

Article

Exploring College Student's Perspectives on Global Mobility during the COVID-19 Pandemic Recovery

Shu-Jing Wu ¹, Dian-Fu Chang ^{2,*}  and Fu-Rong Sun ³¹ School of Education Science, Nanning Normal University, Nanning 530001, China; shielawu2017@gmail.com² Graduate Institute of Educational Policy and Leadership, Tamkang University, New Taipei City 251301, Taiwan³ College of Education, Wenzhou University, Wenzhou 325035, China; sunfr@wzu.edu.cn

* Correspondence: 140626@mail.tku.edu.tw

Received: 23 July 2020; Accepted: 19 August 2020; Published: 25 August 2020



Abstract: At the time of writing, more than 22 million cases of COVID-19 have been reported worldwide, and at least 770 thousand deaths. Under the pressure of the pandemic, promoting global mobility has become an emerging issue in higher education settings. Although various methods of enhancing student mobility have been implemented, little research has as yet confirmed the pandemic challenges for students. This study investigates the global mobility of Chinese college students and the factors influencing their travel decisions. A self-designed questionnaire, consisting of 15 critical indicators of mobile capabilities, intentions, and implementation decisions, was administered to collect data from 2226 participants. The Minitab and Amos software were used to conduct exploratory factor analysis (EFA) and to detect latent relationships among the data with structural equation modeling (SEM). The SEM and logistic regression model provide a clear picture of the relations among the variables, and show that international intention is the key indicator of global mobility implementation under pressure.

Keywords: COVID-19 pandemic; global mobility; higher education; internationalization; structural equation modeling (SEM); multi-group invariance analysis

1. Introduction

The term “global mobility” refers to border-crossing, which most often takes place for temporary purposes, such as a program of study, mid-career international experience, or employment [1]. In this paper, global mobility refers to non-permanent border crossings among college students for study and work. The student mobility figures rose from two million in 1999 to five million in 2016, with an average annual growth rate of 5.1% among countries belonging to the OECD (Organization for Economic Cooperation and Development) and 6.4% among non-OECD countries [2]. According to the 2018 OECD report, Asian students are more internationally mobile at the master's level, while European students tend to be more mobile at the bachelor's and doctoral levels. The report indicates that 89% of OECD citizens studying abroad do so in another OECD country, and about 70% of international students in OECD areas come from a country that is not an OECD member. International students in these countries originate mainly from Asia, which accounts for 87% of the international students in Australia, 77% in the United States, 61% in Canada, and 52% in the United Kingdom [2]. Studying abroad has become a key differentiating experience for students enrolled in tertiary education, and international student mobility has received increasing policy attention in recent years.

Various countries have initiated education policies to promote global mobility among students. For example, the Erasmus program encourages more than 4000 higher education institutions from more than 30 countries to work with them [3]; the New Colombo Plan is a signature initiative of the

Australian Government, which aims to enhance knowledge of the Indo-Pacific region in Australia by providing incentives to Australian undergraduates to study and undertake internships in the region [4]; and Generation Study Abroad is a five-year initiative of the Institute of International Education to mobilize resources and commitments with the goal of doubling the number of U.S. students studying abroad by the end of the decade [5]. The importance of student global mobility is shown in related policy initiatives. Previous studies indicate that studying abroad can provide several advantages to students. These include an opportunity to access quality education, which may not be available in their home country, to acquire skills that may not be taught at home, to get closer to labor markets that offer higher returns on education [6,7], and to improve their intercultural sensitivity [8]. Studying abroad is also seen as a way to improve employability in increasingly globalized labor markets [9,10]. Other motivations include the desire to expand one's knowledge of other cultures and to improve one's foreign language skills, particularly English [2]. While arguments pertaining to all of these advantages have been presented, the extent to which the benefits are realized is unclear. Various methods of promoting global mobility among students have been implemented in different countries, although few studies have verified the effects through empirical testing, or the global mobility capabilities of students in Asia, where most international students originate. At time of writing, more than 22 million cases of COVID-19 had been reported worldwide, as well as at least 770 thousand deaths, according to Johns Hopkins University. Under the pressure of the pandemic, students' global mobility has become an emerging issue in higher education settings.

Given the limited utility of existing self-reporting instruments of student global mobility, this study aims to develop a comprehensive questionnaire that assesses the perceived global mobility capabilities of college students in China under the global pressure of the pandemic. Students from Asia have become the largest group of international students enrolled in OECD tertiary education programs at all levels, and among these students, over 860,000 come from China [2]. The present study examined Chinese students' perceptions of their global mobility capabilities, intentions, and the extent to which they have implemented global mobility under the pressure. Three specific research questions are posed:

- a. What indicators can be used to assess student capabilities for global mobility?
- b. To what extent do college students carry out their global mobility intentions?
- c. What are the implications of this study for global mobility research?

The rest of this paper is organized as follows: Section 2 provides an overview of the literature on student global mobility. Sections 3–5 address the research design of the present study, the method of data collection, and the analytical tools used to interpret the data. Section 6 presents the results of the factor analysis and structural equation modeling, and Section 7 discusses the findings and their implications. Finally, Section 8 presents the conclusion and gives suggestions for future research.

2. Literature Review

Global mobility, which requires international cooperation, is driven by various interests. Among countries that participate in global mobility programs, these interests include academic and economic development, but also competition [11]. Among students, there are numerous factors contributing to international mobility, such as socio-economic status, academic achievement and abilities, social relationships, and former international experiences [12]. Other factors include the situation in a student's home country, such as the level of opportunity for higher education, the quality of national offers, and the relevance of international degrees with respect to the home-country's labor market [13]. This section focuses on the soft power theory and spatial theories as they relate to global mobility, and on studies that discuss the capabilities and intentions of students with respect to studying abroad.

2.1. *The Impact of Global Mobility on Soft Power*

Global student mobility for academic, economic, or political purposes has provided a new map in the world. Many countries view international academic mobility and educational exchanges as critical components for sharing knowledge, building intellectual capital, and remaining competitive in global settings. Studying abroad is a way to foster mutual understanding and cooperation, especially in a climate of increased political uncertainty and unrest [14]. Nye's theory of soft power provides a specific lens for examining the interdependency and complexity of internationalization in the context of higher education worldwide [15–17]. According to the soft power conversion model, higher education in the UK and US has a growing influence on worldwide economic, political, and social forces, which drive the global economy. Increasing international enrollment in higher education, both in the UK and US, is fundamental to governments and educational institutions that aim to provide a comprehensive internationalization agenda consistent with enhanced global capacity building and a globally competitive orientation [18]. From a student perspective, global mobility has the potential to enhance personal soft power with respect to career development. In sum, both personal and national purposes pertaining to global competition underlie enhanced global mobility.

The impact of global mobility on soft power is further underscored by the observation that technology, education, and economic growth are becoming more important in constructing soft power, whereas geography, population, and raw materials are becoming less important [18]. The notion of soft power has been converted into policies for outbound and inbound international education in different countries. To extend the concept of soft power, Knight [19] argued that higher education needs to take a lead in promoting the notion of knowledge diplomacy to avoid becoming mired in the soft power frame of reference that focuses only on self-interest and dominance, which might impact student decisions. Finally, Nagao [20] proposed a distinction between two types of soft power investments: (1) Those that involve direct payment from one government (or institution) to another, and (2) indirect investments among individuals and professionals for the purpose of scholarships, training, and nonmonetary cultural influences. The British Council of the United Kingdom, the Goethe Institute of Germany, and the Confucius Institute of China use indirect investments.

2.2. *Interpretation of Spatial Theories*

Larsen [21] proposed an analysis, using spatial, network, and mobility theories, to broaden the theoretical framework for analyzing internationalization in higher education. She argued that there are notable problems with the distinction between internationalization at home and abroad. Working within this binary framework means holding to the view that particular internationalization strategies are effective in a local setting and others are ineffective [21]. Mobility theories in particular combine social, spatial, and anthropological research, bringing together “some of the more purely ‘social’ concerns of sociology (inequality, power, hierarchies) with the ‘spatial’ concerns of geography (territory, borders, scale) and the ‘cultural’ concerns of anthropology and media studies (discourses, representations, schemas), while inflecting each with a relational ontology of the co-constitution of subjects, spaces and meanings” [22].

In brief, spatial theories are concerned with how space is constructed and changed by human activity within it, and how human activity is altered and shaped by spatial arrangements. The international scene is co-constructed within local universities, which in turn are co-constituted through the very international phenomena that influence and shape their identity [21]. With regard to network theories, Castells [23,24] argued that the space of places is based on the closely interrelated contiguity of practice, meaning, function, and locality, while the space of flows is comprised of the material arrangements that allow for the simultaneity of social practices without territorial contiguity. These spatial and network theories provide a window through which to view the complexity of the student global mobility issue, while broadening our understanding of this issue by presenting it from a wide and multi-faceted perspective.

2.3. Studies on Global Mobility Capabilities

Internationalization has been understood as a trend among policy makers to make border-crossing easier and facilitate knowledge transfer across international boundaries. With respect to global mobility among students, being familiar with the cultural expectations of people from other countries is important, considering the impact culture has on shaping the identities of students who choose to undertake the programs [25]. Therefore, developing an objective method to evaluate intercultural competencies has become paramount [26]. Various studies have shown that internationalization in higher education involves different activities, including foreign language learning and programs to increase global understanding, and they argue that the positive effects of internationalization extend from a more favorable view of other countries to a growing empathy with cultures other than one's own [27–29]. Previous studies focusing on the mobility capabilities of student address issues pertaining to communication, cultural awareness and adaptability, competencies, and skills.

2.3.1. Communication

Communication across borders via the Erasmus program has become a successful global mobility initiative. As Garrido [30] emphasized, volunteers in this program need to learn and use *linguae francae* (English and Spanish) to foster inter-cultural communication and solidarity. While communication skills are essential for all professionals, the requirement is even greater for those working with global mobility [31]. Foreign language proficiency, especially English, is considered crucial in the context of globalization and internationalization. While language requirements differ considerably among countries that participate in global mobility programs for students, it is not uncommon for countries to support the integration of international students by offering some level of English language instruction for free. On the other hand, the requirement of a certain level of competency in English can become a barrier to receiving grants or access to higher education institutions. In those cases, language is used as an exclusive regulation tool [13]. Foreign language skills include, at minimum, an ability to speak, understand, and read the language at the basic functional level required for carrying out everyday activities.

2.3.2. Cultural Awareness

Outbound-oriented mobility learning for economic or cultural reasons has been implemented in various countries, through international service-learning programs in which students can engage in cross-cultural dialogue and reflect upon their experiences [32]. Outbound mobility enhances opportunities for upward mobility, while also challenging the established cultural patterns of learning. Souto-Otero et al. [33] found that one of the differentiating factors between Erasmus and non-Erasmus students is their level of social and cross-cultural awareness, which tends to be higher among Erasmus students. Barriers to entry in the program include costs and socio-economic background. These observations highlight the importance of balancing the risks (credit recognition, costs, and benefits) of student mobility and managing personal anxieties (social factors).

2.3.3. Knowledge and Skills

Empirical studies evidence an association between mobility and quality of work at the individual, organizational, and national levels. Mobile researchers are on average more productive than non-mobile researchers [34,35]. Overall, there is a structural excess of labor supply among mobile researchers, and micro-level matching between an individual's competencies and job specifications is central to the hiring process [36]. Self-selection assessments pertaining to the skills of potential migrants are important to analyze, especially in the context of migration between rich countries [37]. Focusing on international study, Madge, Raghuram and Noxolo [38] assumed that both individual and collective phenomena impact student capabilities for mobile learning. With regard to push factors, it has been shown that an emphasis on theoretical knowledge in traditional teaching methods and curricula

makes it difficult for higher education institutes to pursue educational goals that accelerate student mobility in Asian countries [39]. Moreover, various researchers propose that the value and nature of dynamic capabilities is context-dependent, meaning that different capabilities are required in different contexts [40–43]. For this reason, many students consider mobility as an opportunity to enhance their job-related competencies and skills, through an overseas internship, for example, or by acquiring an international license.

2.4. Factors Impacting Global Intention and Implementation

International student recruitment continues to gain prominence in the strategic priorities of higher education institutions. According to the American Council on Education's report [44], increasing students studying abroad and recruiting international students were identified, respectively, as the number one and number two priority activities for internationalization across all sectors of institutions [44]. Similar findings appear in other countries. At the same time, the past several years has seen barriers to global mobility that include increasing competition, tightened immigration policies, and the unwelcoming rhetoric of the Trump administration [45,46]. With respect to citizenship, the path is narrowing in both the United States and other countries, even for talented immigrants. If anti-immigrant and nationalistic rhetoric continues to be strong, it will negatively affect the perception of safety and post-graduate career opportunities for international students. Moreover, many institutions face the residual effects of the global financial recession, which make it difficult to grow their enrollment of international students.

Addressing sociopolitical, demographic, and economic shifts worldwide along with the global ambitions of universities, Choudaha and Van Rest [47] found a continued qualitative and quantitative growth of English-taught programs in Asia and Europe. The development of higher education in China is no exception. These programs may decrease the perceived need to study abroad, or they may heighten it, depending on student perceptions of foreign language learning and the value of being immersed in a foreign culture. There are many factors, both positive and negative, influencing the decision to study abroad, and these factors are not always easy to isolate or compartmentalize [48]. Traditional theories regarding international student mobility have been extensively dealt with in the transnational educational literature, while student choice remains an underrepresented topic [49]. Studies related to the international intentions of students and the decision to implement these intentions may be useful for constructing a new theoretical framework for understanding global student mobility under a specific global event.

2.5. The Challenge of Internationalization in Educational Settings during the COVID-19 Pandemic

Since the WHO declared the COVID-19 pandemic outbreak, the UN Educational, Scientific and Cultural Organization estimated that a sizeable population around the world—approximately 1.5 billion students and 63 million educators—have stayed away from their conventional education environments [50–52]. The scale and speed of school closures are unprecedented globally. It is unclear how long countries can maintain tight suppression measures before behavioral fatigue in the population occurs [53]. COVID-19 is an emerging contagious pathogen causing a high prevalence of pneumonia in infected individuals. Many studies report important effects on reducing transmission and the size of the pandemic. Yet, there is considerable heterogeneity in the impact on international student mobility depending on the students' characteristics and perspectives.

Education is one of the sectors most heavily affected by the negative consequences of the COVID-19 pandemic. As a response to this crisis and in order to mitigate the spread of the coronavirus and to save lives, governments in affected countries have imposed desperate measures of social distancing, widespread lockdowns, and restrictions on traveling, movements, and gatherings. A large number of schools and educational systems have had to face disruption to education and adopt internet-based methodologies to support their students via distance education solutions during the period of school closures [52,54–56]. Disparities in distance education have become more evident in the context of the

COVID-19 pandemic. The COVID-19 lockdown has severely affected educational systems around the world, especially international student exchange. This study focused on college students' perspectives on identifying the incentives for global mobility.

3. Method

3.1. Measures of the Constructs

The related indicators adopted in this study have been reported in the previous literature. However, Bohmstedt [57] maintained that, to ensure content validity, measurement items need to characterize the concepts about which generalizations are to be made. Therefore, the proposed measurement indicators of global mobility in this study were taken from previous studies and then adapted to suit the present context. Figure 1 shows the theoretical framework for implementing global mobility. Within this framework, we assume that the capabilities of students will determine their mobility intentions and implementation decisions. The 15 indicators selected consist of five domains, namely communication, cultural awareness, knowledge and skills, intention, and implementing. Communication includes three indicators: Spoken_A, Reading_A, and Communication_A; cultural awareness includes three indicators, Cultural_A, Custom_A, and Global_A; knowledge and skills includes five indicators, Ethic_A, P_knowledge, P_skills, P_license, and P_internship; intention includes two indicators, Caring_intent and Working_intent; and implementing includes two indicators, Caring_ability and Working_ability. The details of the 15 indicators are listed in Table 1. All capabilities were presented using a 7-point Likert scale, ranging from 1—strongly disagree, to 7—strongly agree, indicating the level of importance students attached to each indicator. Levels of intention and implementation were determined by actual figures reported by students, for which the weighted levels ranged from very low (1) to extremely high (7).

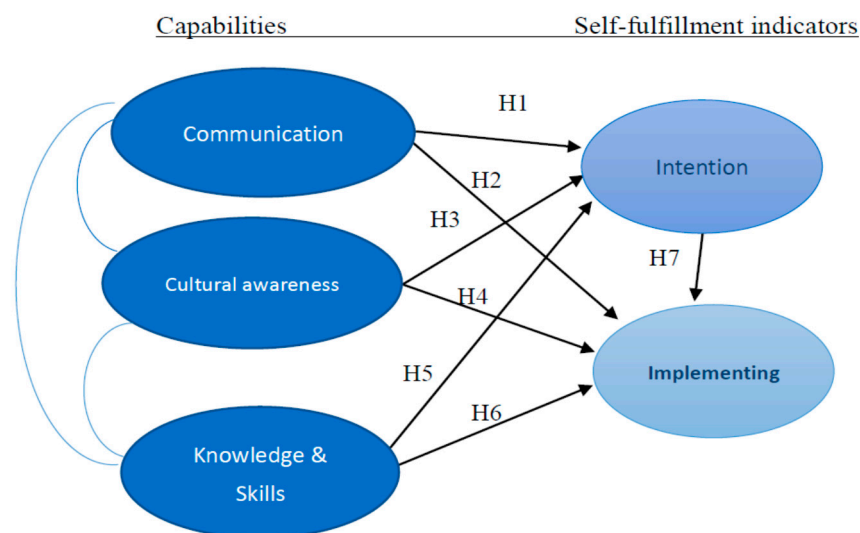


Figure 1. Theoretical framework for implementing global mobility.

Table 1. Global mobility capability requirements for college students.

Domains\Indicators	Definitions
<u>Communication</u>	
Spoken_A:	Ability to speak an international language
Reading_A:	Ability to read an international language
Communication_A:	Fluent communication in an international language
<u>Cultural awareness</u>	
Cultural_A:	Awareness of foreign cultures
Custom_A:	Respect for foreign customs
Global_A:	A global perspective
<u>Knowledge & Skills</u>	
Ethic_A:	Professional ethics in international job markets
P_knowledge:	International professional knowledge
P_skills:	International practice skills
P_license:	An international license
P_internship:	A completed international internship
<u>Intention</u>	
Caring_intent:	An international interest in caring
Working_intent:	An international working intention
<u>Implementing</u>	
Caring_ability:	Implementation of international caring
Working_ability:	Implementation of an international working intention

3.2. Hypotheses Development

This study developed seven hypotheses regarding college students' capabilities for global mobility that propose a link between, on the one hand, capabilities, including communication ability, cultural awareness, and knowledge and skills, and on the other hand, intentions and implementation decisions. The hypotheses are listed below:

Hypothesis 1 (H1). *Communication ability positively affects intentions of global mobility.*

Hypothesis 2 (H2). *Communication ability positively affects the implementation of global mobility.*

Hypothesis 3 (H3). *Cultural awareness positively affects intentions of global mobility.*

Hypothesis 4 (H4). *Cultural awareness positively affects the implementation of global mobility.*

Hypothesis 5 (H5). *Knowledge and skills positively affect intentions of global mobility.*

Hypothesis 6 (H6). *Knowledge and skills positively affect the implementation of global mobility.*

Hypothesis 7 (H7). *Intention positively affects the implementation of global mobility.*

4. Sample and Data Collection

Both an online survey (in China) and traditional questionnaire survey (in Taiwan) were conducted to collect data from the research targets. Ethical approval clearance and informed consent clearance were granted by the CHINAEM in China and by the Ministry of Science and Technology in Taiwan, due to the use of anonymous questionnaires. All the participants joined the survey on a voluntary basis. Data were collected from March 2019 to May 2019. The WHO declared the coronavirus disease 2019 (COVID-19) outbreak, caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), to be a pandemic on 12 March 2020 [52]. It is believed that there were no lockdown or other restrictions

on global mobility before the pandemic in these areas. A total of 2250 questionnaires were collected. Submitted questionnaires with incomplete answers were excluded, resulting in 2226 (25.5% male and 74.5% female; average age from 19.5 to 22.5) usable surveys. The target population included sophomore to senior students recruited from public colleges located in different regions of China, including 16.3% from northeast China (Heilongjiang and Jilin); 67.5% from east China (Shanghai, Jiangsu, Zhejiang, Anhui, Fujian, Jiangxi, and Shandong); 5.8% from north China (Beijing, Tianjin, Shanxi, Hebei, and Inner Mongolia); 2.3% from central China (Henan, Hubei, and Hunan); 1.4% from south China (Guangdong, Guangxi, and Hainan); 4.1% from southwest China (Sichuan, Guizhou, Yunnan, and Chongqing); and 2.6% from northwest China (Shaanxi, Gansu, Qinghai, Ningxia, and Xinjiang). In addition, the target population included sophomore to senior students recruited from public (34.2%) and private (65.8%) colleges located in different regions of Taiwan, including 48.6% from northern Taiwan; 25.4% from central Taiwan; and 26.0% from southern Taiwan. In terms of socio-economic status, most of the students were classified as middle class. Among the total study sample, 39.17% had overseas experience, and 60.83% lacked this experience. The characteristics of the study sample are presented in Table 2.

Table 2. Characteristics of the sample.

Variables		Count	Percent	
Gender	Male	567	25.5	
	Female	1659	74.5	
Social Economic Status (SES)	1 Poor	107	4.81	
	2 Lower	294	13.21	
	3 Middle	1534	68.91	
	4 Upper	277	12.44	
	5 Rich	14	0.63	
Overseas experience	Yes	872	39.17	
	No	1345	60.83	
SES with overseas experience	1 Poor	Yes	25	23.36
		No	82	76.64
	2 Lower	Yes	102	34.69
		No	192	65.31
	3 Middle	Yes	615	40.09
		No	919	59.91
	4 Upper	Yes	120	43.32
		No	157	56.68
	5 Rich	Yes	10	71.43
		No	4	28.57

5. Data Analysis

The data analysis procedure in this study involved exploratory factor analysis (EFA), reliability analysis, and structural equation modeling (SEM). The latter has been proved to be a flexible and powerful means of examining the relationships among constructs [58]. With respect to the EFA, items with factor loadings of less than 0.50 and with many cross loadings were omitted [59,60]. Varimax rotation was conducted, and the validity and reliability of the questionnaire were evaluated accordingly. The scales of each item were clarified by employing the related statistics in Minitab version 19. SPSS AMOS 19.0 was used to conduct the SEM analysis for exploring the structure of relationships between capabilities and implementation decisions, and for testing the measurement model. The overall model fit was assessed using seven common goodness-of-fit indices: The ratio of χ^2 to degrees of freedom (df), goodness of fit index (GFI), adjusted goodness of fit index (AGFI), comparative fit index (CFI), root mean square error of approximation (RMSEA), non-normalized fit index (NNFI), and incremental fit index (IFI) [61,62].

Logistic regression is the appropriate regression analysis to conduct when the dependent variable is dichotomous (binary). In this study, we examined the relationships between students' overseas experience and their weighting of the proposed capabilities. We further examined whether overseas experience was linked to future mobile intentions. Logistic regression was conducted by using the Minitab statistical package. A logit is a log of odds, and odds are a function of P , $logit(P) = a + \beta_1 X_1 + \dots + \beta_n X_n$. The odds ratio (OR) was calculated to reflect the impact of students' responses. It was calculated according to the following formula [63,64]:

$$Odds = e^{\beta_0 + \beta_1 X_1 + \dots + \beta_n X_n} \rightarrow \log(Odds) = \beta_0 + \beta_1 X_1 + \dots + \beta_n X_n$$

$$Odds = \frac{P(y = 1)}{P(y = 0)} \begin{matrix} \text{The Odds will be } > 1 \text{ when there is a higher probability of predicting } y = 1 \\ \text{The Odds will be } < 1 \text{ when there is a higher probability of predicting } y = 0 \end{matrix}$$

Finally, we employed the stepwise method used in more complicated logistic regression models. Adding independent variables to a logistic regression model will typically increase the amount of variance explained in the log odds. In this study, the variance is expressed as R^2 .

6. Results

6.1. Factorial Structure

According to the related literature, theoretical global mobility can be estimated by using student capability with respect to communication, cultural awareness, knowledge and skills, global intention, and global implementation. In this study, the EFA results regarding capabilities for global mobility and implementation indicate that "capability" and "intention and implementing" constitute two dimensions in the global mobility survey. "Capability" refers to 11 related indicators, whereas "intention and implementing" consists of four indicators. In total, the proposed construct can explain 62.2% of the variance, as shown in Table 3. There were no indicators with a factor loading of less than 0.5. Thus, a total of 11 items or indicators were retained in the final version of "capabilities for global mobility," with that construct explaining 76.2% of the variance, as shown in Table 4.

Table 3. Factor loadings for two factors (capability and intention and implementing) in the global mobility scale.

15 Indicators	Factor1	Factor2	Communality
Capability domain			
P_knowledge	0.817	0.000	0.682
P_skills	0.803	0.000	0.662
Reading_A	0.796	0.000	0.634
Spoken_A	0.785	0.000	0.617
Communication_A	0.783	0.000	0.613
Global_A	0.775	0.000	0.619
Ethic_A	0.760	0.000	0.611
Culture_A	0.747	0.000	0.588
P_license	0.743	0.000	0.562
P_internship	0.739	0.000	0.566
Custom_A	0.679	0.000	0.472
Intention and implementing			
Caring_ability	0.000	0.848	0.729
Working_ability	0.000	0.833	0.695
Working_intent	0.000	0.816	0.678
Caring_intent	0.000	0.752	0.599
Variance	6.5286	2.7981	9.3267
% Variance	0.435	0.187	0.622

Table 4. Factor loadings for three factors comprising “capability” in the global mobility scale.

Indicators	Factor1	Factor2	Factor3	Communality
Knowledge and skills				
P_internship	0.862	0.000	0.000	0.810
P_license	0.805	0.000	0.000	0.745
Ethic_A	0.745	0.000	0.000	0.713
P_skills	0.695	0.000	0.000	0.713
P_knowledge	0.624	0.000	0.000	0.701
Communication				
Reading_A	0.000	0.834	0.000	0.851
Spoken_A	0.000	0.823	0.000	0.828
Communication_A	0.000	0.750	0.000	0.764
Cultural awareness				
Custom_A	0.000	0.000	0.860	0.820
Culture_A	0.000	0.000	0.704	0.712
Global_A	0.000	0.000	0.686	0.724
Variance	3.3536	2.6054	2.4211	8.3801
% Variance	0.305	0.237	0.220	0.762

Rotation method: Varimax with Kaiser normalization.

6.2. Results of Reliability Analysis

Reliability was estimated by evaluating the internal consistency of the instrument using Cronbach’s α to represent each factor. In general, reliability analysis suggests that Cronbach’s $\alpha > 0.6$ can be used as an index of convergent validity. In this study, the reliability analysis reveals that all of the indicators have high standardized factor loadings (see Table 5), reflecting convergent validity [65]. The Cronbach’s α of the entire survey questionnaire is 0.899, which also exceeds the minimum standard of 0.70, as recommended by Hair et al. [66].

Table 5. Item statistics for Cronbach’s alpha.

Indicators	Item-adj. Total Corr.	Squared Multiple Corr.	Cronbach’s Alpha
Spoken_A	0.7836	0.6291	0.884
Reading_A	0.8099	0.6608	
Communication_A	0.7325	0.5392	
Culture_A	0.6802	0.4636	0.828
Custom_A	0.6982	0.4876	
Global_A	0.6805	0.4646	
Ethic_A	0.7476	0.5741	0.901
P_knowledge	0.7385	0.5946	
P_skills	0.7658	0.6259	
P_license	0.7454	0.5772	0.652
P_internship	0.7837	0.6370	
Caring_intent	0.6152	0.4697	
Working_intent	0.6732	0.5056	0.744
Caring_ability	0.7204	0.5630	
Working_ability	0.6768	0.5296	

Cronbach’s alpha for all items = 0.899.

6.3. Results of SEM

The results of SEM, along with the recommended values for the common model fit, and the suggested saturated and independence models, are shown in Table 6. Most of the model-fit indices exceed their respective common acceptance levels suggested by previous research, thus demonstrating that the default measurement model exhibits a good fit with the data collected (GIF = 0.916, AGFI = 0.876, CFI = 0.934, RMSEA = 0.087, NNFI = 0.915, IFI = 0.934). According to the χ^2/df

index, the $\chi^2 = 1458.239$ and $df = 81$, which is not a good fit. This result might have been caused by the large sample in this study. With respect to the scaled non-centrality parameter (SNCP) for large samples, the $SNCP = (\chi^2 - df)/n = 1377/2226 = 0.61$, indicating a good fit ($0.61 \leq 3.00$). The parsimony-adjusted measures indicate a parsimonious normed fit index (PNFI) and parsimonious goodness of fit index (PGFI) that exceed the recommended acceptance levels (≥ 0.5). This implies that the suggested model is a good fit.

Table 6. Fit indices for structural and independence models.

Fit Indices	Recommended	Default_m	Saturated_m	Independence_m
Model fit summary				
χ^2/df	≤ 3.00	18.03	-	201.7
GIF	≥ 0.80	0.916	1.0	0.266
AGFI	≥ 0.80	0.876	-	0.161
CFI	≥ 0.90	0.934	1.0	0.000
RMSEA	≤ 0.1	0.087	-	0.300
NNFI	≥ 0.90	0.915	-	-
IFI	≥ 0.90	0.934	1.0	0.000
Parsimony adjusted measures				
PNFI	≥ 0.5	0.718	0.0	0.000
PGFI	≥ 0.5	0.619	0.0	0.000
AIC (relative)	smaller	1536	240	21101

Properties of the causal paths, including the estimated standardized path coefficients and p -values for each equation in the hypothesized model, are presented in Table 7 and Figure 2. As expected, the results support H3, H5, and H7 ($\gamma = 0.416, p < 0.01$; $\gamma = 0.164, p < 0.006$; $\gamma = 1.156, p < 0.001$, respectively). The results reveal negative coefficients with respect to H1 and H4, indicating that the current survey target reflected specific and unexpected phenomena. H2 and H6 were not supported in this study, although both “Communication” and “Knowledge and Skills” exerted an impact on “Implementing” through “Intention” (H7) ($\gamma = 1.156, p < 0.01$). In the discussion section, we will expand on these results.

Table 7. Estimated standardized path coefficients and p -values.

Hypotheses			Estimated	Standardized	p
H1: Intention	<—	Communication	−0.193	−0.185	**
H2: Implementing	<—	Communication	−0.081	−0.066	0.136
H3: Intention	<—	Cultural awareness	0.425	0.416	**
H4: Implementing	<—	Cultural awareness	−0.238	−0.199	**
H5: Intention	<—	Knowledge and Skills	0.144	0.164	**
H6: Implementing	<—	Knowledge and Skills	0.062	0.061	0.194
H7: Implementing	<—	Intention	1.352	1.156	**

** $p < 0.01$.

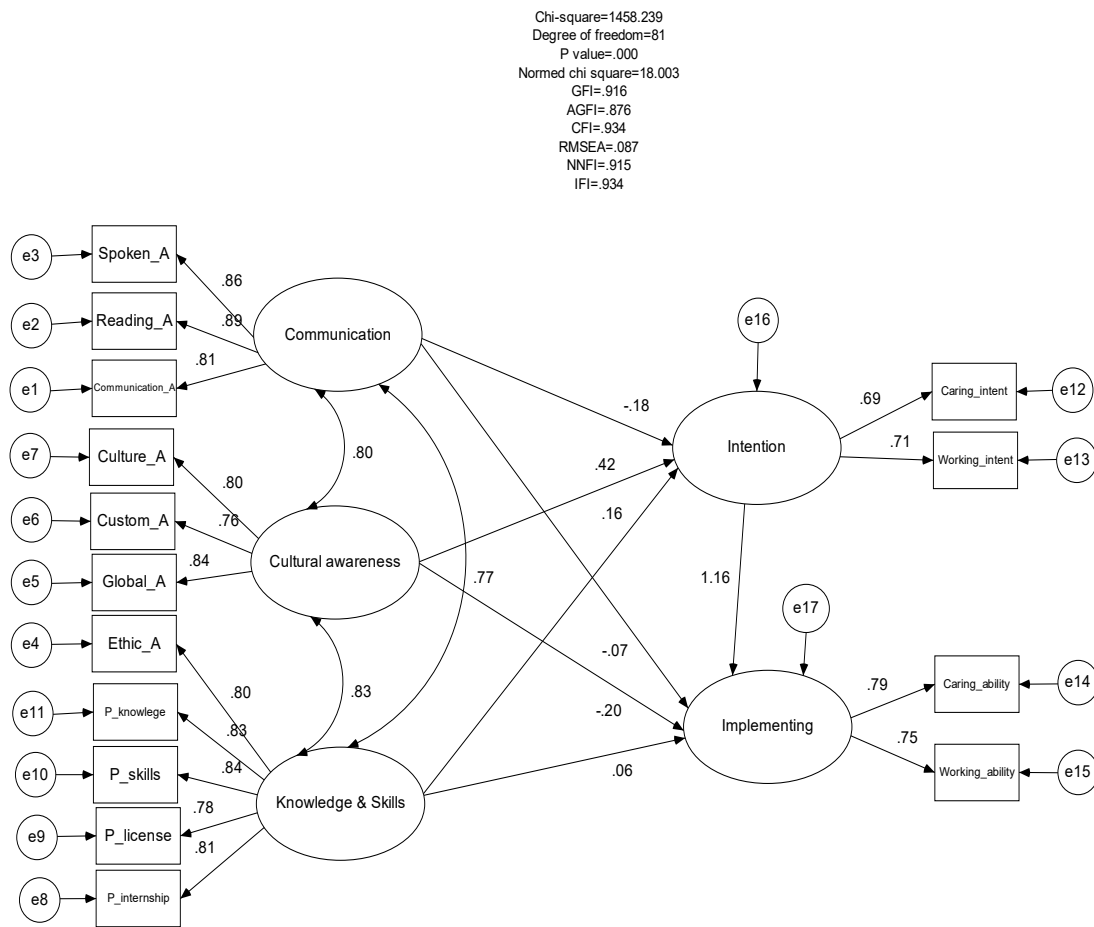


Figure 2. Paths taken toward the implementation of global mobility capabilities.

6.4. Results of Logistical Regression

The results of logistical regression reveal that “overseas experience” is significantly related to “cultural awareness” and “knowledge and skills.” The deviance test displays the results of a Chi-square test used to indicate whether each of the individual terms in the regression was statistically significant after adjustment. The result reveals the adjusted $R^2 = 0.22$, and the AIC = 3082.15 with ($df = 2224$, $\chi^2 = 3078$, $p = 0.000$). The result of logistical regression shows $Y' = 0.0554$; the details are presented in Table 8. The calculated odds ratio for the perception of mobility among college students with overseas experience is $p(1) = \exp(Y') / (1 + \exp(Y'))$. This result demonstrates that college students with overseas experience agreed with the importance of cultural awareness 1.057 times more often than others; the difference in the knowledge and skills of the two groups was less. Those with overseas experience were only 0.98 times as likely to have knowledge and skills than those without this experience.

Table 8. The results of logistical regression for mobility capabilities among students with overseas experience and those without this experience.

Capabilities	Coef	SE Coef	VIF	Odds Ratio	95% CI
Cultural awareness	0.0554	0.0200	1.91	1.0570	(1.0163, 1.0992)
Knowledge and skills	-0.0193	0.0105	1.91	0.9809	(0.9610, 1.0013)

The logistical regression equation for the implementation of mobility intentions shows that $Y' = 0.0622$. Since the coefficient β_1 is 0.0662, the calculated odds ratio will be $\exp(\beta_1) = \exp(0.0622)$

= 1.064. This result reveals that college students with overseas experience had the opportunity to implement their global mobility intentions 1.064 times as often as those without overseas experience.

6.5. Results of the *t*-Test Analysis

The questionnaire administered in this study can determine the factors of global mobility that the students employed. The independent sample *t* test was used to analyze the differences between the respondents from Taiwan and China. The *t*-test results showed that there was significance in “Communication” ($t = -2.93, p = 0.003 < 0.01$), “Knowledge and Skills” ($t = -2.38, p = 0.017 < 0.05$), “Intention” ($t = -3.12, p = 0.002 < 0.01$), and “Implementing” ($t = -3.49, p = 0.000 < 0.001$) of the two groups, showing that significant difference was found between Taiwan and China for these four domains. In addition, there was no significance for “Cultural awareness” ($t = -1.44, p = 0.151 > 0.05$) of the two groups (shown as Table 9), showing that significant difference was not found between Taiwan and China in this domain.

Table 9. Summary of an independent sample *t* test on global mobility across China and Taiwan.

Domains	Area	N	Mean	S.D.	<i>t</i> -Value	<i>p</i>
Communication	Taiwan	1188	5.92	1.29	-2.93 **	0.003
	China	1038	6.06	0.83		
Cultural awareness	Taiwan	1188	5.85	1.11	-1.44	0.151
	China	1038	5.91	0.82		
Knowledge & Skills	Taiwan	1188	5.36	1.25	-2.38 *	0.017
	China	1038	5.48	0.95		
Intention	Taiwan	1188	4.18	1.34	-3.12 **	0.002
	China	1038	4.36	1.33		
Implementing	Taiwan	1188	4.77	1.03	-3.49 ***	0.000
	China	1038	4.92	0.91		

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

6.6. Results of Multi-Group Invariance Analysis

Given that the structural equation models were replicable in each individual sample, we conducted a series multi-group structural equation model to identify any variation in the measurement parameters and pattern of structural relationships among the constructs in the proposed model across Taiwan and China. The results showed that this model demonstrated good fit with the data according to the multiple criteria adopted, $p < 0.001$, RMSEA > 0.60 , NFI > 0.90 , IFI > 0.91 , GFI > 0.89 , AGFI > 0.85 , CFI > 0.91 , ECVI > 0.82 (shown in Table 10). We subsequently estimated nested models that constrained the factor loadings to be invariant across the two groups. Table 11 shows that assuming model Unconstrained to be correct, the invariance across two groups for model Measurement weights was significant ($p < 0.001$); assuming model Measurement weights to be correct, the invariance across two groups for model Structural weights was significant ($p < 0.05$); assuming model Structural weights to be correct, the invariance across two groups for model Structural covariances was significant ($p < 0.001$); assuming model Structural covariances to be correct, the invariance across two groups for model Structural residuals was significant ($p < 0.05$); and assuming model Structural residuals to be correct, the invariance across two groups for model Measurement residuals was significant ($p < 0.001$). The results revealed that the model provided little support for the generalizability of the standardized measures of the constructs used here.

Table 10. Summary of model fit for two-group structural equation models.

	χ^2	df	<i>p</i>	RMSEA	NFI	IFI	GFI	AGFI	CFI	ECVI
Unconstrained	1666.0 ***	160	0.000	0.065	0.921	0.928	0.904	0.856	0.928	0.821
Measurement weights	1769.1 ***	170	0.000	0.065	0.916	0.924	0.898	0.856	0.924	0.858
Structural weights	1786.2 ***	177	0.000	0.064	0.916	0.923	0.897	0.860	0.923	0.860
Structural covariances	2026.7 ***	183	0.000	0.067	0.904	0.912	0.886	0.851	0.912	0.963
Structural residuals	2033.8 ***	185	0.000	0.067	0.904	0.912	0.886	0.852	0.912	0.964
Measurement residuals	2151.6 ***	200	0.000	0.066	0.898	0.907	0.881	0.857	0.907	1.003

*** *p* < 0.001.**Table 11.** Nested model comparisons for two-group structural equation models.

Model Comparison	χ^2	df	<i>p</i>	NFI Delta-1	IFI Delta-2	RFI rho-1	TLI rho2
Measurement weights	103.143 ***	10	0.000	0.005	0.005	0.000	0.000
Structural weights	17.071 *	7	0.017	0.001	0.001	-0.003	-0.003
Structural covariances	240.514 ***	6	0.000	0.011	0.011	0.010	0.010
Structural residuals	7.084 *	2	0.029	0.000	0.000	-0.001	-0.001
Measurement residuals	117.777 ***	15	0.000	0.006	0.006	-0.002	-0.002

* *p* < 0.05, *** *p* < 0.001.

7. Discussion

Ever since internationalization has become mainstreamed at institutions of higher education, support for international activities has increased [1]. Near the beginning of this paper, we raised the question: What kind of indicators can be used to interpret the capabilities of global mobility? Previous literature provides various perspectives on global mobility capabilities, but there are few empirical findings especially pertaining to student perspectives on the issue [10,13,32,35,36]. In this study, we selected 15 indicators of global mobility to address the issue from a student perspective. The results of the EFA suggest that communication ability, cultural awareness, and knowledge and skills can be used to construct a reasonable framework of mobile capabilities with fitted validity and reliability. Furthermore, SEM demonstrates that these capabilities transfer to implementation by way of student intention under the pressure of the global pandemic.

This study further explored the extent to which college students implement their global mobility intentions. Because the target group in this study did not comprise students in OECD countries, the results provide a valuable window on the global mobility intentions and implementation activities of the largest segment of students worldwide who take part in global mobility programs. In this study, H1 (Communication ability positively affects intentions toward global mobility) had a negative coefficient in the SEM model, indicating that foreign language skills are negatively correlated with global mobility intentions. This might be explained by the perceived lack of need to study abroad among students who are proficient in a foreign language. Moreover, the global ambitions of universities are resulting in continued qualitative and quantitative growth of English-taught programs in Asia and Europe [47]. This phenomenon is also reflected in the Chinese higher educational setting, where many students are proficient in English. This study suggests that these students have a reduced intention to engage in global mobility. Similarly, H4 (cultural awareness positively affects the implementation of global mobility) had a negative coefficient in the SEM model. Again, when cultural awareness is not perceived as a problem for students, the implementation of global mobility is likely to be seen as unnecessary. H2 (communication ability positively affects the implementation of global mobility) and H6 (knowledge and skills positively affects the implementation of global mobility) were not supported in this study, although the influences of both “Communication” and “Knowledge and Skills” on “Implementing” were supported through the category of “Intention.” Thus, intention is shown to be the crucial factor determining whether or not students will participate in a global mobility program.

What do the findings suggest with regard to global mobility research, including the impact of internationalization on knowledge and skills, and the opportunities for global mobility implementation?

The results of the logistics regression indicate that students with overseas experience agreed with the importance of cultural awareness 1.057 times more often than those without this experience. The difference in knowledge and skills between students with overseas experience and those without this experience was less. Since these results are based on the perceptions of the participants, they might reflect China's ambition in global competition and soft power maneuvering and, more specifically, its present approach of using "outward-oriented" higher education internationalization strategies for status and image. Students who participate in higher education collaboration, such as the Confucius Institute program, international development aid in higher education, and international student recruitment [67], may view their knowledge and skills as comparatively high. This could negatively affect their interest in studying abroad.

The invariance of global mobility across Taiwan and China was examined by adopting a rigorous, hypothesis-testing approach using structural equation modeling to explore whether standardized measures put forward by the instrument we developed are generalizable across the two groups, and whether the pattern of influence of the hypothesized relationships among the constructs is consistent across these two areas. The result revealed that there were some variations; these were largely unsubstantial and did not compromise the model fit in the model comparisons, supporting the hypothesis of invariance. The findings provide evidence that the global mobility of 15 indicators and the five domains were not equivalent across Taiwan and China. However, Hagger et al. [68] suggested that evaluation and diagnostic instruments that provide equivalent measurement across areas or national cultures are particularly valuable to researchers who seek to develop an instrument with generalizability across samples from different cultural backgrounds. Due to the fact that the metric invariance requirement is usually difficult to satisfy, some researchers [69,70] have proposed that if the non-invariant items constitute only a small portion of the model, then cross-group comparisons can still be made because the non-invariant items will not affect the comparisons to any meaningful degree.

8. Conclusions

This study, which examined global mobility capabilities among college students in China, was based on student self-evaluations. The results indicate that intention of global mobility is the key factor determining global mobility implementation under the pressure of the pandemic. The study employed a rigorous procedure to develop and validate the proposed student mobility model; nevertheless, it has two main limitations that might be addressed in future research. First, the findings were based on survey results from a limited area within China. A random-stratified sampling technique was not adopted, which may impose limits on the generalizability of the results. Future research might examine other areas or other countries to establish the robustness of the current results. Second, the use of self-reported data to investigate research elements introduces the risk of common method bias, including the difficulty of interpretation without additional contextual information. Future research should include both objective and subjective measurements and consider their correlations. In conclusion, this study contributes to the literature and our understanding of college student's perspectives on global mobility. Global mobility in higher education is an important issue, especially when the educational settings worldwide are challenged by the COVID-19 pandemic.

Author Contributions: S.-J.W. contributed to investigation, the statistical data analysis and writing of the manuscript. D.-F.C. guided the work, designed the research and writing of the original draft. F.-R.S. provided funding acquisition and investigation. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by Ministry of Education, the People's Republic of China. 2019 National Social Science Fund Project (grant number: BHA190127).

Conflicts of Interest: The authors declare no conflict of interest.

References

- Teichler, U. Academic mobility and migration: What we know and what we do not know. *Eur. Rev.* **2015**, *23* (Suppl. S1), 6–37. [CrossRef]
- OECD. *Education at a Glance: OECD Indicators*; Organisation for Economic Co-operation and Development: Paris, France, 2018.
- European Commission. *Erasmus+: The EU Program for Education, Training, Youth and Sport 2014–2020*. European Commission. 2016. Available online: https://ec.europa.eu/programmes/erasmus-plus/sites/erasmusplus/files/erasmus-plus-in-detail_en.pdf (accessed on 5 September 2019).
- Australia Government. New Colombo Plan Guidelines Scholarship Program 2017 Round. 2016. Available online: <http://dfat.gov.au/people-to-people/new-colombo-plan/scholarship-program/Pages/scholarship-program-guidelines-2017.aspx> (accessed on 17 January 2020).
- Institute of International Education. *Generation Study Abroad: A Global Movement to Increase Study Abroad*. 2016. Available online: http://www.iie.org/en/Programs/Generation-Study-Abroad#.WB0tb_1942w (accessed on 5 September 2019).
- Garcia-Aracil, A.; Jose-Gines, M.; Vila, L.E. The rewards of human capital competences for young European higher education graduates. *Tert. Educ. Manag.* **2004**, *10*, 287–305. [CrossRef]
- Partlo, M.; Ampaw, F. Using income effects to market undergraduate education abroad participation in higher education. *J. Mark. High. Educ.* **2018**, *28*, 66–89. [CrossRef]
- Rexeisen, R.J.; Anderson, P.H.; Lawton, L.; Hubbard, A.C. Study abroad and intercultural development: A longitudinal study. *Front. Interdiscip. J. Study Abroad* **2008**, *17*, 1–20. [CrossRef]
- Salisbury, M.H.; An, B.P.; Pascarella, E.T. The effect of study abroad on intercultural competence among undergraduate college students. *J. Stud. Aff. Res. Pract.* **2013**, *50*, 1–20. [CrossRef]
- Schmidt, S.; Pardo, M. The contribution of study abroad to human capital Formation. *J. High. Educ.* **2017**, *88*, 135–157. [CrossRef]
- Knight, J. Internationalization and the competitiveness agenda. In *Higher Education, Policy, and the Global Competition Phenomenon*; Portnoi, L.M., Rust, V.D., Bagley, S.S., Eds.; Palgrave Macmillan: New York, NY, USA, 2010; pp. 205–218.
- Niederl, A.; Bader, L. Maßnahmen zur studienortattraktivität aus internationaler perspektive. Unveröffentlicht. In *The European Higher Education Area*; Curaj, A., Matei, L., Pricopie, R., Salmi, J., Scott, P., Eds.; Springer: Cham, Switzerland, 2015.
- Wulz, J.; Rainer, F. Challenges of student mobility in a cosmopolitan Europe. In *The European Higher Education Area*; Curaj, A., Matei, L., Pricopie, R., Salmi, J., & Scott, P., Eds.; Springer: Cham, Switzerland, 2015.
- Bhandari, R.; Blumenthal, P. Global student mobility and the twenty-first century silk road: National trends and new directions. In *International Students and Global Mobility in Higher Education*; Bhandari, R., Blumenthal, P., Eds.; Palgrave Macmillan: New York, NY, USA, 2011; pp. 1–23.
- Nye, J.S., Jr. *Soft Power: The Means to Success in World Politics*; Public Affairs: New York, NY, USA, 2004.
- Nye, J.S., Jr. The decline of America's soft power: Why Washington should worry. *Foreign Aff.* **2004**, *83*, 16–21.
- Nye, J.S., Jr. The rise of China's soft power. *Wall Str. J. Asia* **2005**, *29*, 6–8.
- Li, J. *Conceptualizing Soft Power of Higher Education: Globalization and Universities in China and the World*; Springer: Singapore, 2018.
- Knight, J. Moving from soft power to knowledge diplomacy. *Int. High. Educ.* **2015**, *80*, 8–9. [CrossRef]
- Nagao, H. China's Soft Power Investment in African Nations. Ph.D. Thesis, University of Kansas, Lawrence, KS, USA, 2016.
- Larsen, M.A. *Internationalization of Higher Education: An Analysis through Spatial, Network, and Mobilities Theories*; Palgrave Macmillan: New York, NY, USA, 2016.
- Sheller, M. Mobility. Sociopedia.isa. 2011. Available online: <http://www.sagepub.net/isa/resources/pdf/Mobility.pdf> (accessed on 19 September 2019).
- Castells, M. Materials for an exploratory theory of the network society. *Br. J. Sociol.* **2000**, *51*, 5–24. [CrossRef]
- Castells, M. Grassrooting the space of flows. In *Cities in the Telecommunication Age: The Fracturing of Geographies*; Aoyama, Y., Warf, B., Wheeler, J.O., Eds.; Routledge: New York, NY, USA, 2000; pp. 18–27.
- Chapman, A.; Pyvis, D. Quality, identity and practice in offshore university programs: Issues in the internationalization of Australian higher education. *Teach. High. Educ.* **2006**, *11*, 233–245. [CrossRef]

26. Greenholtz, J. Assessing cross-cultural competence in transnational education: The intercultural development inventory. *High. Educ. Eur.* **2000**, *25*, 411–416. [[CrossRef](#)]
27. Kerr, C. The internationalization of learning and the nationalization of the purposes of higher education. *Eur. J. Educ.* **1990**, *25*, 5–22. [[CrossRef](#)]
28. de Wit, H. *Internationalization of Higher Education in the United States and Europe*; Greenwood Publishing Group: Westport, CT, USA, 2002.
29. Van der Wende, M. Internationalization policies: About new trends and contrasting paradigms. *High. Educ. Policy* **2001**, *14*, 249–259.
30. Garrido, M.R. Voluntary work, transnational mobility and language learning in a social movement. *Lang. Intercult. Commun.* **2018**, *18*, 451–463. [[CrossRef](#)]
31. MacLachlan, M. *5 Essential Skills for Global Mobility Professionals*; Learnlight: UK, 2019. Available online: <https://insights.learnlight.com/en/articles/5-essential-skills-for-global-mobility-professionals/> (accessed on 7 September 2019).
32. Coryell, J.E.; Stewart, T.; Wubbena, Z.C.; Valverde-Poemie, T.C.; Spencer, B.J. International service-learning: Study abroad and global citizenship development in a post-disaster locale. In *Handbook of Research on Study Abroad Programs and Outbound Mobility*; Velliari, D.M., Coleman-George, D., Eds.; IGI Global: Hershey, PA, USA, 2016; pp. 420–445.
33. Souto-Otero, M.; Huisman, J.; Beerkens, M.; Wit, H.; Vujic, S. Barriers to international student mobility: Evidence from the Erasmus program. *Educ. Res.* **2013**, *42*, 70–77. [[CrossRef](#)]
34. Horta, H.; Veloso, F.; Grediaga, R. Navel gazing: Academic inbreeding and scientific productivity. *Manag. Sci.* **2010**, *56*, 414–429. [[CrossRef](#)]
35. Lepori, B.; Seeber, M.; Bonaccorsi, A. Competition for talent. Country and organizational-level effects in the internationalization of European higher education institutions. *Res. Policy* **2015**, *44*, 789–802. [[CrossRef](#)]
36. Agarwal, R.; Ohyama, A. Industry or academia, basic or applied? Career choices and earnings trajectories of scientists. *Manag. Sci.* **2013**, *59*, 950–970. [[CrossRef](#)]
37. Borjas, G. Self-selection and the earnings of immigrants. *Am. Econ. Rev.* **1987**, *77*, 531–553.
38. Madge, C.; Raghuram, P.; Noxolo, P. Conceptualizing international education: From international student to international study. *Prog. Hum. Geogr.* **2015**, *39*, 681–701. [[CrossRef](#)]
39. Tran, L.; Marginson, S.; Do, H.; Le, T.; Nguyen, N.; Vu, T.; Pham, T. *Higher Education in Vietnam: Flexibility, Mobility and Practicality in the Global Knowledge Economy*; Palgrave Macmillan: Basingstoke, UK, 2014.
40. Cavusgil, S.T.; Knight, G. The born global firm: An entrepreneurial and capabilities perspective on early and rapid internationalization. *J. Int. Bus. Stud.* **2015**, *46*, 3–16. [[CrossRef](#)]
41. Pinho, J.C.; Prange, C. The effect of social networks and dynamic internationalization capabilities on international performance. *J. World Bus.* **2016**, *51*, 391–403. [[CrossRef](#)]
42. Spyropoulou, S.; Katsikeas, C.S.; Skarmeas, D.; Morgan, N.A. Strategic goal accomplishment in export ventures: The role of capabilities, knowledge, and environment. *J. Acad. Mark. Sci.* **2018**, *46*, 109–129. [[CrossRef](#)]
43. Winter, S. Understanding dynamic capabilities. *Strateg. Manag. J.* **2003**, *24*, 991–995. [[CrossRef](#)]
44. Helms, R.M.; Brajkovic, L.; Struthers, B. *Mapping Internationalization on U.S. Campuses*; American Council on Education: Washington, DC, USA, 2017. Available online: <http://www.acenet.edu/news-room/Documents/Mapping-Internationalization-2017.pdf> (accessed on 5 September 2019).
45. Choudaha, R. A Third Wave of International Student Mobility: Global Competitiveness and American Higher Education. *Research & Occasional Paper Series: UC Berkeley, CSHE 8*; University of California: Berkeley. Available online: <https://ssrn.com/abstract=3169282> (accessed on 26 June 2018).
46. Douglass, J.A. American Universities in Trump Land-Financial Ruin Averted? *Research & Occasional Paper Series, UC Berkeley CSHE 11.2017. Cent. Stud. High. Educ.* **2017**, 1–4. Available online: https://cshe.berkeley.edu/sites/default/files/publications/2.rops.cshe.11.17.douglass.rops.univ_in_trumpland.10.25.2017.pdf (accessed on 26 June 2018).
47. Choudaha, R.; Van Rest, E. Envisioning pathways to 2030: Megatrends shaping the future of global higher education and international student mobility. *Online Submiss.* **2018**, 28–39. Available online: <http://bit.ly/Megatrends2030> (accessed on 26 June 2018).
48. Lingo, M.D. Stratification in study abroad participation after accounting for student intent. *Res. High. Educ.* **2019**, *60*, 1142–1170. [[CrossRef](#)]

49. Kosmützky, A.; Putty, R. Transcending borders and traversing boundaries: A systematic review of the literature on transnational, offshore, cross-border, and borderless higher education. *J. Stud. Int. Educ.* **2016**, *2*, 8–33. [CrossRef]
50. UNESCO. *How Are Countries Addressing the COVID-19 Challenges in Education? A Snapshot of Policy Measures. Global Education Monitoring Reports*; United Nations Educational, Scientific and Cultural Organization: Paris, France, 2020.
51. UNESCO. COVID-19: Teacher Task Force Calls to Support 63 Million Teachers Touched by the COVID-19 Crisis. UNESCO. 27 March 2020. Available online: <https://en.unesco.org/news/teacher-task-force-calls-support-63-million-teachers-touched-COVID-19-crisis> (accessed on 12 May 2020).
52. World Health Organization. WHO Director-General’s Opening Remarks at the Mission Briefing on COVID-19. 2020. Available online: <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-mission-briefing-on-COVID-19> (accessed on 1 March 2019).
53. Ferguson, N.M.; Laydon, D.; Nedjati-Gilani, G.; Imai, N.; Ainslie, K.; Baguelin, M.; Bhatia, S.; Boonyasiri, A.; Cucunubá, Z.; Cuomo-Dannenburg, G.; et al. Report 9: Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand. *Imp. Coll. Lond.* **2020**, *10*, 77482.
54. Burgess, S.; Sievertsen, H.H. Schools, Skills, and Learning: The Impact of COVID-19 on Education. CEPR Policy Portal. 23 April 2020. Available online: <https://voxeu.org/article/impact-COVID-19-education> (accessed on 10 August 2020).
55. Liguori, E.; Winkler, C. From Offline to Online: Challenges and Opportunities for Entrepreneurship Education Following the COVID-19 Pandemic. *Entrep. Educ. Pedagog.* **2020**. [CrossRef]
56. Özer, M. The contribution of the strengthened capacity of vocational education and training system in Turkey to the fight against COVID-19. *J. High. Educ.* **2020**, *10*, 134–140. [CrossRef]
57. Bohmstedt, G.W. Reliability and validity assessment in attitude measurement. In *Attitude Measurement*; Summers, G.F., Ed.; Rand-McNally: Chicago, IL, USA, 1970; pp. 80–99.
58. Kelloway, E.K. *Using LISREL for Structural Equation Modeling: A Researcher’s Guide*; Sage: Thousand Oaks, CA, USA, 1998.
59. Bentler, P.M. Comparative fit indexes in structural models. *Psychol. Bull.* **1990**, *107*, 238–246. [CrossRef] [PubMed]
60. Walker, S.L.; Fraser, B.J. Development and validation of an instrument for assessing distance education environments in higher education: The distance education learning environments survey (DELES). *Learn. Environ. Res.* **2005**, *8*, 308–389. [CrossRef]
61. Loehlin, J.C. *Latent Variable Models: An Introduction to Factor, Path, and Structural Equation Analysis*, 4th ed.; Lawrence Erlbaum Associates: Mahwah, NJ, USA, 2004.
62. Schumacker, R.E.; Lomax, R.G. *A Beginner’s Guide to Structural Equation Modeling*; Lawrence Erlbaum Associate: Mahwah, NJ, USA, 2004.
63. Aljandali, A. *Multivariate Methods and Forecasting with IBM SPSS Statistics*; Springer: New York, NY, USA, 2017.
64. Chandrayan, P. Logistic Regression for Dummies: A Detailed Explanation What is Logistic Regression Model & How it Works? Available online: <https://towardsdatascience.com/logistic-regression-for-dummies-a-detailed-explanation-9597f76edf46> (accessed on 8 March 2020).
65. Blanthorne, C.; Jones-Faremer, L.A.; Almer, E.D. Why you should consider SEM: A guide getting started. *Adv. Account. Behav. Res.* **2006**, *9*, 179–207.
66. Hair, J.; Black, W.C.; Babin, B.J.; Anderson, R.E. *Multivariate Data Analysis*, 7th ed.; Pearson: Harlow, UK, 2013.
67. Wu, H. Three dimensions of China’s “outward-oriented” higher education internationalization. *High. Educ.* **2019**, *77*, 81–96. [CrossRef]
68. Hagger, M.S.; Chatzisarantis, N.L.; Barkoukis, V.; Wang, J.C.; Hein, V.; Pihu, M.; Karsai, I. Cross-cultural generalizability of the theory of planned behavior among young people in a physical activity context. *J. Sport Exerc. Psychol.* **2007**, *29*, 2–20. [CrossRef]
69. Byrne, B.M.; Shavelson, R.J.; Muthén, B. Testing for the equivalence of factor covariance and mean structures: The issue of partial measurement invariance. *Psychol. Bull.* **1989**, *105*, 456–466. [CrossRef]
70. Marsh, H.W.; Hocevar, D. Application of confirmatory factor analysis to the study of self-concept: First-and higher order factor models and their invariance across groups. *Psychol. Bull.* **1985**, *97*, 562–582. [CrossRef]

