Article

The Impact of Academic Advising Activities on International Students' Sense of Belonging

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ABSTRACT

Research on international students suggests they have a low sense of belonging at the U.S. institutions they attend. This study examined whether academic advisor's cultural empathy, advisor-advisee rapport, and international students' advising satisfaction influenced international students' perspectives of belonging to the institution. We further examined whether cultural empathy and advisor-advisee rapport mediated the effect of advising satisfaction on international students' sense of belonging. The cross-sectional quantitative study used a convenience sample of 209 international students enrolled in two institutions in the United States. Results indicated that cultural empathy and student advising satisfaction had a statistically significant influence on the sense of belonging, not advisor-advisee rapport, and cultural empathy mediated the effect of advising satisfaction on sense of belonging. We offered recommendations for institutions and academic advisors when working with international students.

Keywords: academic advisor, belonging, cross-cultural empathy, international students

There are over one million international college students in the United States (IIE, 2019). Although there are relatively few studies, some research on international students revealed they had a low sense of belonging to the U.S. institutions they attended (Singh, 2018; Wolff, 2014). Some researchers pointed out that low English proficiency (Cao et al., 2018; Su & Harrison, 2016; Wang, 2002; Wu,

2013; Yan & Berliner, 2009) and length of stay (Yan & Berliner, 2011; Yıldırım, 2014) might be two influential factors for international students' integration in the U.S. institutions.

Research on international student challenges of cultural adaptation, acculturation, integration, and coping strategies emphasized the effects of faculty and offices of international relations on the international population (Hegarty, 2014; Heng, 2018; Henze & Zhu, 2012; Ma, 2014; Su & Harrison, 2016). Faculty and instructors sometimes treat international students as "invisible" in American classrooms (Zhang, 2016), and some international students have therefore developed a "work hard, depend on yourself" (Faircloth, 2017, p. 201) strategy when facing challenges in U.S. institutions. Offices of international relations are often the places for addressing international students' status and other legal affairs, rather than destinations for academic issues. Under the umbrella of these offices, international student advisors used to interact and take care of international students, but this changed when they became designated school officials (DSOs) after the terrorist attacks of September 11, 2001 (Rosser et al., 2007).

Among all international students in the U.S, Chinese students have been the largest international student source for over a decade (IIE, 2019). However, literature revealed that Chinese international students encountered culture challenges when studying in the US institutions. Scholars have found Chinese students to be silent in the classroom (Cao et al., 2018; Ha & Li, 2012; Li, 2012; Yan & Berliner, 2009; Zhang, 2016), isolated from domestic students (Wolff, 2014), and close to their co-national friends (Henze & Zhu, 2012). These challenges may be partially explained by vast differences in cultures. Chinese culture is hierarchical, procedure-oriented, and collective, and Chinese education is centralized with the professor as the authority (Crain, 2016). American culture, on the other hand, is collaborative, highly individualistic, and indulgent, and the teaching is decentralized with minimal control in the class (Crain, 2016). Therefore, it might take Chinese international students a longer time and more effort to adapt to the new culture. They may need more cross-cultural empathy from the U.S. institution (Rice et al., 2009).

Although scholars have examined academic advisors' impact on domestic students' sense of belonging (e.g., Strayhorn, 2015) and international students' college experience more generally (Stuart Hunter & White, 2004), the role of academic advisors on international students' belonging has only recently been studied (e.g., Mataczynski, 2013; Saha, 2018). International student advisors mainly represent the institution to collect information of international students and scholars in the United States for the Department of Homeland Security (Rosser et al., 2007). The literature on advising international students has rarely explored the impact of academic advising and academic advisors on international students (Rice et al., 2009; Saha, 2018). For instance, heretofore, there has been no literature examining academic advisor's cross-cultural empathy impacts on international students' sense of belonging.

Purpose and Research Questions

The purpose of the study is to investigate the impact of advising activities on international students' sense of belonging. This study examined whether advisor's cultural empathy, advisor-advisee rapport, and international students' advising satisfaction influenced international students' perspectives of belonging to the institution. The two research questions are:

Q1: Do advisors' cultural empathy, advisor-advisee rapport, and students' advising satisfaction influence international students' sense of belonging?

Q2: If so, do advisors' cultural empathy and advisor-advisee rapport mediate the effect of international students' advising satisfaction on their sense of belonging?

We hypothesized that cultural empathy, rapport, and advising satisfaction would positively influence international students' sense of belonging. We also hypothesized that cultural empathy and rapport would mediate the effect of advising satisfaction on international students' sense of belonging.

LITERATURE REVIEW

Academic Advising in the United States

There are two general types of advising roles in the United States: faculty advisors who advise alongside their other teaching, research, and service duties; and primary-role advisors whose primary responsibility is to advise students (McGill, 2019). This second role distinguishes advising structures in the U.S. from the rest of the world who rely primarily on faculty advisors (Galinova & Giannetti, 2014). Prior to establishing primary-role advising in the U.S., faculty members were assigned as the sole students' academic advisors until the 1950s (Schulenberg & Himes, 2022). By the mid-20th century, primary-role advisors started to share advising responsibilities with faculty advisors (He & Hutson, 2017). As the field continued to professionalize, primary-role and faculty advisors' responsibilities separated as the disposition, knowledge, and skills required for quality advising became more specified (McGill, 2019). In some institutions, faculty members rarely have time for advising students because of other responsibilities or the criteria institutions used for faculty promotion and tenure (Kennemer & Hurt, 2013; Stringer et al., 2009; Tran-Johnson, 2018). As the importance of the advising role continues to grow, scholars call for efforts to advance academic advising as a profession (Adams et al., 2013; McGill, 2018, 2019, 2021; Schulenberg & Himes, 2022; Shaffer et al., 2010).

The Role and Impact of Advising

Along with the increased awareness of advising significance in U.S. higher education, literature has examined the impact of academic advisors and advising. For instance, Strayhorn (2015) advocated academic advisors as cultural navigators to help students understand higher education and "move successfully

through education and life" (p. 59). Academic advisors know about this culture, such as the codes of conduct, customs, dominant values, language, requirements, rules, and traditions. They also help "guide students through their college journey until they are comfortable steering on their own" (Strayhorn, 2015, p. 59). Academic advisors build rapport with students at the start of their college journey, contributing "significantly to student success and growth by encouraging and guiding students to fulfill their academic and professional goals", and they were "the first professional staff members to hear a student's accomplishments, plans, goals, and struggles" (Saha, 2018, p. 11).

Advisor's Cross-cultural Empathy

Advisor's cross-cultural empathy is an essential component when advising international students (Charles & Stewart, 1991). Cultural empathy is especially genuine for students holding collectivistic cultural norms (Guiffrida, 2006), such as Chinese international students. Culturally empathetic advisors embrace different worldviews and their students' values and cultures (Mataczynski, 2013). Advisors should ask their students questions about their home culture and academic backgrounds to learn about them and show their cultural empathy (Charles & Stewart, 1991). Mataczynski (2013) assessed international students' advisor-advisee cultural empathy activities by asking international students whether their advisor discussed their home country, family, cultural differences, and the advising philosophy. Advisor's cultural empathy activities were associated with international students' advising satisfaction and sense of belonging. Rice and colleagues (2009) investigated international graduate students' ideal advising relationship and found that cross-cultural empathy was an essential factor of international student advising satisfaction and sense of belonging. They revealed that "international graduate students had a strong desire for their advisors to understand their cultural values, special needs, and language difficulties" (p. 387).

Advisor-Advisee Rapport

Advisor-advisee rapport was found to be an important predictor of student self-efficacy (Efstation et al., 1990). Efstation et al. (1990) explored three factors from supervisor's side and two factors from advisees' side that influences student self-efficacy, and rapport was included from both sides and was a significant predictor of self-efficacy. Advisor-advisee rapport is also significant to students' emotional bond. Rapport reflects the advisor's support and encouragement of the advisee and is a part of the emotional bond between the advisor and advisee that occurred out of their work together (Schlosser & Gelso, 2001). One study (Schlosser & Gelso, 2001) measuring advisor-advisee relationship from Rapport, Apprenticeship, and Identification-Individuation using the Advising Working Alliance Inventory (AWAI), found rapport reflected how well the advisor and advisee got along interpersonally. The rapport scale had the highest factor loading and the most significant influence on advisees' self-efficacy

of all three variables. The Advisor-advisee relationship was an influential factor in international graduate student advising satisfaction, and all the satisfied students had a positive advising relationship with the advisor. In contrast, many of the unsatisfied students reported they had unpleasant relationships with their advisors. Rice et al. (2009) employed AWAI on international graduate students and supported that rapport was substantially associated with advising satisfaction.

Sense of Belonging

Students' sense of belonging is essential to their college experience (Van Horne et al., 2018, Yao, 2015). Without a good sense of belonging to institutions, students may not well function in the learning environments (Yan & Pei, 2018). Failure to meet needs of belonging may cause social isolation, alienation, and loneliness (Baumeister & Leary, 1995). Students' dissatisfaction with the need for belonging influenced students' academic engagement and involvement in school and classroom activities, academic and social behaviors, motives and attitudes, expectancies, values and goals, emotional functioning, and the development of fundamental psychological processes (e.g., intrinsic motivation, self-regulation, internalization, and autonomy), and psychological outcomes like self-concept, self-esteem, and self-efficacy (Osterman, 2000). Additionally, sense of belonging has a powerful influence on student persistence (Hausmann et al., 2007; Strayhorn, 2019).

A sense of belonging can produce positive outcomes for the students (Glass & Westmont, 2014). Students who felt that they belonged to learning environments reported higher enjoyment, enthusiasm, happiness, interest, and more confidence in engaging in learning activities. In contrast, those who felt isolated reported greater anxiety, boredom, frustration, and sadness during the academic engagement that directly affected their academic performance. In particular, international students with less financial resources had more negative encounters with professors and advisors and that professors' neo-racist attitudes reflected more geopolitical dynamics and structural effects of racism shape on students' everyday relations. Some scholars considered neo-racism the main reason for international students' low sense of belonging. They supported by a consistent theme in the literature that international students experienced discrimination based on their culture, national origin, and relationships between countries (Glass, 2018). This neo-racism, discrimination, or prejudice based on nationality and ethnicity negatively impacted international students' sense of belonging (Lee & Rice, 2007).

To improve international students' sense of belonging, some scholars recommended institutions increase students' social integration (Lertora et al., 2017). A study of international students' transitional experience in a rural university in Texas found that effective social integration had positive impacts on international students' overall satisfaction with college (Lertora & Sullivan, 2019). The research revealed that international students' sense of belonging to the institution decreased when they perceived that they had not received adequate information about counseling services.

A sense of belonging is a fundamental need of all people (Strayhorn, 2019) and is sometimes more critical in certain contexts, for certain people, and during certain moments. For example, an international student may need to feel a sense of belonging more keenly in their first months of study at their new institution than after of few years of experiencing the new culture. so much literature supporting the significance of institutional support to students' sense of belonging (Glass & Westmont, 2014; Van Horne et al., 2018, Yao, 2015), it is unsurprising that some literature highlights insufficient institutional support to students was negatively associated with students' sense of belonging to campus (Soria et al., 2003). However, some scholars pointed out the problem of international students' underutilization of campus services (Lau et al., 2019; Mori, 2000). International students either didn't know or rarely used institutional support services (Lau et al., 2019). In summary, little research has examined the impact of academic advisor's cross-cultural empathy and advisor-advise rapport on international students' sense of belonging. The current study intended to fill that gap.

METHOD

Participants

This cross-sectional quantitative study used a convenience sample of international students enrolled in higher education institutions in the United States. They were recruited through a web-based survey developed in Google Doc. The survey was publicized through two social media platforms, including WeChat and Facebook, as well as institutional email lists and newsletters of two universities. Both universities are four-year institutions located in New York state and each grants undergraduate and graduate degrees. University A is a medium-sized 4-year private institution and has a dedicated team of academic advisors who work closely with students to help them select courses, plan their academic paths, and navigate any challenges they may face along the way. University B, part of the State University of New York system, is a large, public research university. University B has a centralized advising system, with advisors available to assist students with course selection, academic planning, and other academic and personal concerns. The study was approved by the first author's Institutional Review Board in March 2020, when the United States was at the COVID lockdown stage. As so many institutions shifted their classes to the online model, many international students decided to go back to their home country for safety reasons. Consequently, this study was postponed to the fall semester in 2020. The survey was open in the middle of September, and it remained open for about five weeks.

The final sample consisted of 209 participants. The self-reported place of origin from the participants included Canada (n=35), China (n=143), Saudi Arabia (n=11), the United Kingdom (n=5), and Vietnam (n=15). Over 68% of the respondents were from China (n=143). Self-identified female participants (n=136) were more than male students (n=73), and graduate participants (n=122) were more than undergraduate counterparts (n=87). About half of the respondents

(n=106) had studied in the United States for five semesters or longer. See Table 1 below.

Table 1: Demographic Features of Participants

	Groups	N	Percentage
Place of origin	Chinese	143	68.4
	Non-Chinese	66	31.6
	Total	209	100
Gender	Male	73	65.1
	Female	136	34.9
	Total	209	100
Degree level	Undergraduate	87	41.6
	Graduate	122	58.4
	Total	209	100
English proficiency	Low English Proficiency	129	61.7
	High English Proficiency	80	38.3
	Total	209	100
Length of stay	Longer Stay	106	50.7
	Shorter Stay	103	49.3
	Total	209	100

Instruments

Before starting the survey, participants reviewed the consent letter, which explained the purpose of the study, the confidentiality of personal information, and voluntary participation. The participants were instructed to complete the following four instruments based on their experiences with their primary academic advisors. Types of advisor (i.e., primary-role advisor vs. faculty advisor) were not differentiated since international students often don't know their advisors' job classification. Instead, participants were asked to consider the advisor who they contacted the most frequently for academic issues as they rated their experiences.

Cultural Empathy Measure

The Cultural Empathy measure was adapted from Mataczynski (2013), which investigated the influence of the academic advising relationship and activities on advising satisfaction and sense of belonging among international undergraduate students. Mataczynski (2013) developed an 11-items scale assessing international students' perspectives of advising sessions. More specifically, Mataczynski (2013) asked international participants if their advisors asked them questions about their home country, family, cultural differences, and the advisor's advising philosophy during advising sessions. The alpha coefficient of the measure was .73. One item was deleted after the pretest as it caused misunderstanding for several international students; and three irrelevant items were also disregarded, therefore, the final cultural empathy measure of this study contained seven items. Participants were asked about their agreement with each statement on a 6-point

scale, where 1 = "Strongly Disagree" and 6 = "Strongly Agree." Exemplary items include: "My advisor and I discuss cultural similarities and/or differences between the U.S. and my home culture." "My advisor asks about my home country." A scale reliability analysis of the Cultural Empathy measure for this study yielded Cronbach's α of .88.

Rapport Measure

The Rapport measure assessed the advising relationship from the advisee's perspective. This scale was developed by Schlosser and Gelso (2001), who applied the instrument to 281 counseling psychology doctoral students and found three factors between advisor-advisee that influenced students' working alliances: Rapport, Apprenticeship, and Identification-Individuation. Schlosser & Gelso (2001) reported an internal consistency reliability Cronbach's α of .90 on the Rapport scale. This study used seven items from Schlosser and Gelso's (2001) original instrument as the other four items were specifically related to the doctor-advisor-advisor relationship, thus not well suited for the participants of this study. Participants were asked about their agreement with each statement on a 6-point scale, where 1 = "Strongly Disagree" and 6 = "Strongly Agree. " Exemplary items include: "I do not feel respected by my advisor (reverse coded)" and "My advisor offers me encouragement for my accomplishments." A scale reliability analysis of the Rapport measure for this study resulted in Cronbach's α of .90.

Advising Satisfaction Measure

The Advising satisfaction measure was adapted from scales investigating the advisor's approachability and availability (Rice, et al., 2009), and preparedness of the advisor (Mataczynski, 2013) as the observed indicators of advising satisfaction, with a reported Cronbach's alpha coefficient of 0.78. The Advising Satisfaction measure included 3 items. Participants were asked about their agreement with each statement on a 6-point scale, where 1 = "Strongly Disagree" and 6 = "Strongly Agree." Exemplary items include: "My advisor is well-prepared for our meetings" and "I am satisfied with the amount and quality of time spent with my advisor." A scale reliability analysis of the Advising Satisfaction measure for this study resulted in Cronbach's α of .94.

Sense of Belonging Measure

A sense of belonging measure collects students' feelings of inclusion on campus (Mataczynski, 2013). Studying the sense of belonging allows researchers to assess which forms of social interaction (academic and social) further enhance students' affiliation and identity with their colleges (Hurtado & Carter, 1997). Hurtado and Ponjuan (2005) developed and revised the measurement of sense of belonging, which includes five items, with an internal consistency reliability Cronbach's α of .88. Johnson et al. (2007) employed this scale to a national sample of first-year students to investigate the differences in the sense of

belonging between diverse racial and ethical characteristics. The reported internal consistency of the five items in that study was .90 (Johnson et al., 2007). Mataczynski (2013) reported that the internal consistency was .95 when applying this scale on undergraduate international students' sense of belonging at a higher education institution in the U.S. Sense of belonging was measured using Hurtado and Ponjuan's (2005) 5-item scale. Participants were asked about their agreement with each statement on a 10-point scale, where 1 = "Strongly Disagree" and 10 = "Strongly Agree." Exemplary items include: "I see myself as a part of this university" and "I am enthusiastic about this university." A scale reliability analysis of the Belonging measure for this study yielded Cronbach's α of .97.

Data Analysis

We employed IBM AMOS 24.0 software for all data analyses. All data was first examined for accuracy of data entry, outliers, missing values, and normality. A total of 209 responses were complete and used for the following analyses. The study used Structural Equation Modeling (SEM) to examine the following relationships among variables: 1) The direct effect of advisors' cross-cultural empathy, advisor-advisee rapport, and students' advising satisfaction on sense of belonging; 2) The mediating role of advisors' cross-cultural empathy and advisor-advisee rapport on the effects of students' advising satisfaction to sense of belonging. Before developing the SEM models, we applied the Confirmatory Factor Analysis (CFA), a tool to confirm or reject the measurement theory (Statistics Solutions, 2013), to test the model fit.

RESULTS

Confirmative Factor Analysis (CFA)

Using IBM Amos 24, we first performed CFA analyses to address the instrument's convergent validity and discriminant validity. Several ways were available to estimate the relative amount of convergent validity among item measures, including factor loadings, average variance extracted (AVE), and reliability (Hair et al., 2010). The standardized factor loading estimates should be .5 or higher, and ideally, .7 or higher (Hair et al., 2010); the AVE of .5 or higher suggesting adequate convergence; and the construct reliability (CR) value of .7 or higher indicated good reliability. CFA also provided two ways of assessing discriminant validity. Hair et al. (2010) recommended comparing the average variance extracted values for any two constructs with the square of the correlation estimate between the two constructs; and if variance-extracted estimates is greater than the squared correlation estimate, it implies good evidence of discriminant validity.

In this study, there were four constructs: cultural empathy, rapport, satisfaction, and sense of belonging. The cultural empathy construct was measured using empathy items 1-7; the rapport construct was measured using

seven items: rapport items 1-5 (scale reversed) and rapport items 6-7; satisfaction was measured using satisfaction items 1-3; and sense of belonging was measured using belonging items 1-5.

IBM Amos 24 offered several indices to check the model-data fit, including the chi-square statistic, comparative fit index (CFI), the root-mean-square error of approximation (RMSEA), and standardized root-mean-square residual (SRMR). The CFI should be larger than .95 as a good fit, or .80 sometimes permissible; the RMSEA should be less than .05 as good, or .05-.10 moderate, and SRMR should be less than .09 (Hu & Bentler, 1999).

Using the Amos 24 model indices, empathy items 3 and 5, and rapport items 4-7 were deleted because of loading factors less than .7. To increase model-data fit, we identified the following correlations of errors that were associated with the items within a given factor, according to the software-suggested modifications: empathy items 1 and 2, empathy items 1 and 4, empathy items 2 and 4, empathy items 6 and 7; belonging items 1 and 2, belonging items 3 and 4, belonging items 4 and 5; and belonging items 2 and 4. All four constructs, cultural empathy, rapport, and advising satisfaction, were also correlated. The fit indices suggested that this represented a good fit to the data, $\chi^2 = 176.524$, $p < .001$, CFI = .976, RMSEA = .069, SRMR = .0408. See Figure 1.
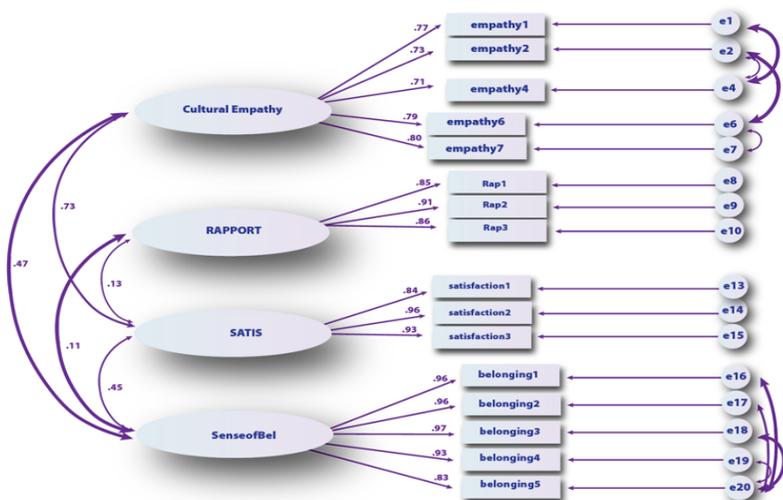

Figure 1: CFA Modified Model

Then the standardized regression weights and the correlation values of the CFA modified model were typed into the Excel tool StatTool (Gaskin, 2016) for validity calculations. See results presented in Table 2.

Table 2: Convergent and Discriminant Validity

	CR	AVE	MSV	MaxR(H)	SATI	CultEm	BELO	RPT
SATI	0.94	0.83	0.54	0.95	0.91			
CultEm	0.88	0.60	0.54	0.89	0.73	0.78		
BELO	0.97	0.87	0.22	0.98	0.45	0.47	0.93	
RPT	0.90	0.76	0.02	0.91	0.13		0.11	0.87

Note. Composite Reliability (CR); Average Variance Extracted (AVE); Maximum Shared Variance (MSV); McDonald Construct Reliability [MaxR(H)]; Reliability CR > 0.7, Convergent Validity AVE > 0.5, Discriminant Validity MSV < AVE.

CFA results demonstrated a high convergent validity of this instrument:
1) Standardized factor loadings higher than .7 or higher;
2) The AVE higher than .5; and
3) The construct reliability (CR) value higher than .7.

The discriminant validity was also good, as evidenced by the Maximum Shared Variance (MSV) value of each item less than its AVE value. The Cronbach's alpha coefficients of all four measures were found with high reliability (Table 3), Cultural Empathy (α = .88), Rapport (α = .90), Advising Satisfaction (α = .94), and Belonging (α = .97).

Table 3: Cronbach's Alpha Values of the Four Constructs: Cultural Empathy, Rapport, Advising Satisfaction, and Belonging

Latent Variables	Items	α	Mean	N
CultEm	Q13, Q14, Q16,Q18,Q19	.88	3.40	5
RAPP	Q20, Q21, Q22	.90	5.04	3
SATI	Q27, Q28, Q29	.94	4.33	3
BELO	Q33, Q34, Q35,Q36, Q37	.97	6.70	5

Research Question 1. Do advisors' cultural empathy, advisor-advisee rapport, and students' advising satisfaction influence international students' sense of belonging?

The first structural equation model (SEM Model 1, Figure 2), based on the data from 209 international student participants in the U.S. for the present study was used to address the first research question.

The latent variable, sense of belonging ("BELO"), used as the dependent variable in the model, was indicated by five of the observed variables. The exogenous (independent) latent variables included cultural empathy ("CultEm"), rapport ("RPT"), and advising satisfaction ("SATI"). Cultural empathy was indicated by five of the observed variables, and rapport and advising satisfaction were indicated by three of the observed variables, respectively. We hypothesized

cultural empathy, rapport, and advising satisfaction would directly influence the sense of belonging.

> Hypothesis 1a. Cultural empathy has a statistically significant influence on the sense of belonging.
>
> Hypothesis 1b. Rapport has a statistically significant influence on the sense of belonging.
>
> Hypothesis 1c. Advising satisfaction has a statistically significant influence on the sense of belonging.
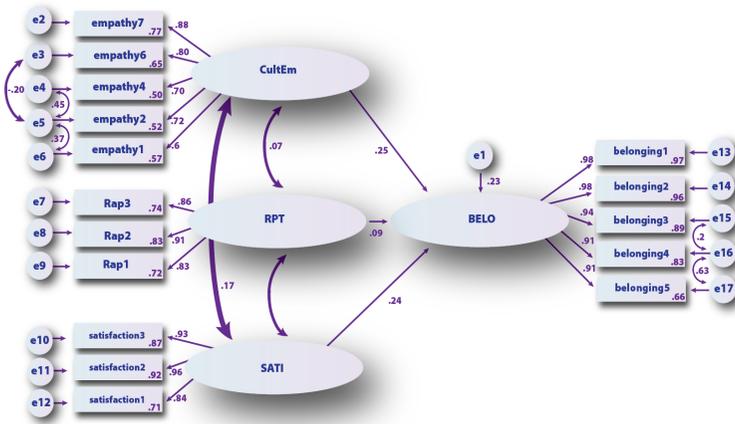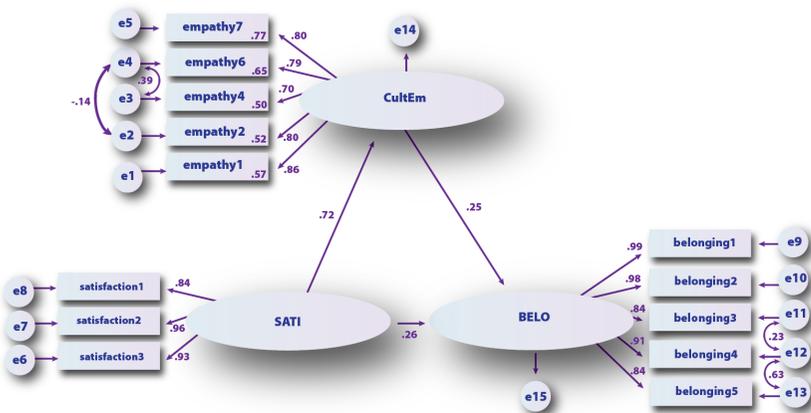

Figure 2 Standardized Path Coefficients of SEM Model 1

Using the model indices, cultural empathy, rapport, and advising satisfaction were correlated. According to the software-suggested modifications, we associated the following errors within a given factor, error 4-5, 3-5, 5-6, 15-16, and 16-17. The fit indices suggested that this represented a good fit to the data. The chi-square test was statistically significant, $\chi 2 = 189.350$, $p < .001$, CFI = .936, RMSEA = .071, SRMR = .0394. The direct path from "Cult-Em" to "BELO" was statistically significant, ($\beta = .251$, $p < .05$). The direct path from "RPT" to "BELO" was not statistically significant ($\beta = .086$, $p = .195$). The direct path from "SATI" to "BELO" was also statistically significant, ($\beta = .241$, $p < .05$; see Figure 2 above). These results suggested that advisors' cultural empathy and students' advising satisfaction had a significant positive influence on their sense of belonging. However, advisor-advisee rapport failed to show a significant influence on international students' sense of belonging.

Research Question 2. If so, do advisors' cultural empathy and advisor-advisee rapport mediate the effect of international students' advising satisfaction on their sense of belonging?

Since advisor-advisee rapport was not a significant predictor of international students' sense of belonging in SEM Model 1, advisor-advisee rapport was removed for the mediation model analysis. The second SEM mediation model (SEM Model 2, Figure 3) was built to examine whether cultural empathy mediated the effect of satisfaction on the sense of belonging. It was based on the data from 209 international student participants in the United States. In this SEM mediation model, satisfaction was the exogenous (independent) variable ("SATI"), cultural empathy ("CultEm") was the mediator, and sense of belonging ("BELO") was the endogenous (dependent) variable (Figure 3). We hypothesized that cultural empathy would mediate the effect of advising satisfaction on sense of belonging.

Figure 3 Standardized Path Coefficients of SEM Model 2

The fit indices suggested that this model represented a moderate fit to the data. To increase model-data fit, we identified the following correlations of errors associated with the items within a given factor, according to the software-suggested modifications: error 2-4, 3-4; and error 11-12, 12-13. The fit indices suggested that this model represented a good fit to the data. The chi-square test was statistically significant, $\chi^2 = 146.686$, $p < .001$, CFI = .972, RMSEA = .086, SRMR = .0384. The direct path from "SATI" to "BELO" was statistically significant ($\beta = .258$, $p < .01$). The indirect path from "SATI" to "CultEm" was

statistically significant (β = .719, p <. 001). The indirect path from "CultEm" to "BELO" was also statistically significant (β = .253, p < .05; see Figure 3). These results suggested that cultural empathy did mediate the effect of advising satisfaction on sense of belonging.

DISCUSSION

This study explored whether cultural empathy, rapport, and advising satisfaction influenced international students' sense of belonging. We hypothesized that cultural empathy, rapport, and advising satisfaction would positively influence international students' sense of belonging. These findings supported two of the hypotheses: 1) advisor's cross-cultural empathy had positive effects on international student sense of belonging; and 2) international students' advising satisfaction had positive effects on international student sense of belonging. Yet, this study did not find a significant relationship between advisor-advisee rapport and international students' sense of belonging.

These findings contribute to the current literature on the impact of academic advising by providing statistical evidence of the influence of academic advising on international students' sense of belonging. Second, these results provide valuable information for the U.S. institutional leadership. Institutions could use academic advising to increase international students' sense of belonging. Additionally, these findings suggest institutions could increase cultural sensitivity and empathy training to academic advisors serving international students to help academic advisors better understand international students' language and cultural challenges as well as their needs in terms of acclimating to U.S. campuses. Training to the international student advisors will enable academic advisors to change their advising approaches and increase their cultural empathy in advising sessions to improve advising efficiency (Wangensteen, 2021).

These findings validate the existing literature advocating for advisors' contribution to students' sense of belonging (Mataczynski, 2013; Strayhorn, 2015). Advisors are important as cultural navigators to help domestic students build stronger sense of belonging to the institution (Strayhorn, 2015). These findings provide evidence that academic advisors are also cultural navigators for international students in US institutions (Wangensteen, 2021).

Additionally, this study provided significant evidence supporting the effects of advisors' empathetic understanding on college students' sense of belonging (Glass et al., 2015; Hoffman et al., 2002). This research filled a gap in the literature about academic advisor's influence on international students' sense of belonging and raised an issue that academia in the United States might have significantly overlooked the impacts of academic advisors. There was substantial literature about faculty and peers' significant impacts on students' sense of belonging (Hausmann et al., 2007; Hoffman, 2002; Hurtado et al., 2015). In contrast, there was minimal research about academic advisors' influences. Academic advisors' cross-cultural empathy with international students significantly affected their sense of belonging to the institution, which revealed

that academic advisors played a role as influential as that of faculty and peers. Thus, we recommend that institutions reexamine their policies and pay equal attention to their primary-role advisors and the faculty advisors. We also suggest that university administrators revere academic advising as a bona fide profession that requires resources like any other important learning function at the institution (McGill, 2019).

Third, these findings support existing research that academic advisors could give international students a sense of belonging by expressing genuine care to them and asking about their family, their home culture, and sharing the advisor philosophy, such as the purpose and frequency of the advising with international students (Mataczynski, 2013; Wangensteen, 2021). Expressing genuine care to students and engaging them in academic advising sessions is consistent with Astin's integration theory (1988, 1993a, 1993b), which posits students' learning and development are related to and influenced by the quantity and quality of their involvement in various academic and social activities, as well as interactions with professors and other staff.

However, these findings did not find any significant effects of advisor-advisee rapport on international students' sense of belonging. This finding conflicted with Schlosser and Gelso (2001), who found that advisor-advisee rapport was essential to advisor-advisee relationship and students' sense of belonging to the institution. Unlike their domestic students (Schlosser & Gelso, 2001), findings on the international students participating in this study indicated that rapport with advisors did not significantly affect their sense of belonging. The discrepancy may be related to two issues. One was the sample size as 209 participants were comparatively small. Second, international students may define rapport differently from domestic students. Either way, a future examination is needed focused on the relationship between advisor-advisee rapport and international students' sense of belonging. These findings evidenced that advisors' cross-cultural empathy mediated the effect of international students' advising satisfaction on their sense of belonging. This finding supported Charles and Stewart (1991), who considered cultural empathy an essential component when advising international students. It also supported that advisors' attitude of genuine caring and interest about each student contributed to effective advising (McGill, 2021; Cadieux & Wehrly, 1986; Walker et al., 2018). Culturally empathetic advisors who took time to understand different worldviews and their students' values positively contributed to international students' sense of belonging (Mataczynski, 2013).

Though not described here, later calculations of this dataset revealed that approximately 41.3% of the effect of advising satisfaction on sense of belonging was mediated through the advisor's cultural empathy activity during advising. This finding reflected that nearly half of the impact of advising satisfaction on international students was affected by advisors' cross-cultural empathy. International students' sense of belonging to the institution decreased when they perceived that they had not received adequate institutional support (Lértora & Sullivan, 2019). These findings suggest that academic advisors could enhance cross-cultural empathy activities to increase international students' sense of

belonging to the institution. This finding also indicates international students' strong desire for cross-cultural empathy from their advisors.

IMPLICATIONS

Advisors as Cultural Navigators

This study considered academic advisors as cultural navigators of the institution to help international students transit to the American higher education system. The results indicated that institutional leadership and policymakers could use academic advisors as institutional navigators to help international students transition smoothly and adapt to the institution quickly. Although not investigated in this study, some pointed out the problem of international students' underutilization of campus services including academic advising (Lau et al., 2019; Mori, 2000). One reason for international students' underutilization of campus services could be their ignorance of services. Job placement, career counseling, childcare, disabilities, and mental health services were often not used by international students (Lau et al., 2019). International students used the services restricted to co-curricular services and academic services, such as computer lab, skill lab, and writing center (Lau et al., 2019). Advisors and others on campus can work to increase international students' sense of belonging rather than focus merely on campus integration (Glass et al., 2015; Yao, 2015). This study provided evidence on the significance of fostering cross-cultural interaction and international students' belonging, which in turn can enhance student retention and academic performance (Glass & Westmont-Campbell, 2014).

As academic advisors contribute significantly to international students' sense of belonging (Lau et al., 2019), some institutions may need to provide more ample resources to both faculty and to primary-role advisors. One significant way to achieve this is to have more advisors to reduce case-load size, which allows advisors to have fewer students and thus dedicate more time with each student with whom they interact. Using academic advisors as cultural navigators could improve international students' sense of belonging. Academic advisors as cultural navigators could bridge the gap and market these services to more international students to increase their knowledge about advising and support services of the institution (McGill, 2021).

Advisors' Cross-cultural Empathy

The problem of international students' low sense of belonging to foreign institutions has existed for a long time. The contemporary research regarding solutions of this issue has mainly focused on the impact of professors or instructors (Glass et al., 2015). Researchers and institutions must not neglect their staff, such as primary-role academic advisors, who are in frontline positions to support international students' belonging. These findings demonstrated that advisors' cross-cultural empathy mediated international students' advising satisfaction on their sense of belonging. This mediation effect suggests that

academic advisors should raise their awareness of empathetic cross-cultural concerns to the international advisees. The core competencies of academic advising from NACADA: The global community for academic advising (2017), provide a good framework for advisors to focus their advising work. One of these competencies, Communicate in an inclusive and respectful manner, is especially relevant when working with students from backgrounds different from the advisors. Now, more than ever, inclusive language, self-reflection of biases, opportunities for dialogue amongst peers, and developing cultural competencies are critical to support student advising. A recent report of the U.S. Department of Education's Office of Planning, Evaluation and Policy Development (2016) articulated the importance of institutional commitment to promoting student body diversity and inclusive campus climates. In recent years, many institutions have enhanced their diversity and inclusion initiatives by hiring chief diversity and inclusion officers. Thus, we recommend advisors raise their intercultural concerns and offer cross-cultural empathy when advising international students (Wangensteen, 2021). Training and development activities need not to be the sole jurisdiction of a campus diversity office. Each supervisor is responsible for not only encouraging participation and learning, but also establishing baseline requirements for ongoing development. Some of these skills are referred to as "soft skills" like questioning, tact, honest, listening, and body language (Thornhill & Yoder, 2010). Also, we suggest that academic advisors develop and engage in forms of cross-cultural activities that show international students their concerns and compassion in addition to conversations about international students' family and home country.

International Students' Advising Satisfaction

Prior research demonstrated student satisfaction with advising was associated with their sense of belonging (Kohle Paul & Fitzpatrick, 2015, Mataczynski, 2013). Students' degree of advising satisfaction was significantly affected by the advisor's availability, quality, and pre-service preparation (Green, 2016). To increase international students' advising satisfaction, these findings suggest that academic advisors should develop a sense of cultural sensitivity to understand students' family background and build trust to make personal meaning of each individual when advising international students (Galinova & Giannetti, 2014). This study found that international students' degree of advising satisfaction largely influenced their sense of belonging. Thus, we recommend that academic advisors make each advising session efficient and effective, and they should make themselves available to international students in need. To increase the availability of advising services and international students' advising satisfaction, institutions should decrease the caseloads of each advisor and provide more flexibility in the advising time.

These findings revealed that advisor-advisee rapport was not related to international students' advising satisfaction and sense of belonging. This suggests that no matter how close the relationship between the advisor and advisee was, international students' degree of satisfaction with advising might not change. The

results of the current study indicate that international students did not have rapport with advisors possibly because many of them may have never used the advising services (Galinova & Giannetti, 2014).

Advisor Training and Development

These findings revealed the importance of academic advisor and academic advising services on international students' sense of belonging as well as how advisors' cross-cultural empathy mediated international students' advising satisfaction on their sense of belonging. The findings indicate that institutions should provide sufficient pre-service and on-service cross-cultural training to academic advisors who serve international students. Institutions need to develop an in-depth cross-cultural training system for advisors (McGill & Lazarowicz, 2022). Advisors should be trained before providing cross-cultural empathetic advising services to new and existing international students, regardless of their English level, length of time in the institution, and their places of origin, with closer attention to the lower English proficiency students. Communicating in an inclusive and respectful manner takes practice. Individuals have many ways to engage in personal growth, such as podcasts, audiobooks, ongoing campus and association dialogues, and web-based learning modules. Advisors can identify the resources and people who are providing diversity and inclusion training and build those opportunities into their annual development and performance reviews. Beyond one's campus, advisors can look to NACADA's Inclusion and Engagement Committee and several of the advising communities for professional development opportunities that address inclusivity.

Limitations

This study had several limitations. First, due to the COVID 19 lockdowns, data collection was more challenging than usual. Many universities became fully online or hybrid, so many international students went back to their home country and studied from there, which may have limited the pool of candidates. In addition, this lockdown stopped many students from participating with Google Form (used in this survey), which was not accessible in some countries (e.g., China). Additionally, during this pandemic, institutions relied more heavily on emails to reach out to their students. To protect their students from interruption and ensure only the most important messages were sent, many universities initially contacted for recruitment declined to assist the process as a result. Given that the convenience sample was used in the study and a high proportion of respondents come from one country, China, caution should be taken to generalize the findings to the entire population of international students in the U.S. Third, this is a non-experimental study. While we are examining the statistical relationship between several factors, limited causal effects can be established. Finally, we did not differentiate faculty and primary-role advisors. Consequently, as institutions employ different advising models, we cannot clarify the implications on a specific kind of advisor.

CONCLUSION

The present study revealed that cultural empathy was a significant predictor of international students advising satisfaction and sense of belonging, but rapport was not statistically significant in international students' sense of belonging. Second, advising satisfaction was a significant predictor of international students' sense of belonging. Furthermore, advisors' cross-cultural empathy mediated international students' advising satisfaction on their sense of belonging.

These findings provided evidence that academic advisors were as important as faculty and peers in the impact to international students' sense of belonging. We recommend that institutions should improve advising services to international students to enhance their sense of belonging to the institutions. In terms of the advisors' cross-cultural empathy, we suggest that advisors should express their genuine care to international students by asking about their family, their home culture, and sharing the advisor's philosophy with them. International students' low sense of belonging deserves more attention from the leadership of U.S. institutions. This study provided valuable information to U.S. higher education as academic advisors' activities significantly influence international students' sense of belonging. A strong sense of belonging among international students may increase international students' academic and non-academic engagement and help them excel and have a better learning experience abroad.

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