The Interplay of Intercultural Learning and Academic Readiness in Developing Virtual Competence among Chinese University Students

[1*] Yang Zhi Xin (iD) , [2] Zainudin Bin Mohd Isa (iD)

City Graduate School, Faculty of Education, Citi University Malaysia, Malaysia,
*Corresponding Author: zainudin.isa@city.edu.my

Information of Article	ABSTRACT
	This study investigates the impact of intercultural learning on the development of virtual intercultural competence among students in Chinese higher education, with a specific focus on the mediating role of academic readiness. The research employs a cross-sectional quantitative methodology to examine the relationships between these variables. Data was collected using structured questionnaires administered to students and educators, followed by comprehensive statistical analysis. Findings indicate a significant positive effect of intercultural learning on virtual intercultural competence and academic readiness, highlighting the importance of incorporating structured intercultural learning activities into higher education curricula. Additionally, the study reveals that academic readiness significantly mediates the relationship between intercultural learning and virtual intercultural competence, emphasizing the interconnectedness of these factors. The research provides valuable insights for educators and policymakers to design and implement effective intercultural learning programs that enhance students' skills for navigating global interactions in digital environments. This study contributes to both theoretical frameworks and practical applications in the realm of virtual intercultural learning, offering a foundation for future research and policy development in higher education.

1. Introduction

In the age of globalization, intercultural competence has become increasingly vital, particularly in higher education (De Wit & Altbach, 2021). This is especially pertinent in China, where the rapid expansion and internationalization of higher education institutions are prominent trends (Yao, 2023). As these institutions strive to integrate into the global educational landscape, there is a growing emphasis on developing intercultural competencies among students. Intercultural competence, defined as the ability to communicate effectively and appropriately with people from other cultures, is essential in our interconnected world (Byram, 2020). In the context of Chinese higher education, this ability is not only beneficial for personal development but also imperative for professional success in a globally competitive market (Altbach, 2013).

The advent of digital technology has introduced virtual environments as a new medium for intercultural learning (Liaw, 2019). Virtual intercultural competence refers to the skills and abilities required to navigate intercultural interactions effectively in online settings. The significance of these competencies has been magnified by the increasing reliance on digital platforms for educational purposes, accelerated by unforeseen global events. This shift has necessitated an urgent reassessment of pedagogical approaches, particularly in the realm of intercultural education (Cathro, 2021). Chinese higher education's response to these challenges involves a strategic emphasis on virtual learning environments that facilitate intercultural competence. This study focuses on these virtual settings, assessing how they contribute to the development of intercultural skills among students. By examining the impact of structured intercultural learning activities delivered through online platforms, the research aims to shed light on the effectiveness of these programs and identify best practices for enhancing student outcomes.

The relevance of studying virtual intercultural competence in Chinese higher education is multifold (Peters et al., 2020). Firstly, it addresses the pedagogical need to prepare students for a globalized job market where intercultural skills are increasingly a prerequisite. Employers worldwide prize graduates who can seamlessly adapt to diverse cultural settings, making the development of these competencies a strategic educational priority. Secondly, this

research explores the role of technology in education, specifically how virtual platforms can be optimized to facilitate meaningful intercultural interactions. It investigates whether these digital environments can replicate the nuanced dynamics of face-to-face intercultural exchanges, which are critical for deep learning and understanding (Guo et al., 2020). Moreover, the study examines the broader implications of virtual intercultural learning for educational policy and curriculum design within Chinese universities (Liaw, 2019). It aims to provide empirical data that can inform policy decisions and curriculum frameworks, ensuring that these structures effectively support the development of intercultural competencies. This is particularly important as educational institutions look to balance traditional teaching methods with innovative digital solutions that meet the evolving demands of students and educators alike (West, 2012).

The importance of this research is further underscored by the strategic educational reforms in China aimed at enhancing international collaboration and exchange (Li, 2024). These reforms reflect a commitment to creating a more globally integrated educational system that not only attracts international students but also prepares domestic students for global opportunities (Wu, 2019). By focusing on the development of virtual intercultural competence, this thesis contributes to understanding how Chinese higher education can better position itself in the global educational arena (Kovalainen, 2022). In addition to these practical implications, the research also engages with theoretical debates in the field of intercultural communication. It seeks to expand existing theories by incorporating insights from virtual interaction studies, thereby broadening the conceptual frameworks used to understand and evaluate intercultural competence. This theoretical contribution is crucial for advancing academic discussions and research in both intercultural communication and educational technology fields (Ferri, 2018).

Furthermore, this study addresses the gaps in current literature by providing a comprehensive analysis of how virtual environments can be leveraged to enhance intercultural learning (Akdere et al., 2021). It explores the specific elements of virtual platforms that contribute to effective intercultural competence development, such as interactive tools, real-time communication features, and the role of digital literacy (Lee, 2020). By identifying these key factors, the research aims to offer actionable recommendations for designing and implementing effective virtual intercultural learning programs. The study aims to fill a critical research gap by investigating how virtual intercultural learning activities impact students' intercultural competence development in Chinese higher education, specifically focusing on knowledge acquisition, skill development, critical cultural awareness, and behavioral adaptation. While traditional face-to-face intercultural learning has been extensively studied, the virtual aspect remains underexplored, especially in the context of Chinese higher education (Giannikas, 2022; Yin and Shim 2022). This study seeks to bridge this gap by providing empirical evidence on the effectiveness of virtual intercultural learning interventions and their impact on students' intercultural competence.

This research is timely and significant given the increasing importance of virtual learning environments in higher education. Understanding how virtual intercultural learning can be effectively integrated into higher education curricula is crucial for preparing students to succeed in a globalized world where intercultural interactions are increasingly taking place in digital spaces (Hackett et al., 2023). The study also aims to explore the mediating role of academic readiness in the development of virtual intercultural competence. Academic readiness, which encompasses students' preparedness for academic tasks, including their motivation, self-regulation, and prior knowledge, is hypothesized to play a crucial role in the effectiveness of virtual intercultural learning. By examining this mediating role, the study seeks to provide a more nuanced understanding of the factors that contribute to successful intercultural competence development in virtual learning environments.

In summary, this study not only fills a significant gap in the current understanding of how virtual environments influence intercultural competence development but also offers practical recommendations for educators and policymakers looking to enhance the efficacy of intercultural education in Chinese higher education. Through a comprehensive analysis of current practices and outcomes, this research will provide valuable insights into the potential of virtual platforms to transform educational experiences and outcomes in the context of a rapidly globalizing world. This study stands to make a significant contribution to the field by bridging the gap between theoretical frameworks and practical applications in the realm of virtual intercultural learning.

2. Research Objectives

The study's primary goal is to explore how intercultural learning impacts the development of virtual intercultural competence in Chinese higher education, focusing on the mediating role of academic readiness. The research aims to assess the positive relationships between virtual intercultural competence (outcome variable), intercultural learning (predictor variable), and academic readiness (mediator variable). The researcher seeks to understand the significance of academic readiness and its influence on the relationship between intercultural learning and virtual intercultural competence development. This understanding will provide insights and recommendations to help educational institutions enhance the effectiveness of intercultural learning programs. The specific objectives are:

- To examine the impact of intercultural learning and academic readiness on virtual intercultural competence.
- To assess the effect of intercultural learning on academic readiness.
- To investigate the mediating role of academic readiness in the relationship between intercultural learning and virtual intercultural competence among Chinese college students.

3. Research Questions

- How does intercultural learning impact the development of virtual intercultural competence in Chinese higher education?
- What effect does intercultural learning have on academic readiness in Chinese higher education?
- How does academic readiness mediate the relationship between intercultural learning and the development of virtual intercultural competence among Chinese college students?

4. Literature Review

The literature review aims to consolidate existing research and theories on intercultural learning and virtual intercultural competence development, particularly in the context of Chinese higher education. This consolidation not only provides a foundation for the current study but also situates it within the broader academic landscape, highlighting its relevance and the gaps it aims to address.

4.1 Intercultural Competence in Higher Education

Intercultural competence, defined as the ability to communicate effectively and appropriately with people from other cultures, is increasingly recognized as vital in the globalized world. This competence is essential not only for personal development but also for professional success in a global market (Altbach, 2013). The concept encompasses various skills, including cultural awareness, empathy, and effective communication, which are crucial for navigating diverse cultural settings. In the context of higher education, developing intercultural competence involves exposing students to different cultural perspectives and encouraging them to engage in intercultural interactions. Traditional methods such as study abroad programs have been effective in this regard, but they often face limitations in terms of accessibility and inclusivity (Deardorff, 2006). Consequently, the integration of intercultural competence into the curriculum through courses, workshops, and experiential learning opportunities has become a focus for many institutions (Zhang, 2019).

4.2 Virtual Intercultural Competence

With the advent of digital technology, virtual environments have emerged as a new medium for intercultural learning. Virtual intercultural competence refers to the skills required to navigate intercultural interactions effectively in online settings. The significance of these competencies has been magnified by the increasing reliance on digital platforms for educational purposes, accelerated by events like the COVID-19 pandemic (Cathro, 2021). Virtual intercultural competence involves unique challenges and opportunities. Unlike face-to-face interactions, virtual environments often lack non-verbal cues, which are essential for understanding cultural nuances. However, they also provide broader access to intercultural experiences, allowing students to engage with peers from diverse backgrounds without the need for physical travel (O'Dowd, 2021).

4.3 Chinese Higher Education and Intercultural Learning

Chinese higher education has undergone significant changes over the past few decades, characterized by rapid expansion and increasing internationalization. These changes reflect China's broader socio-economic development and its ambition to become a global leader in education (Li, 2021). The internationalization of Chinese higher education has been facilitated by policies promoting student mobility, partnerships with foreign institutions, and the integration of global perspectives into the curriculum (Chan & Wu, 2020). Intercultural competence is particularly relevant in the context of Chinese higher education due to the country's strategic emphasis on global engagement and collaboration. Programs aimed at developing intercultural competence in Chinese universities often include language training, cultural studies, and exchange programs (Wright et al., 2022). These initiatives are designed to prepare students for participation in the global economy and to enhance their ability to work effectively in diverse cultural settings.

4.4 The Role of Technology in Intercultural Learning

Technological advancements have significantly impacted intercultural learning by providing new tools and platforms for virtual interactions. Digital learning platforms, such as MOOCs and virtual exchange programs, have expanded access to intercultural education, allowing students to engage in cross-cultural dialogues and collaborations (Liu et al., 2020). Artificial intelligence (AI) and big data analytics also play a role in personalizing intercultural learning experiences. AI-driven platforms can tailor educational content to individual learners' needs, enhancing their ability to acquire and apply intercultural skills (Ahmad et al., 2020). Additionally, virtual reality (VR) and augmented reality (AR) technologies offer immersive experiences that can simulate real-world intercultural interactions, providing students with hands-on learning opportunities (Hutson & Olsen, 2022).

4.5 Government Policies and Intercultural Education

Government policies have been pivotal in shaping the landscape of intercultural education in China. The "Outline of China's National Plan for Medium and Long-term Education Reform and Development (2010-2020)" emphasizes the need for internationalization in education and encourages institutions to adopt global perspectives and practices (Zheng & Kapoor, 2021). The "Double First-Class Initiative," launched in 2015, aims to develop world-class universities and disciplines in China, highlighting the importance of international collaboration and intercultural competence (Gao & Li, 2020). The Belt and Road Initiative (BRI), introduced by President Xi Jinping in 2013, also plays a crucial role in promoting intercultural education. The BRI encourages educational partnerships, student mobility, and cultural exchanges, thereby fostering a more globally aware and culturally competent student body (Leandro & Duarte, 2020).

4.6 Challenges and Barriers to Intercultural Learning

Implementing effective intercultural learning programs in Chinese higher education institutions involves navigating various challenges and barriers. Language barriers are significant, with many students struggling with English proficiency, which can hinder effective communication in intercultural settings (Xie & Curle, 2022). Cultural resistance, rooted in deeply ingrained values and norms, can also create obstacles to adopting new perspectives and approaches (Huang, 2024). Technological limitations, such as access to high-speed internet and digital tools, can further impact the effectiveness of virtual intercultural exchanges. This digital divide often affects students from rural or under-resourced backgrounds, limiting their opportunities for intercultural learning (Vivek & Bhattacharjee, 2021).

4.7 Case Studies of Intercultural Competence Programs

Several Chinese universities have implemented successful intercultural competence programs, providing valuable insights into best practices and outcomes. For example, Tsinghua University's Global Competence Program includes mandatory courses on global studies and intercultural communication, complemented by experiential learning opportunities such as international study tours and virtual exchange programs (Li, 2020). The program has shown positive outcomes in improving students' intercultural communication skills and cultural awareness.

Fudan University's Cross-Cultural Leadership Initiative focuses on developing leadership competencies through academic courses, leadership training workshops, and cross-cultural projects. The initiative has successfully enhanced students' confidence in leading multicultural teams and their understanding of global issues (Chen & Zhu, 2020). Zhejiang University's Intercultural Communication and Exchange Program emphasizes academic courses, cultural exchange activities, and community engagement projects. The program has been effective in increasing students' cultural awareness and communication skills, highlighting the importance of diverse and immersive learning experiences (Xie, 2022).

Comparing intercultural competence programs in China with those in other countries provides valuable insights into global best practices. In the United States, programs often emphasize diversity, equity, and inclusion, incorporating service learning and community engagement to enhance intercultural competence (Chhatlani, 2023). European programs, such as the Erasmus+ initiative, focus on student mobility and multilingualism, reflecting the diverse cultural landscape of the continent (Jongbloed, 2023). Japanese and South Korean universities also prioritize intercultural competence, with programs that include language training, cultural studies, and international exchange opportunities. These programs often leverage technology to facilitate virtual exchanges and global collaboration (Lee & Osman, 2021).

5. Theoretical Framework

5.1 Intercultural Learning Theories

Intercultural learning theories provide various frameworks for understanding how individuals perceive, interpret, and interact with cultural differences. Among the most prominent models is Milton J. Bennett's Developmental Model of Intercultural Sensitivity (DMIS), which outlines stages of intercultural sensitivity from ethnocentric to ethnorelative perspectives (Bennett & Bennett, 2004). This model helps individuals and educators understand the progression of intercultural sensitivity and tailor interventions to foster more inclusive and appreciative attitudes towards cultural diversity.

Intercultural Communication Competence (ICC) is another critical area that focuses on the skills and attitudes necessary for effective cross-cultural communication. This includes understanding diverse cultures, empathy, language proficiency, and managing intercultural tensions (Matveev, 2017). Byram's ICC model, which includes competencies such as critical cultural awareness, interaction, and rapport-building, is widely used to assess and develop these skills (Byram, 2020). These theories are foundational in cross-cultural training programs, international education, and global business, emphasizing the necessity of intercultural competence in today's interconnected world.

5.2 Academic Readiness and Subject Development Theories

Understanding academic readiness and subject development is essential in higher education. Guglielmino's concept of Self-Directed Learning Readiness (SDLR) focuses on the extent to which students are prepared to take responsibility for their own learning (Guglielmino, 1977). This involves traits like initiative, self-reliance, and a passion for learning, which are crucial for academic success. Bloom's Taxonomy, developed by Benjamin Bloom and later revised by Anderson and Krathwohl, categorizes educational goals into cognitive processes such as knowledge, comprehension, application, analysis, synthesis, and evaluation (Forehand, 2010). This framework assists educators in designing curricula and assessing student performance effectively.

5.3 Virtual Intercultural Competence

Virtual Intercultural Competence (VIC) theories explore how individuals engage in effective and appropriate intercultural interactions through digital platforms. Darla K. Deardorff's framework of intercultural competence emphasizes attitudes, knowledge, and skills as crucial components (Deardorff, 2006). In virtual environments, additional competencies such as digital literacy and the ability to navigate cultural exchanges without face-to-face cues are necessary. Deardorff's model, which includes reflection, adaptability, and conflict management, provides a robust foundation for understanding intercultural competence. This model needs to be adapted for virtual settings, where the absence of visual and contextual signals can complicate intercultural interactions. These theories highlight the unique

challenges and benefits of digital communication, advocating for tailored competencies and strategies to enhance virtual intercultural competence.

Hence, the theoretical frameworks outlined above provide a solid foundation for exploring the impact of intercultural learning on virtual intercultural competence development in Chinese higher education. These frameworks will be integrated into the study to examine how structured intercultural learning activities, supported by digital platforms, contribute to developing intercultural skills among students. The research will also assess the mediating role of academic readiness, considering both self-directed learning and structured educational goals, in enhancing virtual intercultural competence. By utilizing these theoretical models, the study aims to provide a comprehensive understanding of the factors influencing intercultural competence in virtual learning environments.
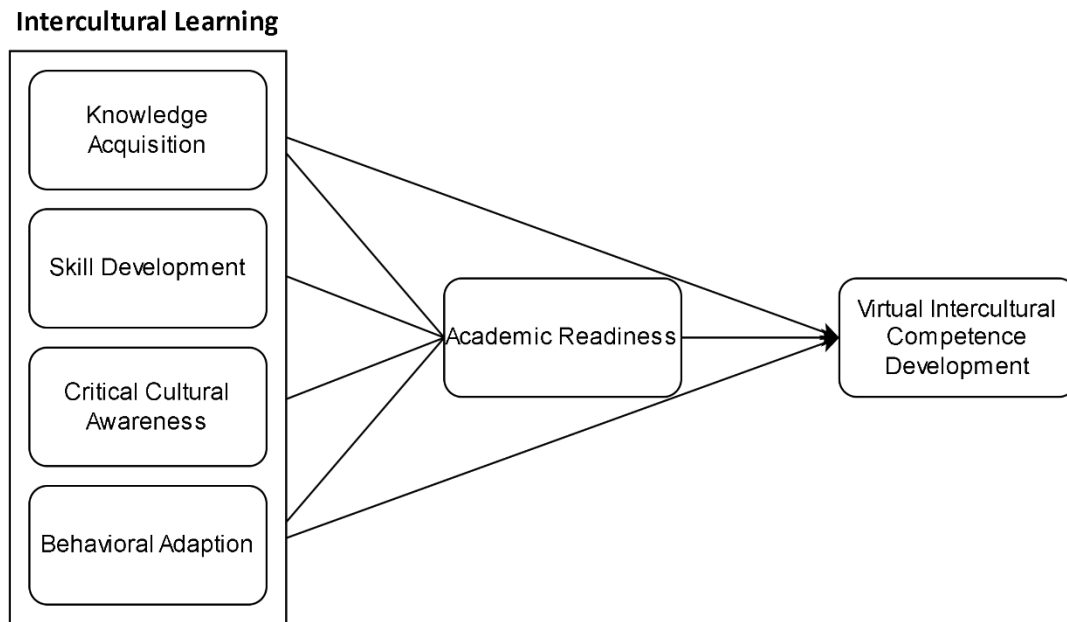
6. Conceptual Framework

Figure 1: Conceptual Framework

7. Research Hypotheses

Below showing the hypotheses of the study:

* **H1**: Intercultural learning positively influences virtual intercultural competence development in Chinese higher education.
* **H2**: Academic Readiness positively influences virtual intercultural competence development in Chinese higher education.
* **H3**: Intercultural learning positively influences academic readiness in Chinese higher education.
* **H4**: Academic readiness mediates the relationship between intercultural learning and virtual intercultural competence development.

8. Research Methodology

This section details the research methodology employed to examine the relationships between intercultural learning, virtual intercultural competence development, and the mediating variables of academic readiness, subject development, and student engagement within the context of Chinese higher education. It outlines the research design, data collection methods, and analysis procedures to ensure the study's validity and reliability.

8.1 Research Design

The study employs a cross-sectional quantitative methodology to capture a snapshot of the current state of intercultural learning and virtual intercultural competence in Chinese higher education. The cross-sectional design allows for data collection at a specific point in time, providing valuable insights into patterns, relationships, and potential causalities without the complexities of longitudinal studies (Toyon, 2023). Data will be collected using structured questionnaires administered to a representative sample of students and educators in selected Chinese higher education institutions.

A quantitative research approach is utilized to investigate intercultural learning and virtual intercultural competence. Rooted in the positivist paradigm, this approach emphasizes objectivity and precision through the evaluation of measurable data using mathematical, computational, or statistical methods (Mbanaso et al., 2023). The quantitative framework is chosen for its ability to provide empirical evidence and generalizability, making it suitable for large-scale studies (Knight et al., 2022).

8.2 Population and Sample

The participants are students enrolled in virtual intercultural learning programs at various Chinese higher education institutions. The sample is diverse, encompassing a range of ages, academic disciplines, and levels of expertise in virtual intercultural learning. This diversity ensures a comprehensive understanding of how different individuals benefit from and engage in these programs. Cochran's formula is used to determine the sample size, aiming for around 385 students based on a 95% confidence level, a 5% margin of error, and an expected proportion of 50%. This calculation ensures a balance between practical feasibility and statistical rigor.

The sampling frame includes individuals actively engaged in or having recently completed virtual intercultural learning initiatives within the Chinese higher education system. The sampling method involves stratified random sampling, dividing the population into strata based on criteria such as location and institution type, and then randomly selecting participants from each stratum to ensure representativeness. This method helps to generalize the findings across different regions and types of institutions.

8.3 Data Collection Instruments

Primary data is collected through surveys, interviews, and observations. Surveys use a mix of closed-ended questions (utilizing a 5-point Likert scale) and open-ended questions to capture quantitative and qualitative data. Semi-structured interviews provide deeper insights into participants' experiences, while observations of virtual classroom sessions offer contextual understanding. Secondary data from educational research databases and institutional records supplement the primary data. These sources include scholarly articles, reports, feedback, and evaluation reports from virtual intercultural learning programs, providing a broader context for the study. Online survey platforms like Google Forms will be used for data collection, ensuring efficient and accurate data recording. Statistical software such as SPSS and R will be employed for data analysis, facilitating complex statistical tests and ensuring precise results.

8.4 Data Analysis Techniques

Data analysis involves both descriptive and inferential statistical methods. Descriptive statistics, including measures of central tendency and variability, will provide an initial understanding of the data distribution. Inferential statistics, such as regression analysis, will be used to examine the relationships between intercultural learning (independent variable) and virtual intercultural competence (dependent variable). Mediation analysis will assess the mediating effects of academic readiness, subject development, and student engagement. Factor analysis may also be employed to identify latent patterns within the data.

Ensuring reliability and validity is crucial for the study. The questionnaire will undergo a pilot test to identify and address any issues, and internal consistency will be checked using Cronbach's alpha coefficient. Content validity will be ensured through literature review and expert input, while construct validity will be assessed via factor analysis. Criterion-related validity will be examined by comparing questionnaire results with established measures in the field.

8.5 Ethical Considerations

Ethical guidelines will be followed throughout the study, including obtaining informed consent from participants, ensuring confidentiality, and handling data responsibly. Participants will be informed about the study's purpose, their right to withdraw, and how their data will be used.

8. Data Analysis

8.1 Demographic Information

Table 1: Respondent Demographic Information

Respondent Demographic	Frequency	Percentage （%）
Gender:		
Female	193	50.3%
Male	191	49.7%
Age:		
18-21 years old	95	24.7
22-25 years old	137	35.7
26-29 years old	101	26.3
30 years old and above	51	13.3
Location:		
Tier 1 Cities (Beijing, Shanghai, Guangzhou)	119	31.0
Tier 2 Cities (Chengdu, Nanjing, Hangzhou)	173	45.0
Other regions	92	24.0
Education Institution:		
Public Comprehensive Universities	89	23.2
Private Comprehensive Universities	143	37.2
Public Vocational Colleges	102	26.6
Private Vocational Colleges	50	13.0
Major:		
Humanities	50	13.0
Social Sciences	90	23.4
STEM	104	27.1
Business and Management	98	25.5
Others	42	10.9
Technology Access:		
High (Regular access to computers and high-speed internet)	198	51.6
Moderate (Access to computers and internet but not always high-speed)	146	38.0
Limited (Infrequent access to digital resources)		
	40	10.4

The demographic profile of the study's respondents shows a balanced gender distribution, with females slightly outnumbering males at 50.3% and 49.7%, respectively. Most of the respondents are young, with 35.7% aged 22-25 years, 26.3% aged 26-29 years, 24.7% aged 18-21 years, and 13.3% aged 30 years and above. Geographically, 45.0% of respondents are from Tier 2 cities such as Chengdu, Nanjing, and Hangzhou, 31.0% from Tier 1 cities like Beijing, Shanghai, and Guangzhou, and 24.0% from other regions, indicating a diverse urban representation. Most respondents are from private comprehensive universities (37.2%), followed by public vocational colleges (26.6%), public comprehensive universities (23.2%), and private vocational colleges (13.0%). Academic majors are primarily in STEM (27.1%), Business and Management (25.5%), Social Sciences (23.4%), Humanities (13.0%), and other fields (10.9%). Regarding technology access, 51.6% of respondents report high access to digital resources, 38.0% have moderate access, and 10.4% experience limited access.

8.2 Normality Test

Table 2: Normality Test Results

	N Statistics	Skewness Statistics	Std Error	Kurtosis Statistics	Std Error
Intercultural Learning	384	-0.844	0.125	-0.537	0.248
Academic Readiness	384	-0.831	0.125	-0.636	0.248
Virtual Intercultural Competence Development	384	-0.856	0.125	-0.576	0.248

The table presents the normality test results for the key variables in the study: Intercultural Learning, Academic Readiness, and Virtual Intercultural Competence Development, including skewness and kurtosis statistics with their standard errors to assess data distribution normality. For Intercultural Learning, the skewness is -0.844 (SE = 0.125) and the kurtosis is -0.537 (SE = 0.248). The negative skewness indicates a leftward tilt, suggesting that respondents rated their experiences positively. The kurtosis value suggests a flat distribution with fewer extreme values, approximating normality. Academic Readiness shows a skewness of -0.831 (SE = 0.125) and a kurtosis of -0.636 (SE = 0.248). The negative skewness reflects high levels of academic readiness among respondents, while the kurtosis indicates a slightly flatter distribution, meaning the responses are broadly spread. Virtual Intercultural Competence Development has a skewness of -0.856 (SE = 0.125) and a kurtosis of -0.576 (SE = 0.248). The negative skewness suggests higher ratings of virtual intercultural competence, and the flat kurtosis indicates varied levels of perceived competence among respondents. Overall, the data distributions are close to normal, with slight negative skewness and flatness. This pattern suggests that respondents rated their experiences and competencies positively, reflecting a favorable perception of the intercultural learning environment.

8.3 Independent Variable Exploratory Factor

Table 3: Independent Variables EFA

Items	Factors
IL1	0.608
IL2	0.660
IL3	0.571
IL4	0.630
IL5	0.641
IL6	0.647
IL7	0.597
IL8	0.625
IL9	0.561
IL10	0.614
IL11	0.646
IL12	0.645
Eigenvalue	4.629
% of Variance	38.578%
KMO	0.902
BTOS	1197.895
Sig.	<0.001

The table presents the results of an Exploratory Factor Analysis (EFA) for Intercultural Learning items (IL1 to IL12). EFA is used to identify underlying relationships between variables and group them into factors representing latent constructs. Twelve items were assessed for factor loadings, eigenvalue, percentage of variance explained, Kaiser-Meyer-Olkin (KMO) measure, and Bartlett's Test of Sphericity (BTOS). Factor loadings ranged from 0.561 (IL9) to

0.660 (IL2), indicating strong correlations between items and the underlying factor of Intercultural Learning. An eigenvalue of 4.629 and a variance explanation of 38.578% suggest that this factor accounts for a significant portion of the data's variance. The KMO measure is 0.902, indicating excellent sample adequacy for factor analysis. BTOS results (1197.895, p < 0.001) confirm significant relationships among items, justifying factor analysis. Hence, the EFA shows that the twelve items form a coherent factor for Intercultural Learning, with strong loadings, high eigenvalue, and substantial variance explained. The high KMO value and significant BTOS further validate the data's suitability for factor analysis, confirming the reliability and validity of the construct.

Table 4: EFA for Academic Readiness

Items	Factors
AR1	0.612
AR2	0.637
AR3	0.573
AR4	0.596
AR5	0.629
AR6	0.618
AR7	0.647
AR8	0.657
AR9	0.654
AR10	0.620
AR11	0.573
AR12	0.596
Eigenvalue	4.588
% of Variance	38.234%
KMO	0.926
BTOS	1134.939
Sig.	<0.001

Table 4 presents the results of an Exploratory Factor Analysis (EFA) on twelve items related to Academic Readiness (AR1 to AR12). EFA identifies underlying factor structures, grouping observed variables into latent constructs. The factor loadings range from 0.573 (AR3 and AR11) to 0.657 (AR8), all above the acceptable threshold of 0.5, indicating significant correlations with the Academic Readiness factor. The eigenvalue for the factor is 4.588, explaining 38.234% of the total variance, suggesting that the items collectively form a cohesive construct. The Kaiser-Meyer-Olkin (KMO) measure is 0.926, indicating excellent sample adequacy for factor analysis. Bartlett's Test of Sphericity (BTOS) result is 1134.939 (p < 0.001), confirming significant relationships among the items. The EFA results demonstrate that the twelve items form a coherent factor with strong loadings, a high eigenvalue, and substantial variance explained. High KMO and significant BTOS values further validate the data's suitability for factor analysis. These findings confirm the construct validity of the Academic Readiness items, making them reliable and relevant for further analysis.

Table 5: EFA for Virtual Intercultural Competence Development

Items	Factors
VICD1	0.615
VICD2	0.629
VICD3	0.608
VICD4	0.647
VICD5	0.628
VICD6	0.583
VICD7	0.650
VICD8	0.617
VICD9	0.597
VICD10	0.639
VICD11	0.586
VICD12	0.582
Eigenvalue	4.457

% of Variance	37.889%
KMO	0.926
BTOS	1105.758
Sig.	<0.001

Table 5 presents the results of an Exploratory Factor Analysis (EFA) on twelve items (VICD1 to VICD12) related to Virtual Intercultural Competence Development (VICD). EFA is used to identify the underlying factor structure of observed variables and group them into latent constructs. The factor loadings range from 0.582 (VICD12) to 0.650 (VICD7), indicating a strong relationship between each item and the underlying factor of VICD. All items have loadings above 0.5, suggesting substantial correlation with the identified factor. VICD7 has the highest loading, showing a strong association, while VICD12, with the lowest loading, still meets the acceptable threshold.

The eigenvalue for the extracted factor is 4.457, significantly above the benchmark of 1.0, indicating substantial variance in the data. The factor explains 37.889% of the variance, meaning it captures a significant portion of the total variance observed in the VICD items. This high percentage suggests a cohesive construct. The KMO measure is 0.926, well above the minimum acceptable level of 0.6, indicating adequate sample size and data suitability for factor analysis. A KMO value above 0.9 is considered excellent, confirming the adequacy of the sample. Bartlett's Test of Sphericity (BTOS) result is 1105.758 with a significance level of <0.001, indicating significant relationships among the items and justifying the use of factor analysis. The EFA results demonstrate that the twelve items form a coherent factor, with strong factor loadings, a high eigenvalue, and a substantial percentage of variance explained. The high KMO value and significant BTOS further validate the data's suitability for factor analysis, suggesting the items effectively capture the construct of VICD, making this factor a reliable measure for further analysis.

In summary, the EFA results indicate that the twelve VICD items reliably form a single, cohesive factor. This factor explains a significant portion of the variance, is supported by strong factor loadings, and is validated by high KMO and significant BTOS values. These findings affirm the construct validity of the VICD items, supporting their use in further analyses and highlighting their relevance in assessing virtual intercultural competence among respondents.

8.4 Reliability Test

Table 6: Reliability Test

	Cronbach's Alpha	No. of items
Intercultural Learning	0.855	12
Academic Readiness	0.853	12
Virtual Intercultural Competence Development	0.851	12

Table 6 presents the reliability test results for the key constructs: Intercultural Learning, Academic Readiness, and Virtual Intercultural Competence Development, assessed using Cronbach's Alpha to measure internal consistency. Each construct includes twelve items. The Cronbach's Alpha for Intercultural Learning is 0.855, indicating a high level of internal consistency. Values above 0.7 are considered acceptable, and above 0.8 are good. This suggests that the twelve items reliably measure Intercultural Learning. The reliability test for Academic Readiness yields a Cronbach's Alpha of 0.853, confirming that the twelve items used to measure Academic Readiness are reliable. This high value indicates consistent measurement of students' academic preparedness. The reliability test for Virtual Intercultural Competence Development shows a Cronbach's Alpha of 0.851, indicating the twelve items used to measure this construct are consistent and reliable. The similar alpha values for these constructs suggest they are equally well-measured by their respective items. The results from Table 6 demonstrate that all constructs have high Cronbach's Alpha values, ranging from 0.851 to 0.855, indicating a high level of internal consistency. This consistency suggests that the survey tool is robust and well-designed. High reliability ensures the validity and dependability of the research findings, allowing researchers to confidently use these constructs in further analyses and draw meaningful conclusions.

8.5 Coefficients Analysis

Table 7: Coefficients between knowledge acquisition, skill development, Critical cultural awareness, behavioral adaptation and virtual intercultural competence development.

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
(constant)	0.725	0.118		6.145	<0.001		
Knowledge acquisition	0.185	0.032	0.222	5.697	<0.001	0.517	1.935
Skill development	0.209	0.031	0.259	6.668	<0.001	0.517	1.933
Critical cultural awareness	0.209	0.032	0.247	6.494	<0.001	0.539	1.856
Behavioural adaptation	0.226	0.034	0.274	6.583	<0.001	0.449	2.225

Table 7 presents the coefficients for the regression analysis, including unstandardized and standardized coefficients, t-values, significance levels, and collinearity statistics (Tolerance and VIF). The constant term has an unstandardized coefficient of 0.725 and a t-value of 6.145 ($p < 0.001$), indicating a significant baseline level of VICD when all predictors are zero. For Knowledge Acquisition (KA), the unstandardized coefficient is 0.185 and the standardized coefficient (Beta) is 0.222, with a t-value of 5.697 ($p < 0.001$). The positive coefficient suggests that higher knowledge acquisition is associated with higher VICD. The Tolerance value of 0.517 and VIF of 1.935 indicates low multicollinearity. Skill Development (SD) has an unstandardized coefficient of 0.209 and a standardized coefficient (Beta) of 0.259, with a t-value of 6.668 ($p < 0.001$). This positive relationship indicates that skill development significantly enhances VICD. The Tolerance value of 0.517 and VIF of 1.933 suggests low multicollinearity. Critical Cultural Awareness (CCA) has an unstandardized coefficient of 0.209 and a standardized coefficient (Beta) of 0.247, with a t-value of 6.494 ($p < 0.001$). This significant positive relationship highlights the importance of critical cultural awareness in developing VICD. The Tolerance value of 0.539 and VIF of 1.856 indicates low multicollinearity. Behavioral Adaptation (BA) has an unstandardized coefficient of 0.226 and a standardized coefficient (Beta) of 0.274, with a t-value of 6.583 ($p < 0.001$). The positive coefficient suggests that behavioral adaptation is the most influential predictor of VICD among the variables studied. The Tolerance value of 0.449 and VIF of 2.225 indicate low to moderate multicollinearity, but within acceptable limits.

Table 8: Coefficients between intercultural learning, knowledge acquisition, skill development, critical cultural awareness, behavioral adaptation and academic readiness.

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
(constant)	0.648	0.117		5.529	<0.001		
Knowledge acquisition	0.192	0.032	0.227	5.958	<0.001	0.517	1.935
Skill development	0.191	0.031	0.233	6.130	<0.001	0.517	1.933
Critical cultural	0.210	0.032	0.245	6.573	<0.001	0.539	1.856

awareness							
Behavioural adaptation	0.255	0.034	0.305	7.469	<0.001	0.449	2.225

Table 8 presents the coefficients for the regression analysis, including unstandardized and standardized coefficients, t-values, significance levels, and collinearity statistics (Tolerance and VIF). The constant term has an unstandardized coefficient of 0.648 and a t-value of 5.529 ($p < 0.001$), indicating a significant baseline level of AR when all predictors are zero. Knowledge Acquisition (KA) has an unstandardized coefficient of 0.192 and a standardized coefficient (Beta) of 0.227, with a t-value of 5.958 ($p < 0.001$). The positive coefficient suggests that higher knowledge acquisition is associated with higher AR. The Tolerance value of 0.517 and VIF of 1.935 indicates low multicollinearity. Skill Development (SD) has an unstandardized coefficient of 0.191 and a standardized coefficient (Beta) of 0.233, with a t-value of 6.130 ($p < 0.001$). This positive relationship indicates that skill development significantly enhances AR. The Tolerance value of 0.517 and VIF of 1.933 suggests low multicollinearity. Critical Cultural Awareness (CCA) has an unstandardized coefficient of 0.210 and a standardized coefficient (Beta) of 0.245, with a t-value of 6.573 ($p < 0.001$). This significant positive relationship highlights the importance of critical cultural awareness in developing AR. The Tolerance value of 0.539 and VIF of 1.856 indicates low multicollinearity. Behavioral Adaptation (BA) has an unstandardized coefficient of 0.255 and a standardized coefficient (Beta) of 0.305, with a t-value of 7.469 ($p < 0.001$). The positive coefficient suggests that behavioral adaptation is the most influential predictor of AR among the variables studied. The Tolerance value of 0.449 and VIF of 2.225 indicate low to moderate multicollinearity but within acceptable limits.

Table 9: Coefficients between intercultural learning, academic readiness, and virtual intercultural competence development.

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
(constant)	0.215	0.094		2.274	<0.001		
Intercultural learning	0.157	0.046	0.158	3.436	<0.001	0.213	4.705
Academic readiness	0.269	0.048	0.273	5.573	<0.001	0.189	5.304

Table 9 presents the coefficients for the regression analysis, including unstandardized and standardized coefficients, t-values, significance levels, and collinearity statistics (Tolerance and VIF). The constant term has an unstandardized coefficient of 0.215 and a t-value of 2.274 ($p < 0.001$), indicating a significant baseline level of VICD when all predictors are zero. Intercultural Learning (IL) has an unstandardized coefficient of 0.157 and a standardized coefficient (Beta) of 0.158, with a t-value of 3.436 ($p < 0.001$). The positive coefficient suggests that higher intercultural learning is associated with higher VICD. The Tolerance value of 0.213 and VIF of 4.705 indicates moderate multicollinearity. Academic Readiness (AR) has an unstandardized coefficient of 0.269 and a standardized coefficient (Beta) of 0.273, with a t-value of 5.573 ($p < 0.001$). This positive relationship indicates that academic readiness significantly enhances VICD. The Tolerance value of 0.189 and VIF of 5.304 suggests moderate multicollinearity.

Table 10: Coefficients between intercultural learning and academic readiness.

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
(constant)	0.842	0.117		5.502	<0.001		
Intercultural learning	0.849	0.027	0.846	30.954	<0.001	1.000	1.000

Table 10 presents the coefficients for the regression analysis, including unstandardized and standardized coefficients, t-values, significance levels, and collinearity statistics (Tolerance and VIF). The constant term has an unstandardized coefficient of 0.842 and a t-value of 5.502 ($p < 0.001$), indicating a significant baseline level of AR when intercultural learning is zero. Intercultural Learning (IL) has an unstandardized coefficient of 0.849 and a standardized coefficient (Beta) of 0.846, with a t-value of 30.954 ($p < 0.001$). The positive coefficient suggests that higher intercultural learning is associated with higher AR. The Tolerance value of 1.000 and VIF of 1.000 indicate no multicollinearity issues. In summary, the analysis shows a significant positive relationship between intercultural learning and academic readiness, with no multicollinearity concerns, confirming the robustness of these findings.

9. Results

Table 11: Summary of Hypotheses

Hypotheses	Relationship	Results
H1	Intercultural learning positively influences virtual intercultural competence development in Chinese higher education.	**Supported**
H2	Academic Readiness positively influences virtual intercultural competence development in Chinese higher education.	**Supported**
H3	Intercultural learning positively influences academic readiness in Chinese higher education.	**Supported**
H4	Academic readiness mediates the relationship between intercultural learning and virtual intercultural competence development.	**Supported**

The research findings indicate a strong positive impact of intercultural learning on the development of virtual intercultural competence among students in Chinese higher education, as supported by Hypothesis 1 (H1). The data shows that students who engage in structured intercultural learning activities exhibit a significantly improved ability to navigate and communicate in virtual intercultural settings. This result aligns with existing literature emphasizing the critical role of integrating intercultural components into higher education curricula to enhance students' competencies in a globalized digital environment. The implication is clear: effective intercultural learning programs are essential for preparing students for successful virtual interactions in a diverse world.

Hypothesis 2 (H2) is also supported, demonstrating that academic readiness has a positive influence on virtual intercultural competence development. Academic readiness encompasses students' preparedness, motivation, self-regulation, and prior knowledge, all of which significantly contribute to their success in virtual intercultural

interactions. This finding underscores the importance of fostering academic readiness as part of a comprehensive strategy to enhance intercultural competence in virtual learning environments. By ensuring that students are academically prepared, institutions can better equip them to handle the complexities of intercultural communication online.

The study further supports Hypothesis 3 (H3), revealing a positive relationship between intercultural learning and academic readiness. Engaging in intercultural learning activities appears to enhance students' overall academic preparedness. This enhancement may be attributed to the diverse cognitive and emotional skills developed through intercultural learning, which can translate into improved academic performance and readiness. This dual benefit of intercultural learning—improving both intercultural competence and academic readiness—highlights the multifaceted value of such programs in higher education.

Moreover, Hypothesis 4 (H4) is validated, indicating that academic readiness mediates the relationship between intercultural learning and virtual intercultural competence development. This mediation effect suggests that intercultural learning enhances academic readiness, which in turn boosts virtual intercultural competence. The interconnectedness of these variables emphasizes that efforts to enhance academic readiness through intercultural learning can lead to better outcomes in virtual intercultural competence. Therefore, educational strategies should focus on both fostering intercultural learning and enhancing academic readiness to maximize students' preparedness for global interactions in virtual settings.

In summary, the research findings provide compelling evidence for the integration of intercultural learning activities in higher education curricula to develop essential intercultural competencies. They highlight the importance of focusing on both intercultural learning and academic readiness to achieve significant improvements in virtual intercultural competence. These insights offer valuable guidance for educators and policymakers aiming to enhance intercultural education and virtual learning experiences in Chinese higher education, preparing students for success in an increasingly interconnected and digital world.

10. Conclusion

This study offers a thorough analysis of how intercultural learning affects the growth of virtual intercultural competence in Chinese higher education students. It specifically investigates the function of academic readiness as a mediator in this process. The results strongly confirm the proposed connections, showing that intercultural learning improves virtual intercultural competence and academic readiness. Additionally, academic readiness acts as a mediator between intercultural learning and the development of virtual intercultural competence.

The beneficial impact of intercultural learning on virtual intercultural competence highlights the significance of incorporating organized intercultural learning activities into the higher education curriculum. These activities facilitate the acquisition of essential skills and competencies required to effectively navigate and communicate in virtual multicultural situations, which is a vital capability in the contemporary globalized digital landscape. The study emphasizes the advantages of intercultural learning, which not only promotes the ability to interact effectively with people from different cultures but also improves students' aptitude for academic pursuits, thereby equipping them for success in both academic and professional spheres in a globalized society.

The development of virtual intercultural competence was significantly influenced by academic readiness. This discovery highlights the importance of higher education institutions prioritizing the development of students' readiness, drive, self-control, and existing knowledge. Institutions can improve students' ability to engage in effective intercultural communication in virtual environments by increasing these components of academic readiness. The mediation study demonstrates that academic readiness significantly enhances the influence of intercultural learning on virtual intercultural competence, emphasizing the interdependence of these variables.

This research has multiple ramifications. The findings offer educators and policymakers useful insights for designing and implementing effective intercultural learning programs. Higher education institutions can enhance the learning environment by focusing on both intercultural learning and academic readiness. This approach helps students develop

the necessary skills to navigate and succeed in the complex global interactions that occur in digital settings. The study also enhances the theoretical comprehension of intercultural competence development in virtual environments, providing a paradigm that can direct future research in this field.

Overall, this study enhances the field by connecting theoretical frameworks and practical implementations in virtual intercultural learning. This study presents empirical data regarding the efficacy of virtual intercultural learning interventions and their influence on students' intercultural competency, specifically in the setting of Chinese higher education. The results highlight the significance of including intercultural learning activities and promoting academic readiness to improve students' virtual intercultural competence, equipping them for success in an increasingly interconnected and digital world. The findings of this study will play a significant role in shaping the creation of new and successful instructional practices as higher education adapts to globalization and technological improvements.

11. Potential Areas for Future Research

Subsequent investigations should investigate several paths to expand upon the discoveries of this study. Longitudinal studies have the potential to offer more profound understanding of the lasting effects of intercultural learning and academic readiness on virtual intercultural competence. Furthermore, conducting comparison studies across various cultural and educational contexts could facilitate the generalization of findings and the identification of culturally unique elements that impact the development of intercultural competence. Moreover, qualitative research has the potential to provide a more comprehensive comprehension of students' individual experiences and difficulties in virtual intercultural learning contexts. Exploring the impact of emerging technologies, such as virtual reality and artificial intelligence, on improving intercultural learning and competency could offer useful insights for creating more sophisticated and efficient teaching tools and tactics.

References

Ahmad, K., Qadir, J., Al-Fuqaha, A., Iqbal, W., El-Hassan, A., Benhaddou, D., & Ayyash, M. (2020). Data-driven artificial intelligence in education: A comprehensive review.

Akdere, M., Acheson, K., & Jiang, Y. (2021). RETRACTED: An examination of the effectiveness of virtual reality technology for intercultural competence development.

Altbach, P. G. (2013). The international imperative in higher education. In *The International Imperative in Higher Education*. Brill.

Bennett, J. M., & Bennett, M. J. (2004). Intercultural sensitivity. *Handbook of Intercultural Training*, 147.

Byram, M. (2020). *Teaching and assessing intercultural communicative competence: Revisited*. Multilingual Matters.

Byram, M., & Golubeva, I. (2020). Conceptualising intercultural (communicative) competence and intercultural citizenship. In *The Routledge handbook of language and intercultural communication* (pp. 70-85). Routledge.

Cathro, V. I. (2021). *A comparative examination of virtual and intercultural competence in the context of global virtual teams* (Doctoral dissertation, University of Otago).

Chan, W. K., & Wu, X. (2020). Promoting governance model through international higher education: Examining international student mobility in China between 2003 and 2016. *Higher education policy*, *33*(3), 511-530.

Chen, J., & Zhu, J. (2020). Cross-cultural adaptation experiences of international scholars in Shanghai. *Singapura: Springer*.

Chhatlani, C. K. (2023). Review the Role of Holistic Learning in Cultivating Global Citizenship Skills. *EIKI Journal of Effective Teaching Methods*, *1*(2).

Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of studies in international education*, *10*(3), 241-266.

De Wit, H., & Altbach, P. G. (2021). Internationalization in higher education: Global trends and recommendations for its future. *Policy Reviews in Higher Education*, *5*(1), 28-46.

Ferri, G. (2018). *Intercultural communication: Critical approaches and future challenges*. Springer.

Forehand, M. (2010). Bloom's taxonomy. *Emerging perspectives on learning, teaching, and technology*, *41*(4), 47-56.

Gao, J., & Li, C. (2020). Version 2.0 of building world-class universities in China: Initial outcomes and problems of the double world-class project. *Higher Education Policy*, 1-17.

Giannikas, C. N. (Ed.). (2022). *Transferring language learning and teaching from face-to-face to online settings*. IGI Global.

Guglielmino, L. M. (1977). *Development of the self-directed learning readiness scale*. University of Georgia.

Guo, K., Bussey, F., & Adachi, C. (2020). Digital learning across cultures: an account of activity theory. *Intercultural Education*, *31*(4), 447-461.

Hackett, S., Janssen, J., Beach, P., Perreault, M., Beelen, J., & Van Tartwijk, J. (2023). The effectiveness of Collaborative Online International Learning (COIL) on intercultural competence development in higher education. *International Journal of Educational Technology in Higher Education*, *20*(1), 5.

Huang, M. (2024). Confucian Culture and Democratic Values: An Empirical Comparative Study in East Asia. *Journal of East Asian Studies*, *24*(1), 71-101.

Hutson, J., & Olsen, T. (2022). Virtual reality and art history: A case study of digital humanities and immersive learning environments. *Journal of Higher Education Theory and Practice*, *22*(2).

Jongbloed, B. (2023). Innovation in teaching and learning through internationalisation.

Knight, G., Chidlow, A., & Minbaeva, D. (2022). Methodological fit for empirical research in international business: A contingency framework. *Journal of International Business Studies*, 1-14.

Kovalainen, N. (2022). The Role of Intercultural Communicative Competence in Transnational Educational and Occupational Fields: Studies of Higher Education and Virtual Working Environments.

Leandro, F. J. B., & Duarte, P. A. B. (Eds.). (2020). *The Belt and Road Initiative: An old archetype of a new development model*. Springer Nature.

Lee, J., & Osman, G. (2021). STUDENTS'EXPERIENCES AND PERCEPTIONS OF ONLINE COLLABORATIVE LEARNING IN HIGHER EDUCATION OF KOREA AND THE UAE. *Turkish Online Journal of Distance Education*, *22*(1), 1-18.

Lee, L. (2020). Promoting interpersonal and intercultural communication with Flipgrid: Design, implementation, and outcomes. In *New technological applications for foreign and second language learning and teaching* (pp. 261-281). IGI Global.

Liaw, M. L. (2019). EFL learners' intercultural communication in an open social virtual environment. *Journal of Educational Technology & Society*, *22*(2), 38-55.

Li, F. (2020). Leading digital transformation: three emerging approaches for managing the transition. *International Journal of Operations & Production Management*, *40*(6), 809-817.

Li, J., & Xue, E. (2024). Reimaging the panorama of international education development in China: A retrospective mapping perspective. *Educational Philosophy and Theory*, *56*(7), 647-657.

Li, L., Shen, W., & Xie, A. (2021). Why students leave Chinese elite universities for doctoral studies abroad: Institutional habitus, career script and college graduates' decision to study abroad. *International Journal of Educational Development*, *84*, 102408.

Matveev, A. (2017). Intercultural competence in organizations. *Management for Professionals*, *10*, 978-3.

Mbanaso, U. M., Abrahams, L., & Okafor, K. C. (2023). Research Philosophy, Design and Methodology. In *Research Techniques for Computer Science, Information Systems and Cybersecurity* (pp. 81-113). Cham: Springer Nature Switzerland.

O'Dowd, R. (2021). Virtual exchange: Moving forward into the next decade. *Computer Assisted Language Learning*, *34*(3), 209-224.

Peters, M. A., Wang, H., Ogunniran, M. O., Huang, Y., Green, B., Chunga, J. O., ... & Hayes, S. (2020). China's internationalized higher education during Covid-19: Collective student autoethnography. *Postdigital science and education*, *2*, 968-988.

Toyon, M. A. S. (2023). Introduction to research: Mastering the basics.

Vivek, K., & Bhattacharjee, P. (2021). Use of Information and Communication Technologies in Education: Effectively Integrating Technology in Under-Resourced Education Systems. *World Bank*.

West, D. M. (2012). *Digital schools: How technology can transform education*. Brookings Institution Press.

Wright, E., Ma, Y., & Auld, E. (2022). Experiments in being global: The cosmopolitan nationalism of international schooling in China. *Globalisation, Societies and Education*, *20*(2), 236-249.

Wu, H. (2019). Three dimensions of China's "outward-oriented" higher education internationalization. *Higher Education*, *77*(1), 81-96.

Xie, W., & Curle, S. (2022). Success in English medium instruction in China: Significant indicators and implications. *International Journal of Bilingual Education and Bilingualism*, *25*(2), 585-597.

Xie, X. (2022). Transnational higher education partnerships in China: exploring the impact of Chinese students' intercultural communicative competence on their motivation to study abroad. *Educational Research and Evaluation*, *27*(3-4), 280-308.

Yao, Y., & Du-Babcock, B. (2023). English as a lingua franca in Mainland China: An analysis of intercultural business communicative competence. *International journal of business communication*, *60*(1), 3-23.

Yin, H., & Shi, L. (2022). Which type of interpersonal interaction better facilitates college student learning and development in China: Face-to-face or online?. *ECNU Review of Education*, *5*(1), 9-36.

Zhang, X., & Zhou, M. (2019). Interventions to promote learners' intercultural competence: A meta-analysis. *International journal of intercultural relations*, *71*, 31-47.

Zheng, J., & Kapoor, D. (2021). State formation and higher education (HE) policy: An analytical review of policy shifts and the internationalization of higher education (IHE) in China between 1949 and 2019. *Higher Education*, *81*(2), 179-195.