

The contributions of teacher intercultural competence to academic satisfaction and engagement among international students in China and Thailand

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ABSTRACT

Purpose: The contributions of teacher intercultural competence to educational outcomes, including student self-efficacy, engagement, and academic satisfaction, were investigated in this study.

Design/Methodology/Approach: The study applies the quantitative method using primary data from the survey collected from 400 international undergraduate students in China and Thailand. The partial least squares structural equation modeling is used to analyze the relationships of variables between conceptual constructions.

Findings: The results indicate that teacher intercultural competence has positive and significant effects on international student self-efficacy and engagement but has no significant effect on international student academic satisfaction.

Conclusion: This study provides new insight into international student self-efficacy, engagement, and academic satisfaction from the perspective of teacher intercultural competence.

Research Limitations/Implications: In this study, undergraduate international students were selected only from China and Thailand, which is considered a research limitation. Thus, increasing the generalizability of the whole population by collecting data from more universities is suggested for future research.

Practical Implications: Educational policymakers or university administrators should improve international student educational outcomes from the perspective of teacher education and professional development. Teacher intercultural competence should be considered a significant part of teacher education and professional development. If the teachers understand the cultural or behavioral differences from the perspective of students, they can construct a more inclusive and effective academic environment.

Contribution to Literature: This study proposed and confirmed the mediating role of international student self-efficacy, which brings clarification to the formational mechanism of how teacher intercultural competence affects international student engagement and academic satisfaction.

Keywords: *Academic satisfaction, Educational outcomes, Engagement, Intercultural competence, International student, Self-efficacy.*

1. INTRODUCTION

With the development of economic globalization, “global citizens”, “world-minded”, “globally engaged”, and “interculturally competent” have become common appeals for the graduates of diverse education organizations (Paige & Goode, 2009). During the post-Covid-19 period, scholars have consistently discussed and researched the trends of higher education internationalization (Li & Eryong, 2022; Li & Xue, 2022), which can be reflected in the increasing number of international students and the more diversified options for international education (OECD, 2019). Apart from the developed countries being the common destination for international higher education, some Asian countries, such as China and Thailand, have increasingly become new alternatives for international students who search for cost-effective education. The Chinese government has positively promoted the internationalization of higher education within China since the mid-1990s (Huang, 2015) to increase the nation’s

global competitiveness in higher education. However, scholars have been paying more attention to the role of China as a source of international student outflow but have often overlooked the country as an education destination for international students (Jiani, 2017). According to the 2018 data provided by the China Ministry of Education, 492,185 foreign students from 196 countries have been learning in China. In Thailand, the internationalization of higher education has been encouraged by the national government since 1990. At present, universities in Thailand are endeavoring to enroll more students from other countries (Lavankura, 2013).

Nevertheless, from the perspective of national culture, both China and Thailand are non-English-speaking countries with distinct local languages and cultures. Given that student learning and engagement are mutual interactions between teachers and students under the impact of sociocultural contexts (Kahu, 2013), international students in China and Thailand from different backgrounds of language and culture are likely to encounter various intercultural challenges such as culture shock and loneliness (Rujiprak, 2016; Tian & Lowe, 2014). Such intercultural challenges might further affect international students learning engagement and academic satisfaction. For instance, different reports in China mention that student learning fatigue, inadequate engagement, and academic dissatisfaction frequently occur due to the shortage of teacher intercultural competence when teaching foreign students (Wang, 2013). A study investigating a sample of international university students in Shanghai (Ding, 2016) identified that only 50% of foreign students are satisfied or very satisfied with their overall learning experience in China. Similarly, only 60% of foreign students learning the Chinese language are satisfied. To cope with such problems and challenges, teachers are often expected to care about the cultural diversity of students from different social backgrounds (Teekens, 2003). Teachers and educators are required to not only be prepared with intercultural knowledge and skills but also to transmit intercultural competence to their students (Cushner & Mahon, 2009). As the conclusion of Cushner and Mahon (2009) in developing the intercultural competence of educators and their students states, "It would appear that future directions for teacher education development should place intercultural competence at the foundation of this work, both in terms of its process and content dimensions in both the domestic as well as international domains" (p. 317). Therefore, this study aims to provide more insights from the perspective of teacher intercultural competence to increase educational outcomes among a group of international students in China and Thailand.

This study was designed to examine the effects of teacher intercultural competence on international student engagement and academic satisfaction through the mediating role of student self-efficacy. Scholars have talked about the effects of different parts of teacher intercultural competence on student engagement and satisfaction (Hasan, Ilias, Rahman, & Razak, 2008; Kuo, Walker, Schroder, & Belland, 2014; Robinson, 2012), but few studies seem to have been done to look at these relationships from the point of view of the potential mediating variable based on a solid theoretical perspective, especially in the context of the emerging internationalization of education. Thus, it remains a research gap to clarify the formation mechanism by which teacher intercultural competence promotes international student engagement and academic satisfaction through a mediating variable in various research contexts. Moreover, the social cognitive theory (Bandura, 1977; Albert Bandura, 1986), as an important metatheoretical support, has been extensively applied in many domains as it provides a dynamic perspective for understanding human cognition and behavior, particularly the concept of self-efficacy since such theory can be utilized in learning and performance (Gibson, 2004). However, the association between intercultural factors and self-efficacy has still not been extensively researched in universities (Bartimote-Aufflick, Bridgeman, Walker, Sharma, & Smith, 2016). Indeed, in the intercultural classroom setting, the input and output of self-efficacy are yet to be examined. This study is expected to fill this gap by investigating the mediating role of international student self-efficacy between teacher intercultural competence and relevant educational outcomes in terms of international student engagement and academic satisfaction.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Teacher Intercultural Competence

In the past, intercultural competence was often viewed as similar to other concepts, such as intercultural communication competence or cross-cultural communication competence. As a top appeal in line with the demands of an increasingly diverse world, intercultural competence has been an intensive concern for scholars. For instance, Matveev and Nelson (2004) constructed the collaborative intercultural competence model, which includes four dimensions: interpersonal skills, team effectiveness, intercultural uncertainty, and intercultural empathy. In addition, Deardorff (2006) proposed that intercultural competence consists of personal attitudes,

knowledge, and communicative skills that contribute to relevant internal and external outcomes, such as effective personal adaptability and communication behavior.

Teacher intercultural competence is a teacher's ability to successfully teach students from diverse cultures (Moule, 2005). In the field of teacher education and professional development, teacher intercultural competence has played a significant antecedent role in increasing educational competitiveness and international education outcomes (Kenneth Cushner & Chang, 2015). The various components of teacher intercultural competence have been investigated to promote educational outcomes. For example, teacher interpersonal skills contribute to student learning motivation, attitude, and self-efficacy (Den Brok, Levy, Brekelmans, & Wubbels, 2005), student academic performance and achievement (Boak & Conklin, 1975; Fan, 2011), teaching performance and effectiveness (Angeles, 2012; Parayitam, Desai, & Phelps, 2007), as well as student satisfaction (Parayitam et al., 2007). Similarly, teacher intercultural openness and patience positively affect student achievement and success (Sherman, Rasmussen, & Baydala, 2008), teaching performance, and professional development (Hascher & Hagenauer, 2016; Mohamed, 2008). Lastly, teacher intercultural empathy has a positive influence on teaching performance and effectiveness (McAllister & Irvine, 2002; Warren, 2013), student learning motivation, and behavior (Waxman, 1983; Wink, LaRusso, & Smith, 2021).

2.2. Teacher Intercultural Competence and International Student Self-Efficacy

Self-efficacy, as a significant concept from the social cognitive theory, reflects the individual's cognitions regarding his/her competence to accomplish the expected performance (Albert Bandura, 1986). There are four original resources for self-efficacy: the individual's past accomplishments, modeling (vicarious experience), social persuasion, and physiological states (Wood & Bandura, 1989). This study identified that teacher intercultural competence would increase international student self-efficacy by providing diverse resources. First, teacher intercultural competence is likely to increase student self-efficacy by contributing to effective social persuasion. In support of this statement, Wood and Bandura (1989) pointed out that self-efficacy can be improved by social persuasions, such as encouragement from elders or friends. In the educational context, Sexton and Tuckman (1991) reported that teacher encouragement can improve student self-efficacy. Bartimote-Aufflick et al. (2016) indicated that student self-efficacy can be cultivated through the teacher's efforts, such as encouraging and maintaining students' learning motivations, which is supported by intercultural competence, particularly effective communicative skills. Similarly, Van Dinther, Dochy, and Segers (2011) reported that student self-efficacy in higher education can be enhanced by controlling and imputing positive external factors, such as effective interpersonal communication between teachers and students. Given that the dimensional characteristics of intercultural competence facilitate effective persuasion, encouragement, and interpersonal communication (Matveev & Nelson, 2004; Matveev, 2017), it is reasonable to predict that a teacher with high intercultural competence is more likely to increase student self-efficacy. Moreover, teacher intercultural competence is expected to contribute to a positive teacher-student relationship and strengthen student self-efficacy. Numerous scholars (Xu & Qi, 2019; Zhou, Liu, & Liu, 2020) have confirmed the positive influence of teacher-student rapport on student self-efficacy. Given that the teacher's characteristics of intercultural competence, particularly the dimension of teacher empathy, play a crucial role in facilitating teacher-student rapport (Meyers, Rowell, Wells, & Smith, 2019), it makes sense to predict that a teacher with high intercultural competence would increase student self-efficacy by building teacher-student rapport. Additionally, some existing empirical studies have examined the potential relationship between the specific components of intercultural competence and self-efficacy. For instance, collecting data from Asian international students in the United States, Lee and Ciftci (2014) attested that the dimension of cultural empathy has a positive influence on student academic self-efficacy. Similarly, Charoensukmongkol and Pandey (2020) investigated the positive relationship between cultural intelligence and self-efficacy in the context of intercultural sales in Thailand. Based on various theoretical and empirical supports, this study predicts that a teacher with high intercultural competence would have a more positive influence on international student self-efficacy. Therefore, the first hypothesis of this study is developed as follows:

Hypothesis₁: Teacher intercultural competence positively associates with international student self-efficacy.

2.3. The Antecedents of International Student Engagement

The concept and dimensions of student engagement have attracted many scholars' attention in the past decades. Finn (1989) viewed engagement as students' involvement to facilitate their positive responses to school

requirements. Krause and Coates (2008) understood student engagement as the degree to which students participate in activities for learning outcomes. Referring to existing literature (Burch, Heller, Burch, Freed, & Steed, 2015; Fredricks, Blumenfeld, & Paris, 2004; Kahu, 2013), the dimensions of student engagement include cognitive engagement, emotional engagement, and behavioral engagement. Cognitive engagement refers to students' understandings and judgments towards learning activities, such as learning motivations, goals, plans, and self-regulation. Emotional engagement consists of different affective responses in or out of class, which might be positive or negative. For instance, being happy or depressed, relaxed or anxious, and feeling a sense of belonging or alienation are examples of emotional engagement. Specific behaviours, such as participation in class activities and making an effort to finish assignments after class, can indicate behavioural engagement.

Student engagement is a complex, multidimensional interaction process with numerous antecedents and consequences embedded within broad sociocultural influences (Kahu, 2013). Kahu (2013) further distinguished two aspects of antecedents for both the university and student levels. On the one hand, the antecedents of the university include school culture, policies, curriculum, staff competence, leadership, etc. On the other hand, the antecedents of students consist of student background, learning motivation, skills, identity, self-efficacy, etc. Based on Kahu's theoretic framework, this study predicts that teacher intercultural competence and international student self-efficacy are likely to determine international student engagement. Evidence from existing empirical studies can further verify and support the related hypotheses. For instance, Robinson (2012) investigated international students in Hong Kong and revealed that student engagement was positively and significantly associated with teacher intercultural competence. Sökmen (2021) reported the positive impact of student self-efficacy on student engagement in Turkey. Olivier, Archambault, De Clercq, and Galand (2019) reported the positive association of student self-efficacy with student classroom engagement in Canada. Similarly, Noreen, Hasan, Batool, and Ali (2018) confirmed a positive relationship between student academic self-efficacy and student engagement in Pakistan. Bresó, Schaufeli, and Salanova (2011) examined whether increasing student self-efficacy can enhance student engagement and performance in Spain. Based on these works of literature, the second and third hypotheses are developed as follows:

Hypothesis₂: Teacher intercultural competence is positively associated with international student engagement.

Hypothesis₃: International student self-efficacy positively associates with international student engagement.

2.4. The Antecedents of International Student Academic Satisfaction

More and more academics are accepting the role of students as customers for educational service providers as the global educational market develops (Wallace, 1999). Educational organizations need to improve perceived quality to ensure the overall satisfaction of students (Misanew & Tadesse, 2014). Similarly to this, Bini and Masserini (2015) noted that student satisfaction can indicate the caliber of educational services. As one of the most important aspects of student satisfaction, academic satisfaction is defined as a subjective appraisal of the overall positivity of the academic experience (Huebner & Gilman, 2006). Similarly, Schleich, Polydoro, and dos Santos (2006) understand academic satisfaction as the student's satisfaction with the specific academic experience. Lent, Singley, Sheu, Schmidt, and Schmidt (2007) view academic satisfaction as the "enjoyment of one's roles or experiences as a student" (p. 87). It is also viewed as a subjective evaluation of the educational experience (Schmitt, Oswald, Friede, Imus, & Merritt, 2008).

From the existing works of literature, we can find that teacher intercultural competence as one external environment factor plays a positive role in shaping student academic satisfaction, particularly for international students in the intercultural context. For example, Bhawuk and Brislin (1992) pointed out that students in culturally diverse classes tend to reflect on and evaluate their academic experience positively if the teacher has high intercultural competence. Contrastingly, if a teacher lacks essential intercultural competence, a negative evaluation of the learning experience and teaching performance is more likely to emerge. Additionally, some scholars (Kuo et al., 2014; Lyons, Scroggins, & Rule, 1990; Parahoo & Tamim, 2012) have also pointed out that student satisfaction is positively associated with the specific components of teacher intercultural competence, such as successful intercultural communication and interaction between teacher and student. Empirically, studies regarding the positive relationship between a specific dimension or component of teacher intercultural competence and student satisfaction have been conducted by scholars. For example, Parayitam et al. (2007) reported that teacher communication skills positively affect student satisfaction in the United States. Also, Hasan et al. (2008) examined the positive relationship between the teacher empathy dimension and student satisfaction

in Malaysia. In the parallel field of business management, [Ihtiyar and Ahmad \(2015\)](#) proposed and examined the positive influence of salespeople's intercultural competence on customer satisfaction. Given such existing theories and studies, this study proposes that teacher intercultural competence tends to influence international student academic satisfaction positively. Hence, the fourth hypothesis of the present study is developed as follows:

Hypothesis₄: Teacher intercultural competence positively correlates with academic satisfaction.

Many scholars have discussed the influence of self-efficacy on satisfaction or well-being ([Judge, 1997](#); [Nielsen & Munir, 2009](#); [Wood & Bandura, 1989](#)). [Judge \(1997\)](#) stated that individuals with high self-efficacy tend to achieve success and satisfaction as they usually have stronger beliefs to cope with various difficulties or challenges. Similarly, given that healthy psychological adaptation is more likely to be derived from strong self-efficacy ([Jerusalem & Schwarzer, 2014](#)), people with strong self-efficacy are more likely to achieve success and satisfaction through positive psychological adaptation ([Coffman & Gilligan, 2002](#)). In contrast, individuals with weak self-efficacy have the tendency to view stress and challenges as threats, thereby generating negative psychological responses such as dissatisfaction, depression, or burnout ([Jex, Bliese, Buzzell, & Primeau, 2001](#); [Judge & Bono, 2001](#); [Liu, Siu, & Shi, 2010](#)). The influence of student self-efficacy on student academic satisfaction has been empirically examined and confirmed by numerous quantitative studies. For example, after collecting data from freshman students in Korea, [Kim \(2016\)](#) reported a significant positive relationship between student academic self-efficacy and satisfaction. [DeWitz and Walsh \(2002\)](#) proposed and investigated the positive relationship between self-efficacy and college student satisfaction in the United States. [Gopalan, Beutell, and Middlemiss \(2019\)](#) examined the positive influence of self-efficacy on student academic satisfaction in the United States. [Lent et al. \(2007\)](#) examined the influence of social cognitive factors on student academic satisfaction and further confirmed the influence of self-efficacy on academic satisfaction in the context of engineering students in the United States. Similarly, the positive relationship between student self-efficacy and satisfaction has also been investigated by other empirical studies, such as [Puzziferro \(2008\)](#), [Kuo et al. \(2014\)](#), [Machmud \(2018\)](#), and [Selzler et al. \(2019\)](#). This study makes the argument that a student with higher self-efficacy tends to be stronger at achieving academic satisfaction. Hence, the fifth hypothesis of this study is proposed as follows:

Hypothesis₅: Student self-efficacy positively associates with student academic satisfaction.

2.5. The Mediating Role of Student Self-Efficacy: A Social Cognitive Theory Perspective

[Figure 1](#) illustrates the relationship between variables in the conceptual framework's construction. Besides the direct effect of teacher intercultural competence on international student self-efficacy, engagement, and academic satisfaction, we argue that student self-efficacy mediates the influence of teacher intercultural competence on international student engagement and academic satisfaction. According to the social cognitive theory ([Albert Bandura, 1986](#)), learning is a mutual interactional process among the external environment, personal behavior, and cognition. [Albert Bandura \(1986\)](#) proposed the seminal concept of self-efficacy as a personal cognitive factor, which has been intensively discussed in educational contexts, particularly the associations between self-efficacy and the various outcomes in the education field.

Based on the existing literature ([Bartimote-Aufflick et al., 2016](#); [Sökmen, 2021](#); [Xu & Qi, 2019](#)), student self-efficacy is a critical mediator between external environmental factors and relevant outcomes, such as student psychological well-being, satisfaction, engagement, and academic achievement. In this study, teacher intercultural competence is identified as an external environmental factor that influences student self-efficacy and further boosts other related educational outcomes in terms of student engagement and academic satisfaction. Thus, two indirect hypotheses are developed as follows:

Hypothesis₆: International student self-efficacy mediates the effects of teacher intercultural competence on international student engagement.

Hypothesis₇: International student self-efficacy mediates the effects of teacher intercultural competence on international student academic satisfaction.

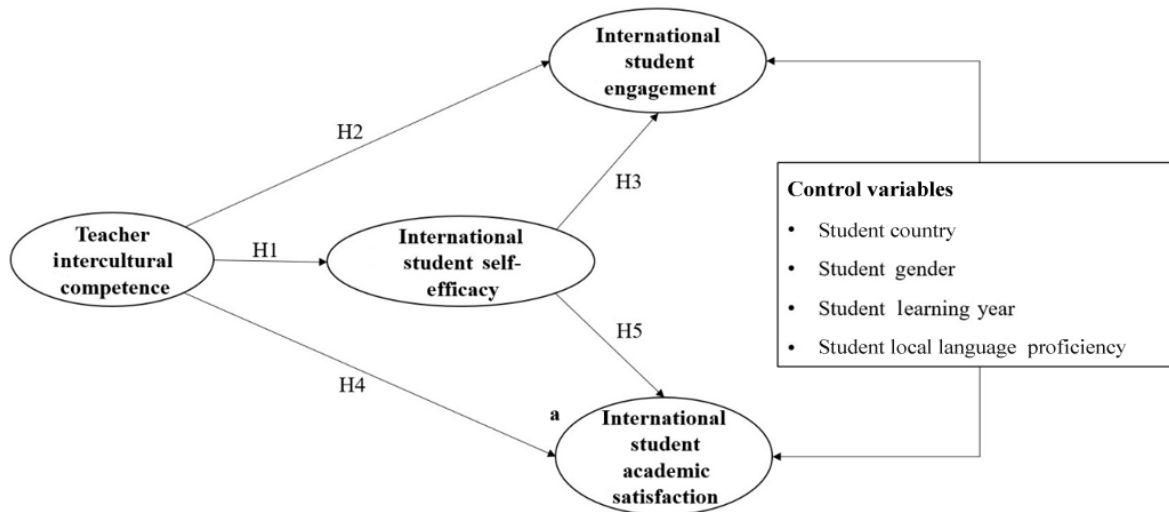


Figure 1. Conceptual framework.

3. MATERIALS AND METHODS

3.1. Sample and Data Collection Procedure

This study employed a convenience sampling method. Given the sufficient number of international students enrolled at Beijing Language and Culture University (BLCU) and Assumption University (AU), the international students of both institutions were suggested as the representatives for higher education international students in China and Thailand. The whole process of data collection lasted approximately 3 months. With clear instructions about the survey’s objectives and a commitment to keep the respondent anonymous and confidential, 430 international undergraduate students from the two universities participated in the online questionnaire survey. Finally, 400 sets of usable questionnaires were gathered for data analysis. The respondents’ demographics and characteristics are reported in Table 1.

Table 1. Respondents’ demography and characteristics.

Characteristics	Descriptive statistics
Gender	Male: 180 (45%) Female: 220 (55%)
Age	Mean: 20.750 S.D.: 2.337
Country	Asian countries: 274 (68.5%) Non-Asian countries: 126 (31.5%)
Length in university	The first year: 70 (17.50%) The second year: 79 (19.75%) The third year: 101 (25.25%) The fourth year: 150 (37.50%)
Local language proficiency	Beginner: 80 (24.5%) Elementary: 98 (24.5%) Intermediate: 101 (25.25%) Upper: 76 (19%) Advanced: 45 (11.25%)

3.2. Measures

The scale constructed by Matveev and Nelson (2004) was employed to measure teachers intercultural competence. This scale consists of interpersonal skills (5 items), cooperation spirit and ability for team effectiveness (7 items), openness to intercultural uncertainty (6 items), and intercultural empathy (5 items). The reliability and validity of this scale have been confirmed in different research contexts (Matveev & Nelson, 2004;

Matveev & Del Villar, 2014). The items were tailored to the research context of this study. Sample items were “My Chinese teacher of this course in BLCU (or My Thai teacher of this course in AU) has the ability to acknowledge differences in communication and interaction styles”. These items were assessed on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The study modified the Solberg, O'Brien, Villareal, Kennel, and Davis (1993) college student self-efficacy scale to measure student self-efficacy. The original scale consists of three subscales with a total of 19 items: course efficacy (7 items), roommate efficacy (4 items), and social efficacy (8 items). As roommate efficacy was not applicable in the research scope of this paper, it was removed from the original scale. The reliability and validity of this instrument have been examined in different research contexts (Solberg et al., 1993; Torres & Solberg, 2001). A sample item was “I am confident that I could successfully research for a term paper.” A five-point Likert scale ranging from 1 (very weak) to 5 (very strong) was employed to assess each item.

The scale created by Burch et al. (2015), which consists of 24 items covering four dimensions: emotional engagement, behavioural and physical engagement, cognitive engagement in class, and cognitive engagement outside of class, measured student engagement. The reliability and validity have been confirmed by different scholars (Burch et al., 2015; Rich, Lepine, & Crawford, 2010). Sample items were “I am enthusiastic about this class or course”, “I work with intensity on assignments for this class or course”, and “When I am in the classroom for this class or course, I pay a lot of attention to class discussions and activities”. A five-point Likert scale ranging from 1 (never) to 5 (always) was used to measure each item.

Applying the five-item Schmitt et al. (2008) scale to measure student academic satisfaction. A sample item was “I am satisfied with the education I can get in this course”. A five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was used to measure each item.

3.3. Control Variables

Control variables in this study include international student gender, country, length of student learning years in university, and local language proficiency in host countries. Students' gender and country were measured as dummy variables. The male students were coded as '1' while the females were coded as '0'; students from non-Asian countries were coded as '1' while the students from Asian countries were coded as '0'; the length of student learning years in university was measured by the actual number of years at school (freshman =1, sophomore = 2, junior =3, senior =4); Local language proficiency was measured by the scale constructed by Takeuchi, Yun, and Tesluk (2002). A five-point Likert scale ranging from 1 (beginner) to 5 (advanced) was used to measure each item.

3.4. Data Analysis

In this study, Partial Least Square Structural Equation Modeling (PLS-SEM) was applied to analyze the data. Besides its multiple functions, including path analysis, multiple regression analysis, and structural equation modeling, PLS-SEM has advantages in terms of analyzing complicated relationships when latent variables have many items as indicators. Additionally, PLS-SEM is more flexible in the requirements of data distribution and sample size, especially when the data is not normally distributed (Hair, Ringle, & Sarstedt, 2011; Kline, 2015). Considering the multiple-dimension latent variables and the abnormal data distribution in this study, PLS-SEM was found to be the suitable analytical approach. WarpPLS 7.0 was utilized to execute PLS estimation.

4. RESULTS

The validity and reliability of the scales were initially tested to ensure the quality of the measurement. First, factor-loading values were employed to identify the convergent validity. Results showed that all values of items in each construct were above the suggested value of 0.5 (Hair et al., 2011). Thus, the convergent validity of each scale was confirmed. Second, discriminant validity was examined by comparing the square root of the average variance extracted (AVE) of each variable and the correlations. If the value of AVE is higher than any correlations that are involved, the discriminant validity will be qualified (Fornell & Larcker, 1981). The results in Table 2 show that discriminant validity is satisfactory. Third, Cronbach's alpha coefficient and the values of composite reliability were identified to confirm the reliability of the scales. As all values in Table 2 are higher than the suggested threshold of 0.7 (Fornell & Larcker, 1981), the reliabilities of each scale are met.

Table 2. Correlation among variables and square root of average variance extracted (AVE).

Variables	Cronbach's alpha coefficient	Composite reliability coefficient	TIC	SSE	SE	SAS	COU	GEN	YEA	LLP
TIC	0.944	0.950	(0.672)	0.355***	0.289***	0.186***	0.063	-0.018	0.083	0.186***
SSE	0.930	0.938		(0.710)	0.538***	0.588***	0.056	0.065	0.079	0.463***
SE	0.945	0.950			(0.667)	0.649***	0.093	0.014	-0.064	0.664***
SAS	0.866	0.904				(0.808)	-0.004	0.048	-0.017	0.682***
COU	n/a	n/a					(1)	-0.083	-0.045	0.033
GEN	n/a	n/a						(1)	0.005	0.080
YEA	n/a	n/a							(1)	-0.077
LLP	0.895	0.923								(1)

Note: TIC=teacher intercultural competence, SSE=international student self-efficacy, SE=international student engagement, SAS=international student academic satisfaction, COU=student country, GEN=student gender, YEA=length of student learning year in university, LLP= student local language proficiency in the host country.

***p-value<.001.

-The square roots of AVE are displayed in the parentheses.

The full variance inflation factor (VIF) can identify the multicollinearity problem. If the value of VIF is not higher than 5, it means it can be accepted (Ringle, Da Silva, & Bido, 2015). Moreover, a full collinearity VIF test can also be employed to detect common method bias (CMB) in the process of data collection (Kock, 2015). The VIF values of all variables in this study ranged from 1.020 to 2.466, which reveals that there is no serious problem with either multicollinearity or CMB.

Results from the PLS-SEM estimation are reported in Figure 2.

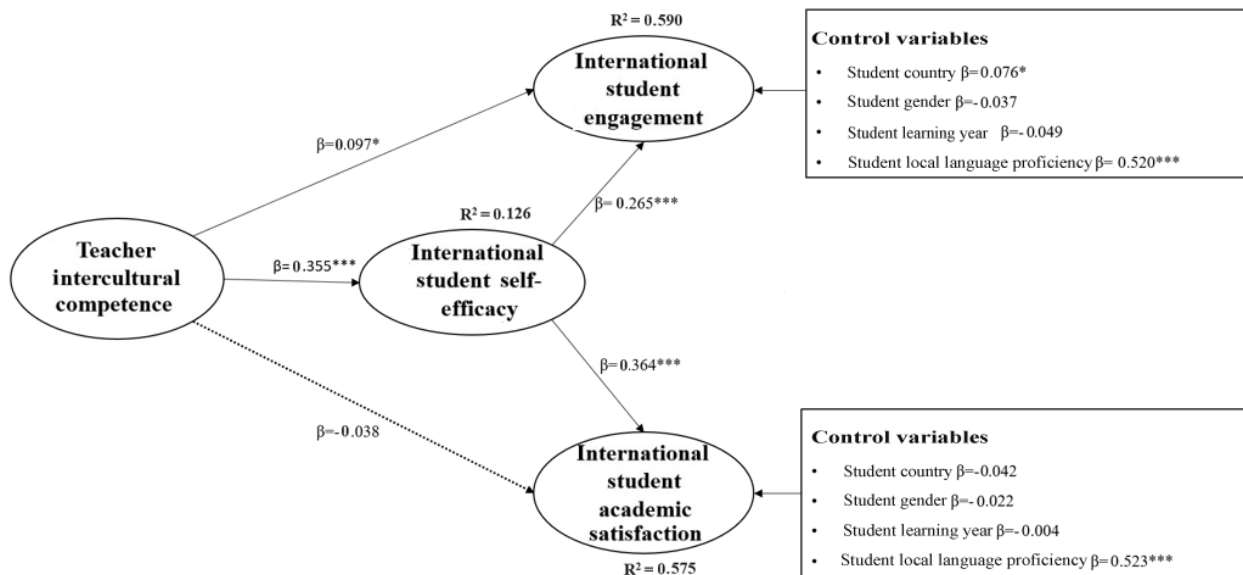


Figure 2. PLS-SEM results.

Notes: * p < 0.1 and *** P<.001. Standardized coefficients are reported. Solid line represents a significant relationship.

Hypothesis 1 predicted a positive relationship between teacher intercultural competence and international student self-efficacy. The result indicated that the association of teacher intercultural competence with international student self-efficacy was positive and statistically significant ($\beta=0.355$, $P<0.001$). Thus, hypothesis 1 was supported.

Hypothesis 2 predicted that teacher intercultural competence would positively influence international student engagement. The result was positive and statistically significant ($\beta=0.097$, $P<0.05$). Hence, hypothesis 2 was supported.

Hypothesis 3 predicted a positive link between international student self-efficacy and engagement. The result demonstrated that the link was positive and statistically significant ($\beta=0.265$, $P<0.001$). Thus, hypothesis 3 was supported.

Hypothesis 4 predicted that teacher intercultural competence would positively impact international students' academic satisfaction. However, the result indicated that the relationship between them was not statistically significant ($\beta=-0.038$, $P=0.206$). Thus, hypothesis 4 was not supported.

Hypothesis 5 predicted a positive association between international student self-efficacy and academic satisfaction. The result was positive and statistically significant ($\beta=.364$, $P<.001$). Thus, hypothesis 5 was supported.

Hypothesis 6 proposed that international student self-efficacy would mediate the association between teacher intercultural competence and international student engagement. [MacKinnon, Lockwood, Hoffman, West, and Sheets \(2002\)](#) suggested that mediating effects can be examined by analyzing the coefficient of indirect effect. The analysis indicated that international student self-efficacy positively and significantly mediated the effect of teacher intercultural competence on international student engagement ($\beta=.094$, $P<.001$). Thus, hypothesis 6 was supported. Given that the direct association between teacher intercultural competence and international student engagement is significant, such a mediating effect is recognized as partial mediation.

Hypothesis 7 predicted that international student self-efficacy would mediate the relationship between teacher intercultural competence and international student academic satisfaction. The coefficient of indirect effect ($\beta=.129$, $P<.001$) indicated that international student self-efficacy positively and significantly mediated the effect of teacher intercultural competence on international student academic satisfaction. Thus, hypothesis 7 was supported. Given that the direct association between teacher intercultural competence and international student academic satisfaction was not significant, such a mediating effect was deemed a full mediation.

Regarding the control variables, the results showed that international student engagement was significantly associated with student country ($\beta=.076$, $P<.05$) and local language proficiency ($\beta=.520$, $P<.001$). However, international student academic satisfaction was only significantly associated with student local language proficiency ($\beta=.523$, $P<.001$). Additionally, no significant variation was discovered when comparing the results of PLS estimation from China and Thailand separately.

5. DISCUSSION

This study explored the influence of teacher intercultural competence on international student self-efficacy, engagement, and academic satisfaction. Based on social cognitive theory, student self-efficacy was suggested as a mediator to transmit the effects of teacher intercultural competence on international student engagement and academic satisfaction.

The PLS-SEM results supported the idea that there are positive and significant links between a teacher's intercultural competence and the self-efficacy and engagement of international students. First, the result indicates that international students tend to have a high level of self-efficacy when their teacher has a high level of intercultural competence. Such a result is in line with scholars' discussion that student self-efficacy can be cultivated and enhanced by positive communication between teacher and student, such as effective social persuasion and encouragement ([Bartimote-Aufflick et al., 2016](#); [Sexton & Tuckman, 1991](#); [Van Dinther et al., 2011](#)), as well as teacher-student rapport ([Xu & Qi, 2019](#); [Zhou et al., 2020](#)). Moreover, this result is consistent with some similar empirical studies. For instance, the study regarding teacher intercultural empathy and student self-efficacy ([Lee & Ciftci, 2014](#)) as well as the study regarding cultural intelligence and self-efficacy ([Charoensukmongkol & Pandey, 2020](#)) support this result. Second, the finding confirms that international students are more likely to be engaged in academics when their teacher displays a high level of intercultural competence. This finding is in line with the discussion on the antecedents of student engagement ([Kahu, 2013](#)). Meanwhile, the result is consistent with the previous empirical finding regarding the positive relationship between teacher intercultural competence and student engagement ([Robinson, 2012](#)). Additionally, this study supports the idea that student engagement plays a partial mediating role between teacher intercultural competence and international student engagement. This finding is in line with some similar studies, such as the study regarding the mediating role of student self-efficacy between teacher-student rapport and student academic achievement ([Xu & Qi, 2019](#)). Similarly, results from the study regarding the function of student self-efficacy in mediating the influence of the academic environment on student engagement ([Sökmen, 2021](#)) also help support this finding.

Results from the PLS-SEM did not support the prediction of a direct association between teacher intercultural competence and international student academic satisfaction. This result contradicts some similar empirical findings in different contexts, such as the finding regarding the significant relationship between teacher communication skills and student satisfaction in the United States (Parayitam et al., 2007). Nevertheless, teacher intercultural competence still positively and significantly affects international student academic satisfaction ($r=.186$, $P<.001$) when interpreting the results of the correlations reported in Table 2. Thus, this finding reveals that the direct link between teacher intercultural competence and international student academic satisfaction becomes insignificant after incorporating the mediating variable of student self-efficacy. This result can be explained by the full mediating role of student self-efficacy, which plays a positive and significant function in indirectly transmitting the effects of teacher intercultural competence on international student academic satisfaction.

Overall, this research contributes to academic research in the following aspects: First, this study provides new insight into international student self-efficacy, engagement, and academic satisfaction from the perspective of teacher intercultural competence, particularly enriching existing research contexts on international students focused on western countries. More importantly, based on social cognitive theory, this study proposed and confirmed the mediating role of international student self-efficacy, which clarifies how teacher intercultural competence affects international student engagement and academic satisfaction. Also, this study adds to existing models of intercultural competence, which tend to focus on the effects of an individual's intercultural competence on the performance or results of working or learning without giving much thought to the possible variables that could act as mediators.

This research has practical implications for educational policymakers or university administrators to increase international student educational outcomes from the perspective of teacher education and professional development. Given the (in)direct influence of teacher intercultural competence on international student self-efficacy, engagement, and academic satisfaction, it is suggested that educational policymakers or university administrators consider teacher intercultural competence as a significant part of teacher education and professional development. Such a suggestion has been mentioned by numerous scholars (Cushner & Mahon, 2009; DeJaeghere & Cao, 2009; DeJaeghere & Zhang, 2008). Particularly in the field of business management, a large body of literature has been constructed on developing intercultural competence. For instance, Matveev and Nelson (2004) suggest that intercultural competence could be developed in four dimensions, including interpersonal skills, team effectiveness, intercultural uncertainty, and intercultural empathy. Such knowledge in business management could also have implications for educational practice. First, teacher interpersonal skills such as motivating students, managing classroom conflicts, and building teacher-student rapport are suggested to be emphasized and trained in the process of teacher education and professional development. According to Mahon's (2009) statement, "Competent teachers are competent communicators who are able to build and sustain interpersonal relationships across culture and across conflict" (p. 46). Second, a teacher should be competent enough to guide his or her pupils or collaborators to academic success in addition to being professional enough to be focused on personal academic achievements. Thus, a cooperative spirit is expected from teachers to increase team or class effectiveness. Third, teachers are suggested to display an open mind, patience, and flexibility in dealing with intercultural uncertainty. Teachers tend to be more comfortable when communicating with diverse students if they can support the different learning styles and avoid the dangers of stereotyping (Bennett, 1995). Fourth, given that teacher intercultural empathy is an important dimension of teacher intercultural competence and is functional in increasing student self-efficacy (Lee & Ciftci, 2014), it is suggested that this skill be emphasized during the process of teacher education and professional development. Teachers can construct a more inclusive and effective academic environment if they can think about and understand cultural or behavioral differences from the perspective of students. In conclusion, teacher intercultural competence, as an essential teaching qualification in an environment of educational globalization and internationalization, should be intensively considered and developed by various stakeholders, including organizations and individuals.

6. CONCLUSION

The results of this study indicate that teacher intercultural competence has positive and significant effects on international student self-efficacy and engagement but has no significant effect on international student academic satisfaction. Student self-efficacy positively and significantly mediates the effects of teacher intercultural competence on international student engagement and academic satisfaction. Some limitations exist in this research. First, students from only two universities were selected as the representatives for international higher education students in China and Thailand. Thus, increasing the generalizability of the whole population by collecting data from more universities is suggested for future research. Second, given that all of the research's variables were self-reported by the participants, common bias and social desirability may have an impact on participants' willingness to give truthful responses. Hence, collecting data from both teachers and students is suggested for future research to verify the possible difference in results. Additionally, future research can further explore more potential mediating or moderating variables between teacher intercultural competence and relevant educational outcomes. Meanwhile, more case studies and practical implications on the feasible training of intercultural competence for teachers would be a significant contribution to the further development of the topic.

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INSTITUTIONAL REVIEW BOARD STATEMENT

The Ethical Committee of the International College, National Institute of Development Administration, Thailand has granted approval for this study 15 January 2022 (Ref. No. 028/2565).

TRANSPARENCY

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

COMPETING INTERESTS

The authors declare that they have no competing interests.

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AUTHORS' CONTRIBUTIONS

Conceptualization, L.G. and M.L.; data collection and analysis, L.G.; writing, L.G., supervision, reviewing, and editing, M.L. Both authors have read and agreed to the published version of the manuscript.

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REFERENCES

- Angeles, P. (2012). Teaching efficacy, interpersonal, intrapersonal skills and teaching performance in the tertiary school. *IAMURE International Journal of Social Sciences*, 2(1), 17-25. <https://doi.org/10.7718/ijss.v2i1.8>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. <https://doi.org/10.1037/0033-295x.84.2.191>
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, 4(3), 359-373. <https://doi.org/10.1521/jscp.1986.4.3.359>
- Bartimote-Aufflick, K., Bridgeman, A., Walker, R., Sharma, M., & Smith, L. (2016). The study, evaluation, and improvement of university student self-efficacy. *Studies in Higher Education*, 41(11), 1918-1942. <https://doi.org/10.1080/03075079.2014.999319>
- Bennett, C. I. (1995). Preparing teachers for cultural diversity and national standards of academic excellence. *Journal of Teacher Education*, 46(4), 259-265. <https://doi.org/10.1177/0022487195046004004>
- Bhawuk, D. P., & Brislin, R. (1992). The measurement of intercultural sensitivity using the concepts of individualism and collectivism. *International Journal of Intercultural Relations*, 16(4), 413-436. [https://doi.org/10.1016/0147-1767\(92\)90047-x](https://doi.org/10.1016/0147-1767(92)90047-x)

- Bini, M., & Masserini, L. (2015). Students' satisfaction and teaching efficiency of University offer. *Social Indicators Research*, 2(129), 847-862. <https://doi.org/10.1007/s11205-015-1141-0>
- Boak, R. T. R., & Conklin, R. C. (1975). Brief notes: The effect of teachers' levels of interpersonal skills on junior high school students' achievement and anxiety. *American Educational Research Journal*, 12(4), 537-543. <https://doi.org/10.3102/00028312012004537>
- Bresó, E., Schaufeli, W. B., & Salanova, M. (2011). Can a self-efficacy-based intervention decrease burnout, increase engagement, and enhance performance? A quasi-experimental study. *Higher Education*, 61(4), 339-355. <https://doi.org/10.1007/s10734-010-9334-6>
- Burch, G. F., Heller, N. A., Burch, J. J., Freed, R., & Steed, S. A. (2015). Student engagement: Developing a conceptual framework and survey instrument. *Journal of Education for Business*, 90(4), 224-229. <https://doi.org/10.1080/08832323.2015.1019821>
- Charoensukmongkol, P., & Pandey, A. (2020). The influence of cultural intelligence on sales self-efficacy and cross-cultural sales presentations: Does it matter for highly challenge-oriented salespeople? *Management Research Review*, 43(12), 1533-1556. <https://doi.org/10.1108/mrr-02-2020-0060>
- Coffman, D. L., & Gilligan, T. D. (2002). Social support, stress, and self-efficacy: Effects on students' satisfaction. *Journal of College Student Retention: Research, Theory & Practice*, 4(1), 53-66. <https://doi.org/10.2190/bv7x-f87x-2mxl-2b3l>
- Cushner, K., & Chang, S.-C. (2015). Developing intercultural competence through overseas student teaching: Checking our assumptions. *Intercultural Education*, 26(3), 165-178. <https://doi.org/10.1080/14675986.2015.1040326>
- Cushner, K., & Mahon, J. (2009). Intercultural competence in teacher education in D. K. Deardorff (Ed.), *The sage handbook of intercultural competence*. In (pp. 304-320). Singapore: SAGE Publications.
- Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education*, 10(3), 241-266. <https://doi.org/10.1177/1028315306287002>
- DeJaeghere, J. G., & Cao, Y. (2009). Developing US teachers' intercultural competence: Does professional development matter? *International Journal of Intercultural Relations*, 33(5), 437-447. <https://doi.org/10.1016/j.ijintrel.2009.06.004>
- DeJaeghere, J. G., & Zhang, Y. (2008). Development of intercultural competence among US American teachers: Professional development factors that enhance competence. *Intercultural Education*, 19(3), 255-268. <https://doi.org/10.1080/14675980802078624>
- Den Brok, P., Levy, J., Brekelmans, M., & Wubbels, T. (2005). The effect of teacher interpersonal behaviour on students' subject-specific motivation. *The Journal of Classroom Interaction*, 40(2), 20-33.
- DeWitz, S. J., & Walsh, W. B. (2002). Self-efficacy and college student satisfaction. *Journal of Career Assessment*, 10(3), 315-326. <https://doi.org/10.1177/10672702010003003>
- Ding, X. (2016). Exploring the experiences of international students in China. *Journal of Studies in International Education*, 20(4), 319-338. <https://doi.org/10.1177/1028315316647164>
- Fan, W. (2011). Social influences, school motivation and gender differences: An application of the expectancy-value theory. *Educational Psychology*, 31(2), 157-175. <https://doi.org/10.1080/01443410.2010.536525>
- Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, 59(2), 117-142. <https://doi.org/10.3102/00346543059002117>
- 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/10.2307/3151312>
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59-109. <https://doi.org/10.3102/00346543074001059>
- Gibson, S. K. (2004). Social learning (cognitive) theory and implications for human resource development. *Advances in Developing Human Resources*, 6(2), 193-210.
- Gopalan, N., Beutell, N. J., & Middlemiss, W. (2019). International students' academic satisfaction and turnover intentions: Testing a model of arrival, adjustment, and adaptation variables. *Quality Assurance in Education*, 27(4), 533-548. <https://doi.org/10.1108/QAE-01-2019-0001>
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152. <https://doi.org/10.2753/mtp1069-6679190202>
- Hasan, H. F. A., Ilias, A., Rahman, R. A., & Razak, M. Z. A. (2008). Service quality and student satisfaction: A case study at private higher education institutions. *International Business Research*, 1(3), 163-175. <https://doi.org/10.5539/ibr.v1n3p163>
- Hascher, T., & Hagenauer, G. (2016). Openness to theory and its importance for pre-service teachers' self-efficacy, emotions, and classroom behaviour in the teaching practicum. *International Journal of Educational Research*, 77(1), 15-25. <https://doi.org/10.1016/j.ijer.2016.02.003>
- Huang, F. (2015). Building the world-class research universities: A case study of China. *Higher Education*, 70(2), 203-215. <https://doi.org/10.1007/s10734-015-9876-8>
- Huebner, E. S., & Gilman, R. (2006). Students who like and dislike school. *Applied Research in Quality of Life*, 1(2), 139-150. <https://doi.org/10.1007/s11482-006-9001-3>

- Ihtiyar, A., & Ahmad, F. S. (2015). The role of intercultural communication competence on service reliability and customer satisfaction. *Journal of Economic & Social Studies*, 5(1), 1-24. <https://doi.org/10.14706/jecoss11518>
- Jerusalem, M., & Schwarzer, R. (2014). Self-efficacy as a resource factor in stress appraisal processes in R. Schwarzer (Ed.), *Self-efficacy: Thought control of action*. In (pp. 195-205). New York: Routledge.
- Jex, S. M., Bliese, P. D., Buzzell, S., & Primeau, J. (2001). The impact of self-efficacy on stressor–strain relations: Coping style as an explanatory mechanism. *Journal of Applied Psychology*, 86(3), 401-409. <https://doi.org/10.1037/0021-9010.86.3.401>
- Jiani, M. (2017). Why and how international students choose Mainland China as a higher education study abroad destination. *Higher Education*, 74(4), 563-579. <https://doi.org/10.1007/s10734-016-0066-0>
- Judge, T. A. (1997). The dispositional causes of job satisfaction: A core evaluations approach. *Research in Organizational Behavior*, 19(1), 151-188.
- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology*, 86(1), 80-92. <https://doi.org/10.1037/0021-9010.86.1.80>
- Kahu, E. R. (2013). Framing student engagement in higher education. *Studies in Higher Education*, 38(5), 758-773. <https://doi.org/10.1080/03075079.2011.598505>
- Kim, Y.-H. (2016). Influence of academic self-efficacy and department satisfaction on college life adaptation of nursing freshman. *Journal of the Korea Academia-Industrial Cooperation Society*, 17(11), 104-113. <https://doi.org/10.5762/kais.2016.17.11.104>
- Kline, R. B. (2015). *Principles and practice of structural equation modeling*. New York: Guilford Publications.
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration*, 11(4), 1-10. <https://doi.org/10.4018/ijec.2015100101>
- Krause, K. L., & Coates, H. (2008). Students' engagement in first-year university. *Assessment & Evaluation in Higher Education*, 33(5), 493-505. <https://doi.org/10.1080/02602930701698892>
- Kuo, Y.-C., Walker, A. E., Schroder, K. E., & Belland, B. R. (2014). Interaction, internet self-efficacy, and self-regulated learning as predictors of student satisfaction in online education courses. *The Internet and Higher Education*, 20(1), 35-50. <https://doi.org/10.1016/j.iheduc.2013.10.001>
- Lavankura, P. (2013). Internationalizing higher education in Thailand: Government and university responses. *Journal of Studies in International Education*, 17(5), 663-676. <https://doi.org/10.1177/1028315313478193>
- Lee, J.-y., & Ciftci, A. (2014). Asian international students' socio-cultural adaptation: Influence of multicultural personality, assertiveness, academic self-efficacy, and social support. *International Journal of Intercultural Relations*, 38(1), 97-105. <https://doi.org/10.1016/j.ijintrel.2013.08.009>
- Lent, R. W., Singley, D., Sheu, H.-B., Schmidt, J. A., & Schmidt, L. C. (2007). Relation of social-cognitive factors to academic satisfaction in engineering students. *Journal of Career Assessment*, 15(1), 87-97. <https://doi.org/10.1177/1069072706294518>
- Li, J., & Eryong, X. (2022). New directions towards internationalization of higher education in China during post-COVID 19: A systematic literature review. *Educational Philosophy and Theory*, 54(6), 812-821. <https://doi.org/10.1080/00131857.2021.1941866>
- Li, J., & Xue, E. (2022). Exploring high-quality institutional internationalization for higher education sustainability in China: Evidence from stakeholders. *Sustainability*, 14(13), 1-15. <https://doi.org/10.3390/su14137572>
- Liu, J., Siu, O. L., & Shi, K. (2010). Transformational leadership and employee well-being: The mediating role of trust in the leader and self-efficacy. *Applied Psychology*, 59(3), 454-479. <https://doi.org/10.1111/j.1464-0597.2009.00407.x>
- Lyons, W., Scroggins, D., & Rule, P. B. (1990). The mentor in graduate education. *Studies in Higher Education*, 15(3), 277-285. <https://doi.org/10.1080/03075079012331377400>
- Machmud, S. (2018). The influence of self-efficacy on satisfaction and work-related performance. *International Journal of Management Science and Business Administration*, 4(4), 43-47. <https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.44.1005>
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7(1), 83-104. <https://doi.org/10.1037/1082-989x.7.1.83>
- Mahon, J. (2009). Conflict style and cultural understanding among teachers in the western United States: Exploring relationships. *International Journal of Intercultural Relations*, 33(1), 46-56. <https://doi.org/10.1016/j.ijintrel.2008.12.002>
- Matveev, A., & Nelson, P. E. (2004). Cross cultural communication competence and multicultural team performance: Perceptions of American and Russian managers. *International Journal of Cross Cultural Management*, 4(2), 253-270. <https://doi.org/10.1177/1470595804044752>
- Matveev, A. V. (2017). The intercultural competence models in A. Matveev (Ed.), *intercultural competence in organizations*. In (pp. 49-73). Singapore: Springer.

- Matveev, A. V., & Del Villar, C. P. (2014). Assessing intercultural communication competence of the Filipino and American managers. *GSTF Journal on Business Review*, 3(3), 46-51.
- McAllister, G., & Irvine, J. J. (2002). The role of empathy in teaching culturally diverse students: A qualitative study of teachers' beliefs. *Journal of Teacher Education*, 53(5), 433-443. <https://doi.org/10.1177/002248702237397>
- Meyers, S., Rowell, K., Wells, M., & Smith, B. C. (2019). Teacher empathy: A model of empathy for teaching for student success. *College Teaching*, 67(3), 160-168. <https://doi.org/10.1080/87567555.2019.1579699>
- Misanew, A., & Tadesse, M. (2014). Determinants of student and staff satisfaction with services at Dilla University, Ethiopia: Application of single and multilevel logistic regression analyses. *Social Indicators Research*, 119(3), 1571-1587. <https://doi.org/10.1007/s11205-013-0561-y>
- Mohamed, N. (2008). 'I have been doing things this way for so many years; why should i change?': Exploring teachers' resistance to professional. *New Zealand Studies in Applied Linguistics*, 14(1), 19-35. <https://search.informit.org/doi/10.3316/informit.997485517703714>
- Moule, J. (2005). *Cultural competence: A primer for teachers and educators*. Wadsworth: Linda Schreiber-Ganster.
- Nielsen, K., & Munir, F. (2009). How do transformational leaders influence followers' affective well-being? Exploring the mediating role of self-efficacy. *Work & Stress*, 23(4), 313-329. <https://doi.org/10.1080/02678370903385106>
- Noreen, S., Hasan, A., Batool, I., & Ali, A. (2018). The impacts of academic self-efficacy on academic outcomes: The mediating effect of student engagement. *International Journal of Academic Research in Business and Social Sciences*, 8(11), 315-327. <https://doi.org/10.6007/ijarv8-i11/4904>
- OECD. (2019). *Education at a Glance 2019: OECD Indicators*. Paris: OECD Publishing.
- Olivier, E., Archambault, I., De Clercq, M., & Galand, B. (2019). Student self-efficacy, classroom engagement, and academic achievement: Comparing three theoretical frameworks. *Journal of Youth and Adolescence*, 48(2), 326-340. <https://doi.org/10.1007/s10964-018-0952-0>
- Paige, R., & Goode, M. (2009). Cultural mentoring: International education professionals and the development of intercultural competence in D. K. Deardorff (Ed.), *the sage handbook of intercultural competence*. In (pp. 333-349). Singapore: SAGE Publications.
- Parahoo, S. K., & Tamim, R. M. (2012). Determinants of student satisfaction in higher education: An empirical study in Dubai. *International Journal of Services, Economics and Management*, 4(4), 282-297. <https://doi.org/10.1504/ijsem.2012.050949>
- Parayitam, S., Desai, K., & Phelps, L. D. (2007). The effect of teacher communication and course content on student satisfaction and effectiveness. *Academy of Educational Leadership Journal*, 11(3), 91-105.
- Puzziferro, M. (2008). Online technologies self-efficacy and self-regulated learning as predictors of final grade and satisfaction in college-level online courses. *The American Journal of Distance Education*, 22(2), 72-89. <https://doi.org/10.1080/08923640802039024>
- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53(3), 617-635. <https://doi.org/10.5465/amj.2010.51468988>
- Ringle, C., Da Silva, D., & Bido, D. (2015). Structural equation modeling with the smartPLS structural equation modeling with the smartpls. *Brazilian Journal of Marketing*, 13(2), 25-35.
- Robinson, E. N. (2012). *The relationship between teacher cultural competency and student engagement*. Doctoral Dissertation. Available from ProQuest Dissertations and Theses database. (UMI No. 3512312).
- Rujiprak, V. (2016). Cultural and psychological adjustment of international students in Thailand. *The Journal of Behavioral Science*, 11(2), 127-142.
- Schleich, A. L. R., Polydoro, S., & dos Santos, A. A. A. (2006). Scale of satisfaction with the academic experience of higher education students. *Avaliação Psicológica: Interamerican Journal of Psychological Assessment*, 5(1), 11-20.
- Schmitt, N., Oswald, F. L., Friede, A., Imus, A., & Merritt, S. (2008). Perceived fit with an academic environment: Attitudinal and behavioral outcomes. *Journal of Vocational Behavior*, 72(3), 317-335. <https://doi.org/10.1016/j.jvb.2007.10.007>
- Selzler, A. M., Rodgers, W. M., Berry, T. R., McFadden, K., Husband, C., & Hall, C. (2019). Reciprocal relationships between self-efficacy, outcome satisfaction, and attendance at an exercise programme. *British Journal of Health Psychology*, 24(1), 123-140. <https://doi.org/10.1111/bjhp.12343>
- Sexton, T. L., & Tuckman, B. W. (1991). Self-beliefs and behavior: The role of self-efficacy and outcome expectation over time. *Personality and Individual Differences*, 12(7), 725-736. [https://doi.org/10.1016/0191-8869\(91\)90228-4](https://doi.org/10.1016/0191-8869(91)90228-4)
- Sherman, J., Rasmussen, C., & Baydala, L. (2008). The impact of teacher factors on achievement and behavioural outcomes of children with Attention Deficit/Hyperactivity Disorder (ADHD): A review of the literature. *Educational Research*, 50(4), 347-360.
- Sökmen, Y. (2021). The role of self-efficacy in the relationship between the learning environment and student engagement. *Educational Studies*, 47(1), 19-37. <https://doi.org/10.1080/03055698.2019.1665986>
- Solberg, V. S., O'Brien, K., Villareal, P., Kennel, R., & Davis, B. (1993). Self-efficacy and Hispanic college students: Validation of the college self-efficacy instrument. *Hispanic Journal of Behavioral Sciences*, 15(1), 80-95. <https://doi.org/10.1177/07399863930151004>

- Takeuchi, R., Yun, S., & Tesluk, P. E. (2002). An examination of crossover and spillover effects of spousal and expatriate cross-cultural adjustment on expatriate outcomes. *Journal of Applied Psychology, 87*(4), 655-666. <https://doi.org/10.1037/0021-9010.87.4.655>
- Teekens, H. (2003). The requirement to develop specific skills for teaching in an intercultural setting. *Journal of Studies in International Education, 7*(1), 108-119. <https://doi.org/10.1177/1028315302250192>
- Tian, M., & Lowe, J. A. (2014). Intercultural identity and intercultural experiences of American students in China. *Journal of Studies in International Education, 18*(3), 281-297. <https://doi.org/10.1177/1028315313496582>
- Torres, J. B., & Solberg, V. S. (2001). Role of self-efficacy, stress, social integration, and family support in Latino college student persistence and health. *Journal of Vocational Behavior, 59*(1), 53-63. <https://doi.org/10.1006/jvbe.2000.1785>
- Van Dinther, M., Dochy, F., & Segers, M. (2011). Factors affecting students' self-efficacy in higher education. *Educational Research Review, 6*(2), 95-108. <https://doi.org/10.1016/j.edurev.2010.10.003>
- Wallace, J. B. (1999). The case for student as customer. *Quality Progress, 32*(1), 47-52.
- Wang, L. (2013). Going global: The changing strategy of internationalisation of education in China. *Journal of Higher Education Policy and Management, 35*(3), 305-315. <https://doi.org/10.1080/1360080x.2013.792315>
- Warren, C. A. (2013). The utility of empathy for white female teachers' culturally responsive interactions with black male students. *Interdisciplinary Journal of Teaching and Learning, 3*(3), 175-200.
- Waxman, H. C. (1983). Effect of teachers' empathy on students' motivation. *Psychological Reports, 53*(2), 489-490. <https://doi.org/10.2466/pr0.1983.53.2.489>
- Wink, M. N., LaRusso, M. D., & Smith, R. L. (2021). Teacher empathy and students with problem behaviors: Examining teachers' perceptions, responses, relationships, and burnout. *Psychology in the Schools, 58*(8), 1575-1596. <https://doi.org/10.1002/pits.22516>
- Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of Management Review, 14*(3), 361-384. <https://doi.org/10.5465/amr.1989.4279067>
- Xu, Z., & Qi, C. (2019). The relationship between teacher-student relationship and academic achievement: The mediating role of self-efficacy. *EURASIA Journal of Mathematics, Science and Technology Education, 15*(10), 1-7. <https://doi.org/10.29333/ejmste/105610>
- Zhou, D., Liu, J., & Liu, J. (2020). The effect of problematic Internet use on mathematics achievement: The mediating role of self-efficacy and the moderating role of teacher-student relationships. *Children and Youth Services Review, 118*(1), 1-7. <https://doi.org/10.1016/j.childyouth.2020.105372>