Article

Journal of International Students
Volume 15, Issue 1 (2025), pp. 61-86
ISSN: 2162-3104 (Print), 2166-3750 (Online)
jistudents.org

East Asian International Doctoral Students' Role Identity Development in the United States: A Collaborative Autoethnography

Qiling Wu
Temple University, Philadelphia, USA

Hyangeun Ji
Temple University, Philadelphia, USA

Yuhyun Park
Auburn University, Auburn, USA

Sori Kim
Columbia University, New York, USA

Jiayu Yang
Temple University, Philadelphia, USA

Lei Wang
Temple University, Philadelphia, USA

ABSTRACT

The U.S. attracts a significant number of international doctoral students each year. As these students navigate cultural and academic systems, understanding their unique experiences and challenges becomes crucial. This study explores the intricate nuances of identity negotiation in the lived experiences of six East Asian international doctoral students in the U.S. using collaborative autoethnography. We examined how role identities explain our experiences by employing the Dynamic Systems Model of Role Identity framework. Our reflections revealed (1) the salience of role identity components and structural relations and the impact of other role identities on resolving tensions; (2) the development of our researcher and teacher role identities within doctoral student role identity; and (3) resilience as both a cultural disposition and a dynamic process that evolves through the constant negotiation and renegotiation of our identities.

Keywords: collaborative autoethnography, East Asian students, international doctoral students, resilience, role identity

INTRODUCTION

The U.S. draws a large number of international students annually. During the 2019-2020 academic year, approximately 1.1 million international students were enrolled in U.S. institutions (Gui et al., 2023), with a considerable proportion pursuing doctoral degrees. With the increasing number of international doctoral students, there is a pressing need for researchers and educators to understand their unique experiences and challenges (Gümüş et al., 2020). These students encounter a myriad of adjustments, including adapting to a new cultural context (Moffett, 2006), navigating complex academic systems (Goode, 2007), and forming social connections in an unfamiliar environment. These challenges have intensified after the sudden break of COVID-19, which caused international students to identify anxiety and a sense of isolation (Ma & Ni, 2022). Other frequently examined aspects include institutional support, such as mentoring (Rangarajan & Daneshfar, 2022), career development (Thiry et al., 2015), and mental well-being of international doctoral students (Mokbul, 2023; Yin et al., 2024).

Due to Asian countries' integration into globalization characterized by economic development and convenience in traveling, there is an increasing trend of the number of students going abroad to study (Ono & Piper, 2004). The U.S. was an ideal country for studying abroad because of its efforts in enrolling more international students than any other countries and a high-quality education system with a wide range of institutions and programs (Milian et al., 2015). As for Asian students, the higher possibility of entering the world top 100 universities in the U.S. is higher than staying in their domestic country (Chao et al., 2017), individuals' desire of entering Ivy League schools, and the critical thinking stressed in its education (Henze & Zhu, 2012) are the main motivators for students to choose the U.S. for their post-secondary study.

Within these experiences, we focus on investigating students' role identity negotiation. Identity negotiation is a negotiation between sociocultural membership identity (e.g., ethnic membership identity, family role conceptions) and personal identity in intergroup communication situations. Such negotiation contributed to an individual's cognitive, affective, and motivational change. For example, identity studies have focused on immigrants' negotiation (e.g., Compton-Lily et al., 2017; Liu, 2015), and teacher role identity negotiation (e.g., Varghese et al., 2016), and other professional negotiation (Hatmaker, 2013). In our study, however, we focused on the personal identity negotiation as highly individual, but also shaped by their sociocultural identities and environmental factors.

To take doctoral students as an example, their negotiation of identities might involve processes that students meet with tensions, break down or refine their past role identity or its constructs, and form a new role identity. Such processes lead to renewed role identities for development. For instance, Consoli et al. (2022)

highlighted the experiences of international doctoral students who later became faculty members and discussed the recurring themes: overcoming linguistic differences, learning to thrive across cultures, and the value of mentoring experiences. Xu (2022) also talked about how social media changed an international postgraduate student's sense of national identity construction from a collectivist to an unofficial ambassador of China. According to Sung (2022), international students engage in the process of negotiating various interpretations of the international student label. They also respond to the (mis)conceptions of their national identities held by local students and grapple with the perceived (in)compatibility between their national and global identities. These identities are influenced by their unique dispositions and abilities to exercise agency in shaping and reconstructing their sense of self.

Whereas these findings contributed to understanding the general experiences and national identity development of international doctoral students, they did not stress the intricate nuances of identity negotiation underlying their lived experiences as international doctoral students. For example, why do they decide on choosing a doctoral program in the U.S.? How does their role identity evolve in their living context and what contributes to these changes? How is their coping with adversaries (resilience) related to their identity negotiation? The exploration of these questions incorporates a comprehensive understanding of the contextual, complex, and dynamic identity processes underlying the experiences of international doctoral students. Therefore, by employing the collaborative autoethnography approach (CAE) and the Dynamic Systems Model of Role Identity (DSMRI, Kaplan & Garner, 2017), the study aims to uncover the patterns within the uniqueness of these students' experiences and investigate their role identity development through collective storytelling and shared reflections.

LITERATURE REVIEW

International Doctoral Students' Decision-Making Processes of Choosing a Doctoral Program Abroad

Researchers stress the motivators of making decisions in the studies of international students' decision-making processes. For example, in Hung and Yeh's (2020) study, even though they applied the concept of decision-making process, they stressed the motivators for decision making, such as "when it comes to deciding on a university, I try to select the best". Lee (2017) employed "push" and "pull" to describe the motivating factors and hindrances in decision making processes for international students. However, a dynamic process was not revealed. Similarly, Wu (2020) raised three key factors in shaping Chinese overseas students' career decision-making, namely, family influences, overseas social life, and personal improvement, but did not stress the dynamic nature of making a decision.

Similarly, the scholarly examination has predominantly centered on external factors, predominantly institutional prestige, scholarship availability, and career prospects in influencing students' decision-making (Lee et al., 2012). Cubillo et

al. (2006) added factors encompassing personal reasons (i.e., advice, personal improvement, ethnocentrism), country image, city image, institutional image, and program evaluation, which provides a comprehensive understanding of the various external elements that students weigh in their decision-making process. James-MacEachern and Yun (2015) extended this understanding by emphasizing the role of marketing tools and reference groups. They highlight how universities' use of brochures, websites, and social media can guide students' choices, while the influence of parents, peers, and educational agents are also acknowledged as significant in shaping these decisions.

Despite acknowledging these external influences, there is a growing recognition of the need to understand the internal motivations that drive international doctoral students. For instance, Yang et al. (2018) investigated Chinese doctoral students' pursuit of degrees in STEM fields, highlighting self-cultivation and life experiences enrichment as their prominent motivators to study abroad. Their research also suggests that the decision, while influenced by collaborations between institutions and the reputation of supervisors, deeply resonates with the students' intrinsic desires for personal growth and self-improvement. Moreover, Trujillo et al. (2020) focused on students studying in Hungary and highlighted the goals of studying abroad for developing self-maturity, self-confidence, and resilience.

The current body of literature, however, has yet to offer a unified framework that holistically encompasses both these external and internal dimensions of the Asian students choosing the U.S. for their doctoral study. Such a framework is essential for a comprehensive understanding of the complex decision-making landscape navigated by international doctoral students, merging their personal desires with the external opportunities and challenges.

Challenges and Growth While Pursuing a Doctoral Degree

Literature on international doctoral students has extensively documented the myriad challenges they face such as difficulties posed by language barriers, department politics, financial strains, and advisor conflicts (e.g., Goode, 2007; Ma & Ni, 2022; Moffett, 2006). Such challenges often impede their ability to meet program requirements and are related to a sense of cultural alienation. For example, Jang et al. (2014) stressed the international students' lack of participation in class discussions about culture and diversity, which could lead to challenges with unsupportive peers or course instructors.

This body of research, while critical in identifying and understanding the issues international doctoral students encounter, predominantly portrays these students' experiences through a deficit lens. Instead, emerging literature points to a more dynamic aspect of the doctoral journey—growth and development. For example, Wang (2012) illustrated how international students' skills and knowledge evolve through the support they receive within their academic, mental health, and career-oriented environments. Focusing on cultural intelligence competence, Wang et al. (2015) examined Chinese international students' distinct trajectories over time (pre-arrival, first month, second month, and third month)

and found environmental predictors of the cultural intelligence including mainstream society, anxiety, perceived language discrimination, and marginally coping through family support.

Despite this emphasis on growth and development, there is still a substantial gap in capturing the nuanced progression of international doctoral students, particularly in terms of how their role identities as researchers and educators develop in response to their experiences. Significantly, the literature also recognizes the satisfaction that international students derive from their academic achievements, which includes passing exams, defending proposals, and completing research tasks (Ku et al., 2008). Studies from Finland (Sakurai et al., 2017) and Australia (Harman, 2003) highlight the high motivation international students have to advance their careers, often leading to a proactive stance against the aforementioned challenges. This indicates a potential for strength-based research that not only acknowledges the challenges but also the intrinsic motivation and adaptability that these students exhibit.

Understanding Resilience in International Doctoral Students' Experiences

Resilience is the capacity to cope with the exposure to adversity and have the outcomes of faring better than would be expected in the context (Troy et al., 2023). In the context of doctoral students, resilience is the ability to overcome the potential adverse effects of stressors (Parks-Savage et al., 2018) and to achieve success in an educational institution regardless of risk factors (Morales, 2008). This encompasses not just academic perseverance but also emotional, cognitive, and behavioral adaptability. Devos et al. (2017) highlight the importance of feeling progress with manageable stress and a clear understanding of the subject matter for doctoral completion. They emphasize the crucial role of supervisors in fostering this sense of progress and stress management, suggesting that while peers play a part, their influence may be less significant. This underlines the importance of cognitive and emotional aspects of resilience, including managing stress effectively and understanding the academic content.

A range of protective factors contribute to resilience in doctoral students. Personal factors such as self-efficacy (Bandura, 1982) and the desire to meet goals (Resnick, 2014), along with the ability to draw on past coping experiences (Luthar & Cicchetti, 2000) or developing new strategies (Cho, 2024), are essential for fostering resilience. Environmental factors, such as social connection (Sun et al., 2021) and communities-oriented support systems (Kim, 2024), play a crucial role. Sociocultural factors (Yuen, 2022) also contribute significantly, including the opportunity to develop self-esteem and efficacy through valued social roles (Elder and Caspi, 1987), sharing similar cultural beliefs, and maintaining positive peer relationships. Professional factors, such as engagement in meaningful work, further augment resilience, underscoring the importance of academic and professional engagement.

There is a critical need for research specifically targeting international doctoral students, who often face unique challenges. These students must navigate not only the usual stresses of a doctoral program but also additional complexities

such as cultural adjustments, language barriers, and adapting to new educational systems. Understanding the resilience factors that specifically aid international students is vital. This research should explore how personal, environmental, social, and professional factors interact uniquely for these students, and how these factors can be supported effectively by institutions and academic communities (McCray & Joseph-Richard, 2020). Such focused research is essential for developing tailored support strategies that address the specific needs and challenges of international doctoral students, ensuring their successful academic and personal adjustment, and enhancing their overall doctoral experience.

Studying Abroad and Role Identity Negotiation

Spencer and Markstron-Adams (1990) described role identity constructs as being related to self-recognition, self-awareness, locus of control and other psychological constructs. To conceptualize these constructs in a higher-order systematic way, we employed DSMRI's categories of four elements within role identity, namely, purpose and goals, self-definitions and perceptions, worldviews, and action possibility (see Figure 1). The processes of role identity negotiation thus include the dynamic changes of these constructs and the structure between and among the constructs. Furthermore, role identity is a construct perceived from a complex dynamic system perspective, which means its negotiation process is situated in a constantly changing environments and each construct is in response to the changes of other constructs and the four parameters as listed in DSMRI (i.e., context, domain, disposition, and culture).

Figure 1: Kaplan & Garner's (2017) Dynamic Systems of Role Identity

We used the DSMRI to demonstrate international doctoral students' U.S. experiences from a role identity perspective. The DSMRI identifies three facets involved in the process of the emergence of experiences and actions within role identity: content facet, structure facet, and process of formation facet. The content facet concerns four components, namely, ontological and epistemological beliefs, purposes and goals, self-perceptions, and perceived action possibilities.

First, ontological and epistemological beliefs serve as the international doctoral students' framework for understanding the world. In this study, this specifically pertains to the knowledge that international students hold regarding U.S. higher education and the strengths and weaknesses they perceive in their own experiences. The purposes and goals are statements that express their sense of purpose in their academic role, as well as their aims for themselves as students and for others in the academic context. Self-perceptions and self-definitions pertain to their understanding of personal and social attributes relevant to their academic roles. Their perceived action possibilities encompass both internal thought processes/planning and external behaviors related to their role.

Second, the structure concerns the harmony and tension between different content elements within each system component, the alignment or misalignment between the different components of the system as well as the integration or lack of integration of the focal role-identity system with other role-identity systems the person holds. Third, the process of the model concerns the ways by which the role identity forms and transforms.

METHOD

Research Approach

Our study employed CAE to undertake a comprehensive examination of our respective role identities. CAE is a qualitative research method that offers a distinctive platform for researchers to immerse themselves in a multifaceted exploration of their identities (Lassiter, 2005). This approach is characterized by its facilitation of internal and communal dialogues, prioritizing elements such as self-reflection, heightened researcher visibility, contextual sensitivity, and rigorous critical discourse (Chang, 2013). We, six researcher participants (four females and two males), shared the commonality of being international doctoral students in the U.S., hailing originally from East Asian countries (China and South Korea). Our years staying in the U.S. ranged from 1 to 7.5 years, with different academic concentrations and school locations (see Table 1).

Data Collection and Analysis

We adapted the four steps of CAE outlined by Pretorius et al. (2023): (1) reflective prompting, (2) individual writing, (3) group sharing and refining, and (4) group-based analysis. The overall data collection and analysis plan is summarized in Figure 2. First, we collaboratively came up with a set of eleven written questions asking about international doctoral students' experiences and

Table 1: Six Researcher Participants' Demographic Information

Name	Ethnicity	Institution Location	Year	Major	Gender	Total Years of Studying in the U.S.
Sarah	Chinese	Philadelphia, PA	3	Educational Psychology	Female	2 years - 2 years (Ph.D.)
Jasmine	Korean	Philadelphia, PA	3	Educational Technology	Female	2.5 years - 2 years (Ph.D.) - 0.5 years (Study abroad)
Tim	Korean	Tucson, AZ	3	Counselor Education and Supervision	Male	7.5 years - 1.5 years (Ph.D.) - 2 years (Master's) - 4 years (Undergraduate)
Elizabeth	Korean	New York, NY	3	Music Education	Female	5 years - 1 year (ED.D.) - 2 years (Master's) - 2 years (Master's)
Kate	Chinese	Philadelphia, PA	2	Documentary Arts and Visual Research	Female	4 years - 1 year (Ph.D.) - 1 year (OPT) - 2 years (MFA)
Alex	Chinese	Philadelphia, PA	1	Computer Science	Male	1 year - 1 year (Ph.D.)

Note. The names of the participants were anonymized.

challenges (see Appendix) based on Kaplan and Garner (2019), Consoli et al. (2022), and McKay et al. (2022). Then, each participant individually answered the questions using a first-person narrative in English. We enhanced our narratives with visual artifacts—such as photos, blogs, emails, or drawings—to vividly illustrate our transformative moments, challenges, and achievements.

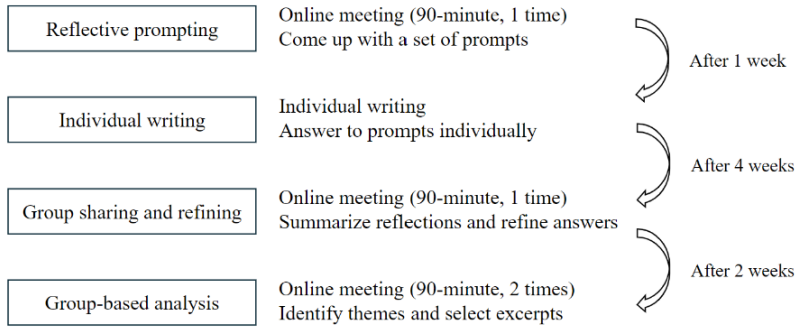

Figure 2: Data Collection and Analysis Procedures

Subsequently, we organized ourselves into two groups based on ethnicity (Korean and Chinese). Within each group, each participant summarized their reflections and responded to questions from peers, such as "I notice that during...(activities) you...(actions/emotions). Why did you do this? What do you think you felt at the time?" These questions were designed to elicit insights into our role identity at those moments. After 30 minutes of individual reflection and discussion within the groups, we began comparing and contrasting our responses, identifying patterns in the role identity of doctoral students across the group for 20 minutes.

For data analysis, we convened an additional two 90-minute meetings where all authors participated. The first meeting focused on identifying major themes from the collected narratives, emphasizing the diverse role identities and decision-making processes of international doctoral students. During our second meeting, we concentrated on selecting specific excerpts that exemplified these themes.

RESULTS

Integration of the International Doctoral Students' Role Identity in Decision Making

We first reflected on our decision making of pursuing our doctoral programs, uncovering a complex interplay of influences. Each narrative highlighted the unique, often complex, interplay of individual role identity components such as goals and ontological beliefs, and social context factors in making these decisions. For instance, Jasmine formed positive ontological beliefs about the intellectual

appeal of research work and the professional necessity of pursuing a U.S. doctoral degree for a faculty role in South Korea. Similarly, Elizabeth's decision was spurred by her self-perception of enjoying conducting research and the perceived advantages of obtaining U.S. educational background in the higher education market.

Alex's career goal was to expand his interests in artificial intelligence (AI). However, working as a well-paid software engineer in China, his ontological belief about the job was misaligned with his goal, "much of my time at work was spent on inefficient communication and server management". Thus, Alex took the action of quitting his job and applying for a Ph.D. study to explore his career interests. While Kate's initial goal was to become an artist rather than pursue academia, her experiences of struggling to find film editing jobs reinforced her ontological belief and action possibility in "the impossibility of becoming a full-time artist due to the limited market for documentary art," especially during COVID. Additionally, her search for supervisors led her to a new ontological belief that "art and scholarly pursuits may not be mutually exclusive but can be harmoniously integrated". Consequently, when she discovered her current program could fulfill her goals of "being an artist while also being a scholar," she was drawn to it. As for Sarah, her Christian belief in becoming an important vessel through education guided her decision to apply for a Ph.D. Tim viewed English as a key to broader career options and valued the academic and lifestyle benefits of being a doctoral student in the U.S., envisioning his future as a counselor or a professor.

In addition, our role identities significantly influence our decisions when selecting specific doctoral programs. For instance, Jasmine chose between offers from two universities based on her ontological beliefs about the mentors' cultural understanding and mentorship, "It seemed to me that the Korean professor had a better understanding of the unique concerns Korean students may have during this global crisis (COVID)". This belief aligned with her self-perception of needing support from mentorship during her master's studies and her goal for relatedness with mentors for her Ph.D. studies. Additionally, the potential emotions of feeling lonely from leaving family and living abroad prompted her to seek close mentorship. As for Elizabeth, Tim, and Sarah, they held ontological beliefs about the importance of funding for Ph.D. study and underscored the challenges international students face in financing their education.

Development of Researcher and Teacher Role Identities Within International Doctoral Students' Role Identity

We found that within our doctoral role identities, both our researcher and teacher role identities are preeminent. Initially, we approached our doctoral journeys with specific goals, like expanding research networks, developing research interests, mastering technical domains, and cultivating meaningful relationships with mentors. Elizabeth, for instance, has a distinct mixture of self-perception and ontological belief that "combining my passions in music with a research-oriented career would be advantageous, as it sets me apart from most musicians who

typically do not have a strong interest in research". Situated in her international doctoral student role identity, Elizabeth had the ontological belief that "I am aware that there may be others who possess permanent residency or superior qualifications", and thus, she aimed for "stand(ing) out" and being "indispensable" in her academic career.

Moreover, when reflecting on meaningful experiences and sources of satisfaction, many of the participants revealed both challenges and growth related to research and teaching that have shaped our academic paths. Alex recounted the harsh lesson he learned from missing a submission deadline with his ontological belief being "Missing a deadline for a key conference was a significant setback, particularly for me, an international student striving to accumulate publications during my Ph.D. studies". Tim described his efforts and sacrifices made to attend conferences, emphasizing the importance of resilience and determination. He told the story that "In order to save on expenses, I booked a budget airline ticket, and to comply with the strict baggage restrictions of low-cost airlines, I had to squeeze all my clothes into a small backpack. In addition, to catch the early-morning flight at 5 am, I had to take a bus the night before and stay up all night to get to the airport in Phoenix". Nevertheless, he formed positive ontological beliefs about the experiences as "it provided me with networking opportunities, exposure to cutting-edge research, and the opportunity to present my ongoing research... It inspired me and motivated me to be a better scholar".

Satisfaction within our role identities also comes from various achievements and recognitions, like publications, which affirm the value of our hard work. Alex found great satisfaction in the academic freedom and resources available to him, which allowed him to explore his research interests. Sarah's satisfaction stemmed from her self-perception about her development as a researcher. Specifically, "I became more proficient in organizing logistics, generating research ideas, collaborating with fellow researchers, refining research proposals, and conducting research". Elizabeth's most satisfaction came from working with exceptional professors and acknowledging that "I can apply what I have learned", through which experiences she had witnessed "my own progress and growth".

For Sarah and Tim, satisfaction was also found in their growth as teachers and the joy from teaching reinforced their sense of progress and fulfillment. Sarah made the comparison that "In my first year, ... students' feedback towards me was just medium... In my second year, most students showed sincere appreciation towards my teaching. One student even wrote a thank-you letter to me saying that I am his favorite teacher". In addition to the ontological belief about student comment, Sarah expressed her self-perception of growth in teaching by reflecting on her processes of shifting from self-centered to student-centered teaching, "…my students started to respond in surprising ways… My attention shifted from my scripts to my students".

As for Tim, teaching provided him the most satisfaction. His self-perception changed in the process of teaching— "I never expected that I would enjoy teaching, and for the first few classes I was very nervous and anxious, but as I continued, I felt very satisfied and rewarded". This self-perception was aligned with his ontological belief about the immediate rewards of teaching, "I get

immediate responses from students every week and get the chance to revise/rethink what I will be teaching next time". In comparison to Sarah and Tim, Kate, who would start her teaching assistantship in the upcoming semester, expressed her goal towards the experience, "I aim to improve both my language skills and my knowledge in the field of film studies, equipping myself to be a future educator in this domain".

Resilience Emerged Within the Processes of Role Identity Negotiation

Challenges

In our reflection, we mentioned a myriad of challenges that encompassed transitional difficulties, financial constraints, and the impact of COVID-19 (Li et al., 2024). For example, the pandemic exacerbated feelings of isolation and the practical difficulties of different time zones. Tim expressed his depression and had the haunting thought of falling behind, "The COVID-19 pandemic was my low point...I feel like I am a little behind everything. I finally got to meet with my advisor in person after 3 years since I started my program". Maintaining network was another problem; Jasmine felt the absence of old friends and family, and Kate contrasted the close bonds formed in earlier educational settings with the more individualistic nature of friendships during her doctoral study.

Language barriers presented recurring challenges in our class engagement and social activities, with us often feeling inadequate and doubting our achievement. For instance, Jasmine shared that "I started feeling anxious that my students might critique my English-speaking abilities... I anticipate that such challenges might resurface when I transition into a faculty role". Tim worked in a substance use treatment center and mentioned that "especially when working with local clients, it was extra difficult for me to understand their accents and their use of jargon". Sarah also shared her initial language anxiety in teaching, "What if I do not understand my students' questions? What if I cannot give answers with professional languages?"

Cultural differences also affected our perceptions of professional expectations and communication in research and work environments, requiring adjustments and self-advocacy that diverged from our home country norms. For instance, Kate shared her action possibility and self-perception of needing to self-advocate in the U.S. that "I always feel the need to put in extra effort to adapt, adjust, and fit into the Western academic environment... Throughout my elementary school to college years, I was always a top student by quietly sitting in class and excelling in exams, without being particularly vocal. However, things are different here". Sarah had the ontological belief and action possibility that "In Chinese culture, my impression is always that students need to collaborate with professors to publish. However, viewing my colleagues' progress, I started to develop awareness that perhaps I should also conduct research independently". Tim noted that "As a mentee and a student in Korea, I was expected to stay reserved and comply with my supervisor's instructions or advice. But if I do the

same here in the U.S., I learned that I may be viewed as lacking commitment and proactiveness".

Other challenges including lawful status concern and identity conflict were also shown in our reflections. Alex noted that "Another predicament is the uncertainty surrounding my stay in the U.S. The process of obtaining a green card is complex and often stressful, leaving me apprehensive about my long-term prospects in the country". Elizabeth noted that "hiring a foreigner requires a significant commitment of time and resources from the university's side. Native citizens who don't require such assistance might have an advantage in the hiring process". As for national identity conflict, Elizabeth noted that "I often feel like I don't belong anywhere. I don't fit well or feel familiar in either culture... I want to stay, but at the same time, I wonder if I should continue living as a foreigner because I am Korean".

Resilience

Encountering these challenges, resilience appeared because of cultural influences, alignment among role identity components, and contextual impact. In facing challenges, students coped with these exposures to adversity in various ways. For example, facing language barrier problems, Elizabeth "continued to make efforts to improve and compensate for this deficiency". Due to COVID-19 isolation, many of us feel the insufficiency of our progress in academics. However, once returning to in-person meeting, to grasp networking opportunities, Tim was not hesitant to overcome challenges— "In order to save on expenses, I booked a budget airline ticket, and to comply with the strict baggage restrictions of low-cost airlines, I had to squeeze all my clothes into a small backpack. In addition, to catch the early-morning flight at 5 a.m., I had to take a bus the night before and stay up all night to get to the airport in Phoenix". As for Kate, after "losing sleep over this anxiety (about my language proficiency and expertise in the field)", she realized that "fixating on matters beyond rapid resolution wasn't conducive to my well-being" and she redirected her mental energy from fretting over perceived inadequacies to focusing on immediate actionable steps. Her strategy was that "fake it till you make it"— "I trained myself to set them aside temporarily and concentrate on the immediate task at hand".

To cope with the challenges, cultural influences turn out to be valuable assets. For example, Sarah embraced the ontological belief of a Chinese saying that "Enduring hardships is the path to becoming an outstanding individual" (吃得苦中苦,方为人上人). This ontological belief was aligned with her growth mindset, "being uncomfortable is indeed productive". For instance, she demonstrated her resilience cycle experiences of "meeting with difficulties, being stressful and sad, actively improving through self effort and others' support, and growing".

In another example, Alex participated in the graduate student strike at his institution, which he considered "an important stepping stone in my cultural assimilation into American society". Alex was clear about the challenges of participating in the strike when he mentioned his ontological belief that "The threat of losing our F1 visas, as conveyed in the university's email, was

intimidating". However, he overcame this challenge because of his ontological belief about the "US culture of advocating for freedom and defending my own rights". The experiences also strengthened Alex's cultural integration, in which he held the ontological belief and action possibility that "This newfound appreciation for solidarity has driven me to embrace the community and strive together towards shared goals".

The development of our role identities as researchers and teachers enhances our international students' role identity and become a major contributor of resilience. For example, when reflecting on our satisfying experiences, Jasmine's success in publication as an emergent researcher promoted her self-perception and ontological beliefs that "They validate all the hard work I've put into my research. This tangible outcome not only validates the effort and commitment I have invested in my research but also serves as evidence for the quality and impact of my work". Similarly, most of the participants mentioned that our progress in research and teaching experiences decreased our anxiety from cultural and language barriers in being an international student but instead boosted our self-efficacy in facing challenges in the journey.

A more coherent role identity also contributed to our resilience. In overcoming challenges, we noted the influences of our ontological beliefs about challenges, clear career goals, and better-integrated self-perceptions. To take perceptions about challenges as an example, Elizabeth viewed them as "ongoing, inevitable, and continuous" and believed that "these challenges have nurtured my resilience and determination, leading to a deeper understanding of my strengths". Similarly, Jasmine held the ontological belief that "they reinforced my adaptability, resilience, and determination...They have reinforced my determination to succeed and have shown me that I can overcome obstacles on this path". Moreover, obtaining clear goals also supported our resilience. Alex's clear academic goals serve as "the driving force behind my determination to confront challenges and pursue continual advancement".

Moreover, better-integrated self-perceptions reinforced our resiliency. Sarah's self-perception that "language proficiency is just one aspect of who you are... We bring valuable attributes such as diligence, unique perspectives, and skills as our assets". Kate and Alex also recognized their uniqueness in research interests and professional background in the industry, respectively. During a group discussion, Kate commented that "I sensed my uniqueness among my colleagues— my research integrates my background in insects with documentary research. Besides, I got As in all my courses, which I consider as a normal standing out". Alex also noted his self-perception that "Unlike many international students who transition directly into a Ph.D. program after completing their bachelor's or master's degrees, I chose to embark on a Ph.D. journey after three years of industry experience... I possess a defined objective, knowing what I want and the direction I need to take". The aforementioned role identity negotiation processes contributed to our resilience emergence and practices.

In addition to cultural and identity aspects for resilience, we have all mentioned external support, which includes support from our institutions, mentors, and peers. Elizabeth held the ontological belief that "when the university

provides essential funding, additional resources, and extraordinary research and teaching opportunities, it fosters my sense of belonging and boosts self-confidence". Tim emphasized connectedness as part of his ontological belief, "I try to stay connected with local/national/international associations through conferences". Jasmine repeated its importance and said, "connecting with fellow doctoral students, joining student organizations, and participating in various activities can help create a sense of belonging and provide a network of like-minded individuals". Sarah and Elizabeth also credited their church community as "a strong support system", which "can provide solace and a sense of belonging to individuals, particularly international students who often grapple with insecurity and isolation".

DISCUSSION

External and Internal Factors and Tension Resolution in Deciding Doctoral Programs in the U.S.

The decision-making processes of international doctoral students are nuanced and multifaceted. Factors such as job prospects, English language proficiency, institutional and faculty reputation, and recommendations from peers and mentors significantly influence the choices of international students (Lee et al., 2012). For example, Tim's reflection illustrates how language proficiency and perceived quality of a doctoral student's life are internalized in the decision-making process. Furthermore, country and city images, stressed by Cubillo et al. (2006), were also shown to be of our concern. Elizabeth considered the U.S. as a leading country in higher education advancement while Jasmine chose Philadelphia other than Hawaii because it is considered as an international metropolitan city.

The decision-making processes of international doctoral students also extend beyond the previously emphasized external factors to a more intricate consideration of role identity components. Jasmine's narrative of making decisions between two universities, for instance, underscores her research goal during doctoral study and ontological beliefs about the mentors' cultural understanding in mentorship. Indeed, mentors' cultural awareness has been stressed by researchers in the topic of the racial or ethnicity match between doctoral students and mentors. For example, Tuma and Dolan (2024) found mentors who display greater cultural awareness also show more supportive and higher quality mentoring while gender, race, or ethnicity match were not necessarily related with greater mentorship quality even though students tend to feel that having a mentor of one's own gender or race is important especially for women and students of color (Blake-Beard et al., 2011).

The tensions students experience before arriving in the U.S. and beginning their doctoral studies have been rarely explored in previous research (e.g., Ku et al., 2008). However, our study suggests that, in addition to external and internal factors, the pre-decisional tensions international students encounter (e.g., Alex's decision of quitting his job in China) before pursuing a doctoral degree abroad can provide significant insights for policymakers and college administrators. Even

though not in the realm of international students, the pre-decisional tensions in decision making can be applied here. The resolving of the tension before making the decision can aid individuals in regulating their emotional discomfort (Carpenter et al., 2016). The resolution of role identity before applying for doctoral studies also encourages individuals to stay motivated, creating a positive feedback loop for their future studies.

The findings advance the theoretical understanding of international doctoral students' experiences by demonstrating how the negotiation between external factors and internal factors (including personal goals, self-perceptions, and academic aspirations) plays a critical role in shaping their role identities. Practically, these insights can guide universities in designing tailored support systems that address both the institutional and personal needs of international students, ultimately enhancing their decision-making and successful adaptation to U.S. doctoral programs.

Development of Researcher and Teacher Role Identities

The identities of researcher and teacher have been most prominent within our international doctoral student role identity. The significance of the researcher role identity is reflected in our forming, developing and adjusting our purposes and goals during our doctoral studies, which include expanding research networks, developing research interests, and mastering professional domains. This prominence echoes the findings of Tapani (2009), who detailed her own researcher role identity development through seven steps during her research process, highlighting the interplay between social-based and individualistic identity. Our goals to develop research interests align with Tapani's individualistic role identity, characterized by exploring different research ideas and engaging in professional discussions. Similarly, our goal of building research networks and mentor relationships corresponds with Tapani's social identity process, emphasizing membership and a sense of belonging.

Our collaborative ethnographic approach illustrates the processes of change, not just the outcomes. This dynamic nature aligns with Castelló et al. (2020), who found that researcher identity evolves and changes over time. Particularly, our goals have become increasingly specialized and intertwined with our researcher role identities. Moreover, our ontological belief in the supportive research context of the U.S., compared to the more strictly hierarchical academic culture of our home countries, also promotes our researcher role identity. As for our self-perceptions, active participation in research, conferences, and publications has boosted our self-esteem as researchers. For example, despite initial feelings of inadequacy, Sarah's involvement in a research project provided a safe space to develop high-level research skills. Over time, her comprehension and confidence grew, allowing her to contribute meaningfully and affirm her potential as a researcher. As for our social context, the sense of belonging to a research community further reinforces our researcher role identity, despite the financial difficulties of joining and meeting with the community through conferences.

The development of our teacher role identity is also consistent with the findings of Mayer (1999) and Walkington (2005), which suggest that core beliefs and perceptions before teaching (in our case, ontological beliefs) influence the dynamics of learning to teach and establishing a teacher role identity. Our doctoral student role identity affects our self-perception as teachers and our teaching practices (White, 2014). This pre-perception about our professionalism in the course domain often impacts our self-esteem in teaching. The construction of our professional identity, as opposed to our personal identity, occurs over time (Murphy et al., 2014). For instance, Sarah mentioned that it took her three years to feel that she had gradually established her identity as an undergraduate teacher in the U.S. During this period, we underwent professionalization, learning the skills, values, and norms of the profession (e.g., assistant professor), and socialization, reflecting and adopting these norms and values. As international students, we also integrated our cultural values and self-perceptions as immigrants and second language learners into our teacher role identity formation.

Psychological processes are also involved in developing a teacher role identity for international doctoral students. Van Lankveld et al. (2015) identified five psychological processes in developing teacher role identity: a sense of appreciation, connectedness, competence, commitment, and envisioning a future career. For us, one additional process also involved negotiating conflicts and tensions, such as doubts about our competence (e.g., profession, language, cultural awareness) and lack of connectedness. However, successful teaching experiences and positive interactions with students reinforced our teacher role identity and generated satisfaction. Conversely, unresolved conflicts, such as discrepancies between our perceptions of English proficiency and our goal of sounding natural and professional, led to frustration.

This finding advances our understanding of international doctoral students' researcher and teacher role identity development by highlighting how the negotiation of personal goals, worldviews including cultural values, and professional environments shapes these identities. It thus offers insights for institutions to design supportive systems that facilitate the integration and growth of students' professional identities within diverse academic and cultural contexts.

Resilience and the Role Identity Negotiation

In exploring the journey of international doctoral students, our findings underscore how resilience is intricately woven into the role identity negotiation during cultural adaptation and academic achievement. Resilience, in this context, is not a static trait but a dynamic process that evolves through the continual negotiation and renegotiation of these international students' identities through their responses to both cultural and academic challenges. For instance, resilience manifests in participants like Jasmine, whose early self-perception was struggling with language barriers and cultural dissonance, misaligned with her worldview about the job market expectation required her to form the goal of adapting and reframing her challenges. These moments of adversity, which included feelings of isolation and academic pressure, were pivotal in shaping her enduring

commitment to her goal. By actively seeking mentorship and engaging in multicultural forums, Jasmine's resilience was reflected in her ability to reconcile her internal beliefs including her self-perceptions and worldviews with external realities, ultimately reinforcing her role identity as a scholar in the U.S.

Moreover, our findings suggest that cultural adaptation fosters a unique interplay between different forms of resilience. In the case of participants from China, for example, resilience was initially rooted in cultural values that emphasize adjusting oneself to the environment (Xie & Wong, 2020). However, as these students engaged with a U.S. academic system that values individualism and action-oriented approaches (Fletcher & Sarkar, 2013), their resilience evolved to include strategies aimed at altering their environment to meet personal and academic goals. Alex's experiences during a labor strike illustrate this shift, as he moved from adjusting to systemic challenges to actively advocating for change, embodying a Western-oriented form of resilience.

Resilience is linked to the negotiation of both multiple role identities and the elements within role identity of international doctoral students. This negotiation occurs on two levels: first, among the integration or lack of integration of their various role identities as international doctoral students, researchers, and teachers, and second, within the role identity, through the negotiation of the alignment and misalignment between elements, harmony and disharmony with a particular component. With the development of researcher and teacher role identity, our international doctoral student role identity was enriched and strengthened, which further promotes our resilience. Also, resilience is developed through the constant recalibration of these internal identity components. Participants who were able to better integrate their multiple role identities and align and harmonize these elements appeared to experience greater resilience, as this coherence allowed them to navigate tensions more effectively and maintain positive emotional well-being (Waters & Fivush, 2014; Yampolsky et al., 2013). The results have shown more aligned ontological beliefs about challenges, clear career goals, and better-integrated self-perceptions all contribute to the emergence and practices of resilience.

CONCLUSION

To explore the nuances of underlying motivation and identity negotiation in international students' lived experiences, we conducted CAE with six East Asian international doctoral students and employed DSMRI to examine our experiences. Our findings highlight the significance of role identity in making decisions about pursuing doctoral studies in the U.S., the development of researcher and teacher role identities within our international doctoral students' broader role identity, and the resilience that emerges through role identity negotiation.

Implications of the Study

This research provides implications for applying a complex dynamic systems framework to investigate action, motivation, and identity in the international

student community. It also offers insights for higher education policies and administration regarding doctoral student enrollment and support. Furthermore, our research findings demonstrate the effectiveness of using the DSMRI as a theoretical framework for investigating role identity negotiation and growth among international students. With the increasing number of East Asian doctoral students in the U.S., this research also provides insights into the factors influencing international students' program decisions and highlights experiences that current and future doctoral students may encounter. Moreover, the study suggests that fostering the development of coherent role identities among international doctoral students can significantly enhance their resilience. Support for this development can take various forms, such as mentoring programs that emphasize the integration of personal and professional identities, workshops that help students articulate their role identities more clearly, and peer groups that offer space for identity exploration and affirmation.

Limitation and Suggestions for Future Research

Despite these insights, the study's limitations include a need for longitudinal studies, sample size, and generalizability. While CAE offered valuable insights into our role identity changes following life events, a longitudinal approach could better represent our role identity changes over time in response to major life events or transitions. Future research could adopt a longitudinal design to trace these identity transformations over several years, providing a deeper understanding of the dynamics involved. As for the sample size and generalizability, with only six participants from Korea and China, the study's findings are limited in their ability to be generalized to the broader community of East Asian international doctoral students. Increasing the sample size and including participants from a wider range of East Asian countries could enhance the representativeness and applicability of the findings. Furthermore, employing mixed methods could enrich the qualitative data and help verify the consistency of the results across different contexts.

Acknowledgment

In the preparation of this manuscript, we utilized Artificial Intelligence (AI) tools for content creation in the following capacity:

☑ *None*
☐ *Some sections, with minimal or no editing*
☐ *Some sections, with extensive editing*
☐ *Entire work, with minimal or no editing*
☐ *Entire work, with extensive editing*

The use of AI tools complied with ethical standards and guidelines for academic integrity. The final content has been thoroughly reviewed and edited to ensure accuracy, relevance, and adherence to academic standards.

REFERENCES

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, *37*(2), 122–147. https://doi.org/10.1037/0003-066X.37.2.122

Blake-Beard, S., Bayne, M. L., Crosby, F. J., & Muller, C. B. (2011). Matching by Race and Gender in Mentoring Relationships: Keeping our Eyes on the Prize. *Journal of Social Issues*, *67*(3), 622–643. https://doi.org/10.1111/j.1540-4560.2011.01717.x

Carpenter, S. M., Yates, J. F., Preston, S. D., & Chen, L. (2016). Regulating Emotions during Difficult Multiattribute Decision Making: The Role of Pre-Decisional Coherence Shifting. *PLOS ONE*, *11*(3), e0150873. https://doi.org/10.1371/journal.pone.0150873

Caspi, A., Elder, G. H., & Bem, D. J. (1987). Moving against the world: Life-course patterns of explosive children. *Developmental Psychology*, *23*(2), 308–313. https://doi.org/10.1037/0012-1649.23.2.308

Castelló, M., McAlpine, L., Sala-Bubaré, A., Inouye, K., & Skakni, I. (2020). What perspectives underlie "researcher identity"? A review of two decades of empirical studies. *Higher Education*, *81*(3), 567–590. https://doi.org/10.1007/s10734-020-00557-8

Change, H. (2013). Individual and collaborative autoethnography as method. In S. T. Jones, T. E. Adams, & C. Ellis (Eds). *Handbook of autoethnography* (pp. 107-122). Walnut Creek, CA: Left Coast Press.

Chao, C. N., Hegarty, N., Angelidis, J., & Lu, V. F. (2019). Chinese students' motivations for studying in the United States. *Journal of International Students*, *7*(2), 257-269.

Cho, H. (2024). "I feel safe when I listen to Korean music!" Journal of International Students, 14(4), 760–780. https://doi.org/10.32674/jis.v14i4.6528

Compton-Lilly, C., Papoi, K., Venegas, P., Hamman, L., & Schwabenbauer, B. (2017). Intersectional identity negotiation: The case of young immigrant children. *Journal of Literacy Research*, *49*(1), 115-140. https://doi.org/10.1177/1086296X16683421

Consoli, A. J., Çiftçi, A., Poyrazlı, Ş., Iwasaki, M., Canetto, S. S., Ovrebo, E., Wang, C. D. C., & Forrest, L. (2022). International Students who Became U.S. Counseling Psychology Faculty Members: A Collaborative Autoethnography. *The Counseling Psychologist*, *50*(6), 874–910. https://doi.org/10.1177/00110000221098377

Devos, C., Boudrenghien, G., Van der Linden, N., Azzi, A., Frenay, M., Galand, B., & KAlexn, O. (2016). Doctoral students' experiences leading to completion or attrition: a matter of sense, progress and distress. *European Journal of Psychology of Education*, *32*(1), 61–77. https://doi.org/10.1007/s10212-016-0290-0

Edwards, E., & Burns, A. (2016). Language teacher-researcher identity negotiation: An ecological perspective. *Tesol Quarterly*, *50*(3), 735-745.

Fletcher, D., & Sarkar, M. (2013). Psychological Resilience: A Review and Critique of Definitions, Concepts and Theory. *European Psychologist*, *18*(1), 12–23. https://doi.org/10.1027/1016-9040/a000124

Garner, J. K., & Kaplan, A. (2018). A complex dynamic systems perspective on teacher learning and identity formation: an instrumental case. *Teachers and Teaching*, *25*(1), 7–33. https://doi.org/10.1080/13540602.2018.1533811

Goode, J. (2007). Empowering or disempowering the international Ph.D. student? Constructions of the dependent and independent learner. *British Journal of Sociology of Education*, *28*(5), 589–603. https://doi.org/10.1080/01425690701505409

Gui, J., Lan, S.W., & Oliveira L. C. (2023). Writing for Publication as Doctoral Students Challenges, Opportunities, and Lessons Learned. In Yazan, B., Trinh, E., & Herrera, L. J. P. (Eds.). (2023). *Doctoral Students' Identities and Emotional Wellbeing in Applied Linguistics: Autoethnographic Accounts*. Taylor & Francis.

Gümüş, S., Gök, E., & Esen, M. (2019). A Review of Research on International Student Mobility: Science Mapping the Existing Knowledge Base. *Journal of Studies in International Education*, *24*(5), 495–517. https://doi.org/10.1177/1028315319893651

Harman, G. (2003). International PhD students in Australian universities: financial support, course experience and career plans. *International Journal of Educational Development*, *23*(3), 339–351. https://doi.org/10.1016/s0738-0593(02)00054-8

Hatmaker, D. M. (2013). Engineering identity: Gender and professional identity negotiation among women engineers. *Gender, Work & Organization*, *20*(4), 382-396.

Henze, J., & Zhu, J. (2012). Current Research on Chinese Students Studying Abroad. *Research in Comparative and International Education*, *7*(1), 90–104. https://doi.org/10.2304/rcie.2012.7.1.90

James-MacEachern, M., & Yun, D. (2017). Exploring factors influencing international students' decision to choose a higher education institution. *The International Journal of Educational Management, 31*(3), 343-363. https://doi.org/10.1108/IJEM-11-2015-0158

Jang, Y. J., Woo, H., & Henfield, M. S. (2014). A qualitative study of challenges faced by international doctoral students in counselor education supervision courses. *Asia Pacific Education Review*, *15*(4), 561–572.https://doi.org/10.1007/s12564-014-9342-9

Kaplan, A., & Garner, J. K. (2017). A complex dynamic systems perspective on identity and its development: The dynamic systems model of role identity. *Developmental Psychology*, *53*(11), 2036–2051. https://doi.org/10.1037/dev0000339

Kaplan, A., Neuber, A., & Garner, J. K. (2019). An identity systems perspective on high ability in self-regulated learning. *High Ability Studies*, *30*(1-2), 53–78. https://doi.org/10.1080/13598139.2019.1568830

Kim, S. (2024). Subjective well-being of international students. *Journal of International Students*, *14*(4), 570–590. https://doi.org/10.32674/jis.v14i4.6480

Ku, H.-Y., Lahman, M. K. E., Yeh, H.-T., & Cheng, Y.-C. (2008). Into the academy: preparing and mentoring international doctoral students. *Educational Technology Research and Development*, *56*(3), 365–377. https://doi.org/10.1007/s11423-007-9083-0

Lassiter, L. (2005). Collaborative Ethnography and Public Anthropology. *Current Anthropology*, *46*(1), 83–106. https://doi.org/10.1086/425658

Lee, C.-F. (2017). Exploring Motivations for Studying Abroad: A Case Study of Taiwan. *Tourism Analysis*, *22*(4), 523–536. https://doi.org/10.3727/108354217x15023805452077

Lee, K.-W., Yuan, J. (Jessica), Hwang, J.-S., & Kim, H.-S. (2012). Doctoral students' selection intention in Hospitality and Tourism Management (HTM) programs in the United States. *Journal of Hospitality, Alexsure, Sport & Tourism Education*, *11*(2), 140–150. https://doi.org/10.1016/j.jhlste.2012.03.001

Li, J., Liu, X., & Mullins, P. (2024). Exploring the career development challenges and expectations of international students during the COVID-19 pandemic. *Journal of International Students*, *14*(4), 591–605. https://doi.org/10.32674/jis.v14i4.6511

Liu, S. (2015). Searching for a sense of place: Identity negotiation of Chinese immigrants. *International Journal of Intercultural Relations*, *46*, 26-35.

Luthar, S. S., & Cicchetti, D. (2000). The construct of resilience: implications for interventions and social policies. *Development and Psychopathology*, *12*(4), 857–885. https://doi.org/10.1017/s0954579400004156

Ma, Q., & Ni, C. (2022). Offshore doctoral identity negotiation during COVID-19: challenges and opportunities. *Higher Education Research & Development*, 1–14. https://doi.org/10.1080/07294360.2022.2156484

María Cubillo, J., Sánchez, J., & Cerviño, J. (2006). International students' decision-making process. *International Journal of Educational Management*, *20*(2), 101-115. https://doi.org/10.1108/09513540610646091

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, *56*(3), 227–238. https://doi.org/10.1037//0003-066x.56.3.227

Mayer, D. (1999). Building teaching identities: Implications for preservice teacher education. *Australian Association for Research in Education, Melbourne*, 6-7.

McCray, J., & Joseph-Richard, P. (2020). Towards a model of resilience protection: factors influencing doctoral completion. *Higher Education*. https://doi.org/10.1007/s10734-020-00507-4

McKay, S., Lannegrand, L., Skues, J., & Wise, L. (2020). Identity Development During Student Exchange: A Qualitative Study of Students' Perspectives on the Processes of Change. *Emerging Adulthood*, 216769682096946. https://doi.org/10.1177/2167696820969464

Moffett, D. W. (2006). *A Phenomenological Study of International Students in a Florida University Ph.D. Program.*

Mokbul, M. (2022). Rediscovering Myself Through Fear of Failure: My Journey as an International Doctoral Student During a Pandemic. *Research and Teaching in a Pandemic World*, 77–86. https://doi.org/10.1007/978-981-19-7757-2_6

Murphy, S., McGlynn-Stewart, M., & Ghafouri, F. (2014). Constructing Our Identities through a Writing Support Group: Bridging from Doctoral Students to Teacher Educator Researchers. *Studying Teacher Education*, *10*(3), 239–254. https://doi.org/10.1080/17425964.2014.949656

Nguyen Thanh Hung, & Kuo Liang Yen. (2020). *The Role of Motivation and Career Planning in Studentsâ€TM Decision-Making Process for Studying Abroad: A Mixed-Methods Study*. *29*(4), 252. https://doi.org/10.24205/03276716.2020.825

Nicholson, B. (2015). Personal and Professional Challenges and Benefits of Studying Abroad. *Journal of International Education and Leadership*, *5*(1). https://eric.ed.gov/?id=EJ1135354

Ono, H., & Piper, N. (2004). Japanese women studying abroad, the case of the United States. *Women's Studies International Forum*, *27*(2), 101–118. https://doi.org/10.1016/j.wsif.2004.06.002

Pretorius, L., Cahusac, B., & Macaulay, L. (2022). *Preface: Research and Teaching in a Pandemic World*. 3–13. https://doi.org/10.1007/978-981-19-7757-2_1

Rangarajan, R., & Samran Daneshfar. (2022). *Processing Uncertainty During COVID-19: A Collaborative Autoethnography of Two Stranded International Ph.D. Students*. 37–57. https://doi.org/10.1007/978-981-19-7757-2_4

Resnick, B. (2018). The Relationship Between Resilience and Motivation. *Resilience in Aging*, 221–244. https://doi.org/10.1007/978-3-030-04555-5_12

Sakurai, Y., Vekkaila, J., & Pyhältö, K. (2017). More or less engaged in doctoral studies? Domestic and international students' satisfaction and motivation for doctoral studies in Finland. *Research in Comparative and International Education*, *12*(2), 143–159. https://doi.org/10.1177/1745499917711543

Sun, X., Hall, G. C. N., DeGarmo, D. S., Chain, J., & Fong, M. C. (2021). A longitudinal investigation of discrimination and mental health in Chinese international students: The role of social connectedness. *Journal of Cross-Cultural Psychology*, *52*(1), 61-77. https://doi.org/10.1177/0022022120979625

Sung, C. C. M. (2022). Identity Conflicts and Negotiations: Narratives of Asian International Students' Experiences in Hong Kong. *Journal of Intercultural Studies*, 1–18. https://doi.org/10.1080/07256868.2022.2063818

Tapani, A. (2009). "Is Becoming a Researcher Some Kind of Role-Playing" - Roles of the Researcher in the Process of Forming the Identity. *Tamara: The Journal of Critical Organization Inquiry*, *7*(3), 71–87.

Thiry, H., L Laursen, S., & G. Loshbaugh, H. (2015). "How do I get From Here to There?" An Examination of Ph.D. Science Students' Career Preparation

and Decision Making. *International Journal of Doctoral Studies*, *10*, 237–256. https://doi.org/10.28945/2280

Troy, A. S., Willroth, E. C., Shallcross, A. J., Giuliani, N. R., Gross, J. J., & Mauss, I. B. (2022). Psychological Resilience: An Affect-Regulation Framework. *Annual Review of Psychology*, *74*(1). https://doi.org/10.1146/annurev-psych-020122-041854

Trujillo, J.P.C. (2021). International Students' Academic and Social Integration Stories. *Studies in Educational Management*, *9*, 17–29. https://doi.org/10.32038/sem.2021.09.02

Tuma, T. T., & Dolan, E. L. (2024). What Makes a Good Match? Predictors of Quality Mentorship Among Doctoral Students. *CBE Life Sciences Education*, *23*(2). https://doi.org/10.1187/cbe.23-05-0070

Van Lankveld, T., Schoonenboom, J., Volman, M., Croiset, G., & Beishuizen, J. (2016). Developing a teacher identity in the university context: a systematic review of the literature. *Higher Education Research & Development*, *36*(2), 325–342. https://doi.org/10.1080/07294360.2016.1208154

Walkington, J. (2005). Becoming a teacher: encouraging development of teacher identity through reflective practice. *Asia-Pacific Journal of Teacher Education*, *33*(1), 53–64. https://doi.org/10.1080/1359866052000341124

Wang, K. T., Heppner, P. P., Wang, L., & Zhu, F. (2015). Cultural intelligence trajectories in new international students: Implications for the development of cross-cultural competence. *International Perspectives in Psychology: Research, Practice, Consultation*, *4*(1), 51–65. https://doi.org/10.1037/ipp0000027

Wang, Y. (2012). Transformations of Chinese international students understood through a sense of wholeness. *Teaching in Higher Education*, *17*(4), 359–370. https://doi.org/10.1080/13562517.2011.641004

Waters, T. E. A., & Fivush, R. (2014). Relations Between Narrative Coherence, Identity, and Psychological Well-Being in Emerging Adulthood. *Journal of Personality*, *83*(4), 441–451. https://doi.org/10.1111/jopy.12120

White, E. (2013). Being a teacher and a teacher educator – developing a new identity? *Professional Development in Education*, *40*(3), 436–449. https://doi.org/10.1080/19415257.2013.782062

Wu, Y. (2020). Study Abroad Experience and Career Decision-Making: A Qualitative Study of Chinese Students. *Frontiers of Education in China*, *15*(2), 313–331. https://doi.org/10.1007/s11516-020-0014-8

Xie, Q., & Wong, D. F. K. (2020). Culturally sensitive conceptualization of resilience: A multidimensional model of Chinese resilience. *Transcultural Psychiatry*, *58*(3), 136346152095130. https://doi.org/10.1177/1363461520951306

Xu, X. (2022). Exploring the Impacts of Social Media Usage on a Chinese International Student's Identity Development. *Journal of Linguistics and Communication Studies*, *1*(1), 27–33. https://doi.org/10.56397/jlcs.2022.11.05

Yampolsky, M. A., Amiot, C. E., & de la Sablonnière, R. (2013). Multicultural identity integration and well-being: a qualitative exploration of variations in

narrative coherence and multicultural identification. *Frontiers in Psychology*, *4*(126). https://doi.org/10.3389/fpsyg.2013.00126

Yang, Y., Volet, S., & Mansfield, C. (2017). Motivations and influences in Chinese international doctoral students' decision for STEM study abroad. *Educational Studies*, *44*(3), 264–278. https://doi.org/10.1080/03055698.2017.1347498

Yin, Z., Ong, L. Z., & Qiao, M. (2024). Psychological factors associated with Chinese international students' well-being in the United States. *Journal of International Students*, *14*(4), 529–551. https://doi.org/10.32674/jis.v14i4.6428

Yuen, C. (2022). *Multiculturalism, Educational Inclusion, and Connectedness*. Routledge.

APPENDIX

Written Reflective Prompts

We warmly invite you to illuminate your journey as an international Doctoral student. Please answer the following questions using a **first-person narrative in English** and crafting a vivid story of your experiences. Augment your narrative with visual artifacts—photos, blogs, emails, or drawings—which can bring your transformative moments, challenges, and achievements into sharp focus.

Q1: In this written reflection, we are interested in your experience as an international Doctoral student. Could you please tell me about how you became an international Doctoral student?
Q2: How did you decide to pursue this Doctoral program?
Q3: What were your hopes and expectations from your Doctoral program?
Q4: What were the most meaningful experiences including high/low and turning points you have had as an international Doctoral student? Why were they so meaningful?
Q5: How do you think these experiences relate to who you are as an international Doctoral student?
Q6: What provides you the most satisfaction now as an international Doctoral student?
Q7: What dilemmas and challenges do you face as an international Doctoral student?
Q8: Where do you imagine yourself in the future as an international Doctoral student?
Q9: What recommendations do you have for international Doctoral students who are navigating their academic journey in the U.S.? How can they overcome challenges and make the most of their experiences?
Q10: When reflecting on your entire experience as an international Doctoral student in the US, how would you summarize it in a few words or describe its theme? Why did you choose this description?

Author bios

QILING WU, Ph.D. is in Educational Psychology from Temple University, USA. Her research focuses on parenting among immigrant families including parent belief and parental involvement. She conducted national dataset analysis and qualitative studies. Her research epistemological belief is influenced by the Dynamic System Model of Role Identity (DSMRI, Kaplan & Garner, 2017) framework. Email: qiling.wu@temple.edu

HYANGEUN JI, M.A., is a Ph.D. candidate in the College of Education and Human Development at Temple University in the USA. Her major research interests lie in the area of artificial intelligence in Education (AIEd), virtual/online learning, computer-assisted language learning (CALL), and teacher education. Email: hyangeun.ji@temple.edu

YUHYUN PARK, Ph.D. is an assistant professor in the Department of Special Education, Rehabilitation, and Counseling within the College of Education at Auburn University, USA. His primary research interests encompass substance use disorder treatment, career development and counseling, counselor education and supervision, and the experiences of marginalized populations in higher education. Email: yzp0037@auburn.edu

SORI KIM, Ed.D, is an instructor at Teachers College, Columbia University in the USA. Her research focuses on pedagogical approaches that empower students and promote educational equity, addressing issues related to gender stereotypes alongside advocating for culturally responsive music education for culturally and racially marginalized students, with a strong emphasis on the needs of students of color, racial minorities, historically underrepresented groups, and gender-related concerns. Email: sk4478@tc.columbia.edu

JIAYU YANG, M.F.A., is a Ph.D. candidate in the School of Theater, Film and Media Arts at Temple University in the USA. Her research interests lie in the intersections of Critical Animal Studies, Eco-Cinema, and Multi-species Ethnography. Email: jiayu.yang@temple.edu

LEI WANG, M.S. is a Ph.D. student in Computer and Information Science from Temple University, USA. His research focuses on LLMs with social media content analysis and AI in education. Email: tom.lei.wang@temple.edu