert scales a 6-point Likert scale where 1 represents "strongly disagree" and 6 for "strongly agree". The questionnaire was also translated into the Chinese language.

# 5. Findings

# 5.1 Respondents' Profile

As the results of the study indicated 122 males (40.7%) and 178 females (59.3%) participated in the study (See in Table 1). Also, most of the respondents are from one single-child family (63.7%, n=191) and the rest are not from one single-child family (36.3%, n=109).

Demographic Characteris	Frequency	Percentage (%)			
Gender	Male	122	40.7		
	Female	178	59.3		
	Total	300	100		
Sibling Structure	Yes	191	63.7		
(Whether from a one-child family)	No	109	36.3		
	Total	300	100		

**Table 1.** Frequency and Percentage Distribution by Gender and Sibling Structure.

# 5.2 Measurement Model

A measurement model employed to assess the reliability, internal consistency, and validity of the structural model. The values of composite reliability (CR) scored from 0.812 to 0.912, demonstrating great internal consistency of scores (see Table 2). The construct validity is evaluated using convergent and discriminant validity. All values of average variance extracted (AVE) scored above 0.50 and the values of Cronbach's  $\alpha$  was above 0.70, indicating high convergent validity (Hair et al., 2017).

Table 2. Construct reliability and validity

Construct	Item	loading	Cronbach's α	rho_A	CR	AVE
PSS	PSS10	0.736	0.892	0.895	0.912	0.535
	PSS12	0.722				
	PSS2	0.716				
	PSS3	0.705				
	PSS4	0.728				
	PSS5	0.787				
	PSS6	0.753				
	PSS7	0.737				
	PSS9	0.801				
PWB	PWB11	0.781	0.838	0.845	0.881	0.554
	PWB12	0.818				
	PWB2	0.755				
	PWB22	0.725				
	PWB38	0.705				
	PWB40	0.782				
RE	RE11	0.701	0.849	0.853	0.888	0.570
	RE13	0.767				
	RE16	0.770				
	RE17	0.762				
	RE21	0.748				
	RE22	0.780				
SP	SP2	0.817	0.750	0.761	0.812	0.593
	SP6	0.824				
	SP7	0.758				

Note. Perceived social support: PSS; psychological well-being: PWB; resiliency: RE; spirituality: SP.

The variance inflation factors (VIF) values in this study were lower than 5 (see Table 3), indicating that the problem of multicollinearity was not present (Tabachnick & Fidell, 2013).

**Table 3**. Multi-collinearity test for exogenous latent constructs.

	1	2	3	4
1. PSS	-	1.222	1.000	1.000
2. PWB	-	-	-	-
3. RE	-	1.303	-	-
4. SP	-	1.116	-	-

*Note.* Perceived social support: PSS; psychological well-being: PWB; resiliency: RE; spirituality: SP.

To test discriminant validity, the Fornell-Larcker criteria and the Heterotrait-Monotrait (HTMT) criteria were used (Henseler et al., 2015). Following this criterion, the results indicated that discriminant validity was obtained as each construct had AVE square root values that were greater than the correlation values for any constructs that were paired. Also, the HTMT values in all cases scored under the 0.85 threshold (see Table 4). This effectively confirmed discriminant validity in the study.

	Fornell-L	arcker Criterio		Heterotrait-Monotrait Ratio (HTMT)				
	1	1 2 3		4	1	2	3	
1. PSS	0.732						<del>.</del>	
2. PWB	0.574	0.744			0.652			
3. RE	0.420	0.600	0.755		0.477	0.694		
4. SP	0.197	0.399	0.314	0.770	0.253	0.548	0.429	

*Note*. Perceived social support= PSS; psychological\_well-being= PWB; resiliency= RE; spirituality= SP

### **5.3** Structural Model Results

The overall fit of the PLS structural model was verified in this investigation when the standardized root-mean-square residual (SRMR) value was 0.06, which was significantly less than the 0.10 criterion (Henseler et al., 2015). As shown in Table 5, perceived social support has a significant impact on PWB ( $\beta$  = 0.374, t = 6.509, p = .000). Hence, H<sub>1</sub> was supported. According to indirect effect, resiliency partially mediated the relation between perceived social support and PWB ( $\beta$  = .159\*\*\*, t = 3.567, p > 0.001). In addition, resiliency partially mediates the relationship between perceived social support and PWB ( $\beta$  = .041\*\*, t = 2.339, p < 0.001). Hence, H<sub>2</sub> and H<sub>3</sub> were partially supported (see Table 5).

Table 5. Mediation result

Model "A" Total Effect						Model "B" Direct effect					Model "C" Indirect effect			
	Bias corrected bootstrap (95% CI)						Bias corrected bootstrap (95% CI)				Bias corrected bootstrap (95% CI)		ected strap	
Path	Coefficient	t- value	LCI	UCI	Path	Coefficient	t- value	LCI	UCI	Path	Coefficient	t- value	LCI	UCI
PSS→ PSW	0.574 ***	13.84	0.49	0.65	PSS→ PSW	0.374***	6.509	0.25	0.47	PSS→ RES → PWB PSS→ SPIR →	0.159*** 0.041**	2.339	0.08 6 0.01 4	0.25
										PWB				

Note. Note. Perceived social support: PSS; psychological well-being: PWB; resiliency: RE; spirituality: SP.

### 6. Discussion and Implications

This research set out to investigate both resiliency and spirituality as mediators in the relations of the perception of social support and PWB among international university students. For the first hypothesis, the structural model provided results that substantiated the positive link between the two mentioned variables. The results also revealed the independent and partial mediating effects of resiliency and spirituality in the link of perceived social support-PWB. Taken together, the present findings provided a deeper understanding of the constitution of perceived social support as Chinese international students' PWB develops. More importantly, clarity is established on the inner workings of resiliency and spirituality serving as important mediational mechanisms for PWB. In addition, these results offer useful recommendations to universities that seek appropriate enhancement interventions to boost students' PWB in their efforts to appeal to international students. Furthermore, this study fills the research gap of existing PWB literature (e.g., Akhtar & Kroener-Herwig, 2019; Li et al., 2019) which although past studies have examined other mediating effects of the two key constructs, the investigation into the pathways of resiliency and spirituality on PWB was lacking. As far as we know, the paired

mediating roles of resiliency and spirituality is a fairly new research area, hence the novelty of this study, contributing towards the core theoretical development of PWB.

First, the present study proved that the positive correlation of perceived social support with PWB is significant among the UPM sample of 300 Chinese international students. As expected, perceived social support from one's circle of family members, peers, and significant others contributed considerably to PWB. This result is aligned with past research (e.g., Kingery et al., 2020). Corsano et al. (2006) reported that enjoying positive relations with family and friends will boost youth's PWB. In addition, Zhang and Goodson (2011) have reported that international students who enjoy social support networks that comprise peers and academic staff tend to experience a smooth academic transition and adjustment.

Second, the mediating role of resiliency between the two key constructs was supported in the present study, thereafter in congruence with past studies that reported the link of resiliency to perceived social support (Kong et al., 2021; Singh & Jamil, 2021) and psychological well-being (e.g., Halif et al., 2020). This further supports the transactional theory of stress and coping (TTSC) (Lazarus & Folkman, 1984). As TTSC goes, it can be predicted that resilient Chinese students will tend to display positive PWB. This theory also suggests that resiliency is an inherent resource that can impact students' distress perception amid challenging circumstances. Instead of only providing social support to the students at the onset of observable distress signals and the development of negative psychological outcomes, the intervention focus should be to spark and nurture students' inner potential during the pre-distress stage so that it lays the foundation for mental preparedness to handle adjustment challenges. Thus, resiliency, in conjunction with social support, enables Chinese students at UPM to cope with stressors and enhance their PWB.

In past studies, researchers showed the moderating role of spirituality in numerous relationships (e.g., Kent et al., 2020). This study advances the said literature by highlighting and demonstrating spirituality mediating in the workings of the perceived social support-PWB relationship. In essence, international students from China who enjoy esteemed social support have tendencies to establish and develop positive, healthy relationships and attain spiritual transcendence, all of which engender high levels of PWB experiences. This study also advances the understanding of spirituality as a mediator in the dynamics of context and PWB. According to Baron and Kenny (1986), the study of mediator variables aims to explain the relationship that exists between the independent and dependent variables. Taking all into consideration, the findings of the present study indicate that international students consider spirituality as an essential part of their lives. Koenig (2004) posits that the importance of spirituality on PWB stems from nurturing a positive global perspective, meaning, and purpose, easing of psychological integration, hopeful disposition, empowered sensibility, answers to ultimate questions, and providing social support.

Based on the results, we provide some practical suggestions on improving international students' PWB. With the said findings in mind, counseling centers at universities should consider psychology-based intervention programs of educational nature. A good example is introducing coping strategies to students to tackle migration, academic, and life stressors. Another topic to introduce is how to develop interpersonal skills because these can enhance students' relationships with the immediate members of their social circle. In the facilitation of a social support system, universities should encourage and provide platforms for social events and networks that not only bring local and international students together but also among just international students where they can form and interact in organizations or clubs that would ease them into being well-settled. In addition, as a precampus activity, international students can begin to engage with their local counterparts through email, social media, and pre-orientation programs (Yao, 2008). In effect, university administrators are encouraged to offer, increase, and enhance access to courses on the topics of freshman year experience as well as academic and cultural transitions. Studies have shown that these said intervention programs are relevant and essential for international students in their freshman year as evidence has shown positive outcomes, such as strengthened social support, a sense of belonging, and fostering diversity appreciation and inclusion (Brunsting et al., 2018).

When the resiliency mediator comes into the picture of the social support-PWB dynamics, there are several implications for international students at universities. A current example is when the Covid-19 pandemic remains as a sustained life disruptor. Those in the professions of psychology and psychiatry should consider an online approach (Internet and social media) to timely reach out to

international students as self-help strategies are shared. During this approach, opportunities to cultivate resilience and positive emotions should be exploited, and that these should be paired with problem-focused coping strategies. Spirituality, as a mediator, lends greater importance with key implications because it is considered an essential part of health, both from the field of medicine and social sciences. Spirituality resides as a PWB dimension which students access to overcome various life barriers. Therefore, some courses can be created to discuss theories regarding spirituality, peace, faith, and religious beliefs and practices. These courses may be offered as an elective and made accessible for students from all university programs. When students take up these courses, they are encouraged to explore and tap into their spiritual resources, maintain social relationships, and boost PWB levels. Other initiatives worth developing are community service projects, such as those that offer compassion and care to vulnerable and underprivileged groups. Spirituality can be further enhanced with well-organized lectures, seminars, or workshops that link it with the PWB of international university students. Finally, universities should attend to the provision of conducive prayer room facilities so that students can privately perform their religious and spiritual practices.

# 7. Limitation and Direction to Future Studies

There are some limitations to the current study that might be helpful for the future. The first limitation is the use of a cross-sectional study design, which precludes studies into causal relationships. Therefore, future studies extending our results should perform longitudinal or experimental studies for verification. Another limitation of the study is that the participants were recruited from a single university. Therefore, the findings cannot be generalized across international students of other higher education institutions. It must be noted that to establish reasonable generalizability of the results, data must be collected from a broader range of universities. The third limitation is that despite reliable and valid instruments employed, the results of this study were based on self-assessed measurements. Thus, the pairing of other forms of assessment, such as peer- and parent-reporting, should be considered in future research. Finally, because of the provision of a political indoctrination curriculum in China, the majority of Chinese students do not care about the idea of God; therefore, this study focuses solely on researching Chinese students' spirituality rather than religious views. Thus, religiosity is advised to be included as an independent variable for further study.

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