

## AFRICAN STUDENTS' MOBILITY TO CHINA AN ECOLOGICAL SYSTEMATIC PERSPECTIVE

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**Abstract.** The exponential growth of African students' mobility to China has become a *cause célèbre* in China-Africa relations. As of 2018, the African students occupied 16.57% of the international students in China. Against this backdrop, it is imperative to understand the drivers and motivations behind their continuous influx to Chinese higher education institutions. This paper goes beyond the commonly used 'pull-push' model and approaches this trend from a holistic perspective provided by Bronfenbrenner's ecological systems theory. Through a mixed approach, we explored the impact of the students' multi-dimensional environment on their decision-making of mobility to China. Data from a survey of 375 participants and 15 interviews showed that the macrosystem had the utmost influence on choosing China as their study destination. It also shows that the economic factors and the pursuit of better education amalgamate the 'why' and 'how' in the students' decision-making process. Although they opt for quality education, African students tend to carefully weigh the yearnings and earnings of mobility to China through self-bargaining and self-negotiations. The implications on international students' mobility are discussed in this article.

**Keywords:** international student mobility, African students, ecological systems, higher education, China, Africa

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## 1. Introduction

Since World War II, the mobility of international students has increased substantially (Ahmad and Shah 2018, Altbach et al 2019). According to UNESCO, by 2020, over 6 million international students were seeking degree education outside their home countries (UNESCO 2020), and this number is expected to reach 8 million by 2025 (ICEF 2012).

Northern America and western Europe have long been the preferred destination for international students from the developing world (Altbach 2004). However, driven by its quest for internationalization and world-class universities (Wang 2014, Zhaet al 2019), China rose from an insignificant player to an emerging competitor in the international student market (Ding 2016). Many attribute this success to the Chinese government's plan to recruit half a million international students by 2020, with its subsequent encouraging policies such as low tuitions, scholarships, lower admission requirements, and flexible visas (Ahmad and Shah 2018, Ma 2017, Wen et al 2018, Yang 2020). Consequently, the latest official statistics show that 492,185 international students from 196 countries/areas were pursuing their studies in Chinese HEIs, among which 81,562 students were from African countries, accounting for 16.57% (MOE 2018). In the meantime, China is also a major source of international students (Lu et al. 2019, Pan 2013), as over 6.5 million Chinese nationals have studied abroad between 1978 and 2019 (MOE 2020).

Moreover, as part of its 'going out' policy and south-south cooperation, China vigorously supports education in Africa and encourages outstanding African youth to study in China through several scholarship schemes (The State Council Information Office of the People's Republic of China 2021). China repeatedly confirms this commitment by promising 50,000 scholarships for African students for 2019–2021 (Lefifi and Kiala 2021) ergo, China is now the second-largest destination for African students (ICEF 2021).

Notwithstanding, the exponential increase of African students' mobility to China raises a plethora of research questions where the answers are scarce. A dissent of available literature reveals a paucity of empirical research on African students' motivations and drives behind their steady mobility to Chinese higher education institutes. Besides, the available literature largely relies on the overused 'pull-push' model as the theoretical framework despite its limitations to explain the international students' mobility to middle-sized economies or emerging destinations like China (Jon et al 2014). Therefore, this paper intends to fill this void by exploring the African students' mobility to China with Bronfenbrenner's ecological systems model as the theoretical framework.

## 2. Historical development and literature review

The literature widely agrees that China started receiving African students in 1956, with four Egyptian students as trailblazers (Li Anshan 2018, Sautman and Hairong

2009, Snow 1988). However, since 2006 (also labeled as 'the year of Africa'), the African students' mobility to China grew exponentially. Figure 1 exhibits that in just over a decade, they increased by 21 fold (i.e. from 3737 in 2006 to 81562 students in 2018) (MOE 2018).

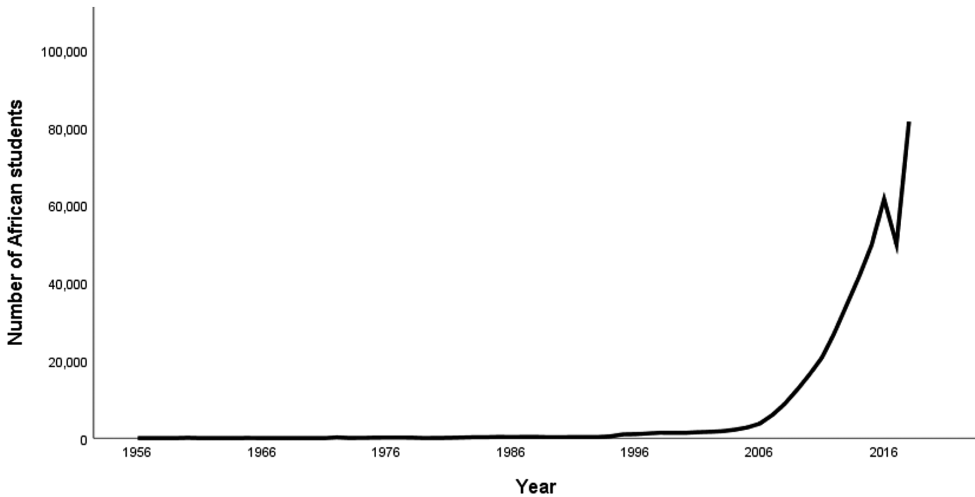


Figure 1. African students' mobility to China 1956–2018.

Source: Collected and adapted by the authors from the Chinese Ministry of Education: <<http://www.moe.gov.cn/>>, Chinese National Bureau of Statistics: <http://www.stats.gov.cn/>>, and Chinese Ministry of Foreign Affairs: <<https://www.mfa.gov.cn/>>.

Following the Sino-Egyptian diplomatic encounter during the Bandung conference in 1955, China began assisting African countries to gain their independence and achieve economic development. In this regard, education was one of China's paths to strengthen its relationship with Africa and the African people. By late 1962, some 118 African students were enrolled in Chinese higher education institutions. However, those trailblazers' experiences were not plain sail. The typical image and the stereotypical perceptions of Africans remained present in the new communist China.

Moreover, the still conservative Chinese society added to the harsh environmental conditions, made life in China unbearable for those trendsetters (Hevi 1963). The consequence was: "Send me back to Mother Africa!" as a young Zanzibari female student cried. Sooner, 96 out of the 118 African students left permanently for home (Snow 1988).

The cultural revolution aggravated the situation and halt African students' mobility to China for over ten years. Once more, life and study, for African students in China in the late seventies and early eighties, was no better than that of their predecessors; at best, they were a scapegoat; at worst, they were clashing with their Chinese peers (Sautman and Hairong 2009, Sullivan 1994). Gillespie's research in the late nineties also depicted their stay in China as unsatisfactory and challenging (Gillespie 2014).

The unsatisfied African students with education quality and learning experience in China often turn traders to compensate for their disappointments (Haugen 2013, Mulvey 2020). Racial discrimination and education quality appear to be central themes among the challenges facing African students in China (Bodomo 2012, Lan 2016). The rule of thumb suggests that these challenges would divert potential candidates and nip their idea of mobility to China in the bud. *Au contraire*, African students are flocking to Chinese higher education institutions in waves.

Researchers established four categories of African mobile students in China: the elite who explore new opportunities, the middle class who are cost-wise, the coerced to move abroad, and the unprivileged individuals (Mulvey 2021). Each sees the mobility to China as an opportunity to an end. Commonly, mobility to China is a *modus operandi* to escape the unfavorable socio-economic conditions at home (Hodzi 2020) and a path to a prosperous future (Brown 2012). In this respect, the availability of financial support and ease of visa access combined with hopes for better education, all provide the right incentives for mobility (Gbollie and Gong 2020).

Although recent case studies showed that recommendations from the current African diaspora or online information were the most determinant factors in the students' decision-making process (Lei et al. 2021), a dissent of available literature still reveals a series of gaps. The interplay between the factors mentioned above in the African students' decision-making process is still unclear. Therefore, this study sought to unveil the motives and factors influencing the African students' decision-making process with a comprehensive approach provided by Bronfenbrenner's ecological systems theory.

### 3. Theoretical framework

*Tabula rasa* (Latin: 'scraped tablet', i.e. 'blank slate') is a well-known theory in epistemology and psychology which assumes that individuals are born without built-in mental content. Both the Aristotelians, the stoics, and modern empiricists, believe in an original blankness of the mind, and that all materials of reason and knowledge are driven from experience. The role of the individuals' experience, namely their interaction with the surrounding environment, to explain their behavior, is one of the cornerstones in modern educational and behavioral sciences. For instance, Lewin kurts' classic equation  $B = f(P, E)$  assumes that a persons' behavior ( $B$ ) is a function of the interplay between the person ( $P$ ) and his/her environment ( $E$ ) (Lewin 2013). In the same vein, Lev Vygotsky, in his socio-cultural theory, argues that social interactions play a critical role in the Childs' development. The role of community in 'making meaning' for the individual is made first through interactions with others before fully integrated into one's mental structure (Vygotsky 1978). Capitalizing on these two concepts, Bronfenbrenner developed his ecological systems theory which views child development as a complex of relationships and interactions within multiple surrounding environments.

The theory approaches child development from four dimensions; Nominally micro-, meso-, exo-, and macrosystems. This theory was primarily utilized in the educational psychology field until its recent implication by Yu et al. to explain ISM from the developed world to China. The model was extended and refined to an international context of individual development, with four layers nominally: interpersonal, institutional, socio-cultural, and global. The refined model according to Bronfenbrenner's theory (1977) and Yu et al (2021):

1. The microsystem/interpersonal dimension is the immediate complex of relations between the individual and his/her environment (e.g. family, friends, peers, school and/or workplace).
2. The mesosystem/institutional dimension refers to the containing institutional environment that influences or provides incentives of mobility to the student (e.g. financial support, admission criteria, quality, and prestige).
3. The exosystem/socio-cultural dimension is an extension of the mesosystem that embraces the overall socio-cultural and economic environment that influences the student at home (e.g. industry, media, social services, and students' socio-economic background).
4. The macrosystem/ global dimension stands for the overarching global economic, political, educational, and social patterns which shape and influence the individuals' exo-, meso-, and microsystems.

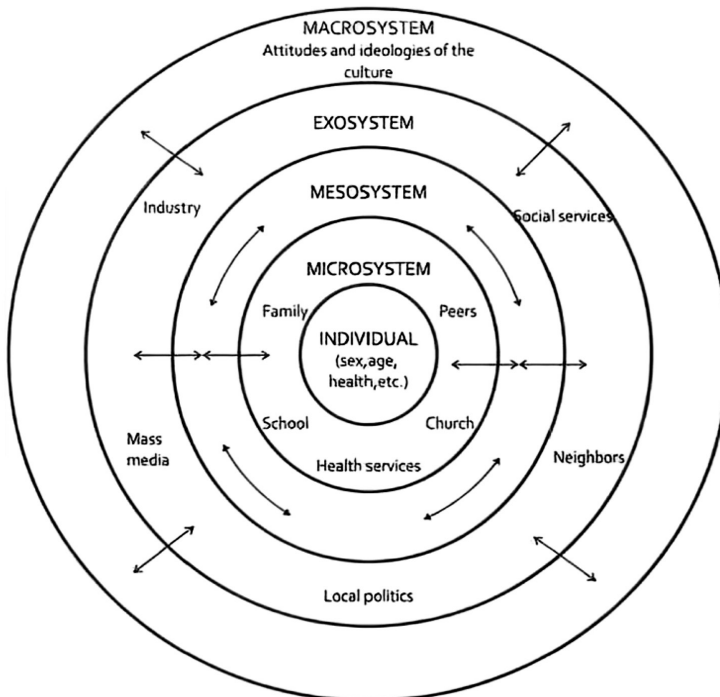


Figure 2. Bronfenbrenner's ecological systems theory.  
Source: Bronfenbrenner 1979.

The ecological systems theory also contains the chronological system, which considers the significance of major historical events and their influence on the child's development. In other words, the ecological systematic theory with its micro-, meso-, exo-, and macrosystems encompasses how time, space, and environment co-contribute and shape the individuals' decision-making to study abroad (Kudo *et al.* 2017).

In brief, the ecological systems theory, as illustrated in Figure 2 above, provides a holistic and comprehensive model with significant conceptual and practical implications for understanding students' behavior (Yu *et al.* 2021). Therefore, it would be enthralling to adapt this model as a theoretical framework to explore the behavior of African students' mobility to China.

## 4. Methodology

In this research, we employed a 'mixed method' design for its advantageous use of qualitative and quantitative data that can result in well-validated and substantiated findings with high rigor and impact (Creswell 2009, Gibson 2017).

### 4.1. Instruments

#### 4.1.1. Survey

Since there was no available validated instrument to investigate the interplay of the ecological framework dimensions in the international students' mobility by means of quantitative data, the authors first developed and validated a survey based on the theory guidelines and relied on previous studies of the theory implications on international students' mobility to China (Yu *et al.* 2021). The survey consisted of 38 variables to unveil the drivers behind African students' decision-making of mobility to China and Chinese universities. The survey was developed through (wjx.cn), a Software-based Application with easy access to smartphones that enabled all participants who met the study's criteria to fill in the survey easily. However, to ensure the survey's capacity to collect reliable data, the authors first conducted a pilot study on 22 participants to pre-test, refine and redesign the survey before launching the large-scale data collection.

Concerning the surveys' content, the first part consisted of 6 dichotomous and multi-choice questions that sought to collect participants' primary information such as gender, age, degree of study, study discipline, funding source, and enrolment type (part or full-time). The second part is comprised of 32 variables that are meant to encapsulate each of the four dimensions of the ecological systems theory framework. The students were asked to rate the importance of each variable on a 5 points Likert scale anchored by 1 (not important at all) to 5 (very important).

To explore the micro-system, students were asked to rate the importance of family, peers, school, and educational services providers as direct influential factors in their decision-making to study in China. By the same token, the mesosystem was

uncovered by the importance of institutional factors such as (quality and prestige, admission criteria and process, financial support and cost, location and size) as key institutional incentives and significant concerns for students in choosing a specific institution. As an extension of the mesosystem, the exosystem was unveiled by the influence of the industry, the socio-economic and cultural background, mass media, and the social services on the students' mobility venture. Finally, the macrosystem was inspected by the importance of the cost of mobility, the financial support, the visa accessibility, safety, the political stability, and the economic growth of their choice of China and Chinese universities as a study destination. The study also took into account the recent events that shape China-Africa relations as the chronosystem of African students' mobility to China.

#### 4.1.2. Interview

In addition to the survey, students were invited for semi-structured interviews to clarify findings and collect additional qualitative data. With the participants' consent, notes and records were taken to be coded and analyzed thoroughly in NVivo software. The interviews were conducted face-to-face and through phone calls in English and lasted 15 to 30 min each. The main question for the interviewees was, "Please state the reasons why you chose China and your current school as your study destination?". Next, prompt questions followed on a case-by-case basis to clarify the participants' answers. However, given the African students' awareness of the sensitivity to express one's opinions, it was pivotal that assurance be given that their participation is voluntary, anonymous, and confidential. Therefore, to protect the participants' privacy, we refer to them by the respective code numbers given to them according to their genders (M = males and F = female). On principal, the qualitative component of this study was meant to promote inference and convergence of results from the quantitative data.

#### 4.2. Sampling

In total, we received 387 filled questionnaires. However, 12 questionnaires were excluded after data screening due to validity issues. Therefore, the final sum was 375 valid questionnaires, which is a suitable size for the correct operation of the statistical methods. The researchers employed the statistical package for social science (SPSS) version 26.0 and Microsoft excel software statistical techniques for the quantitative data analysis. Multiple analysis techniques were considered as seen fit to make meaning of the data and achieve the research aim. Table 1 shows the demographic profile of the quantitative sample.

**Table 1. Demographic profile of the quantitative sample (N = 375)**

<b>Variables</b>	<b>Frequency (N)</b>	<b>Percent (%)</b>
<b>Gender</b>		
Female	133	35.5
Male	242	64.5
<b>Age</b>		
25~18	154	41.1
30~26	141	37.6
40~31	74	19.7
50~41	6	1.6
<b>Field of study</b>		
Business	107	28.5
Natural and applied sciences	164	43.7
Social sciences	55	14.7
Humanities	49	13.1
<b>Source of funding</b>		
Self-sponsored	122	32.5
Scholarship	253	67.5
<b>Type of enrolment</b>		
Full-time	351	93.6
Part-time	24	6.4
<b>Degree</b>		
Language student	15	4.0
Bachelor	124	33.1
Master	150	40.0
Ph.D.	86	22.9
<b>Countries</b>	48	100.0
<b>Universities</b>	98	100.0



The table above shows that the sample's diversity and size gave the study significant representativeness and a higher possibility for generalizing the results. However, to ensure the validity and reliability of the research survey, a Pearson correlation, Mean, standard deviation, Cronbach's alpha ( $\alpha$ ), and Kaiser–Meyer–Olkin (KMO) tests were computed. Table 2 shows the research survey's validity, reliability, and coherence.

**Table 2. Validity, reliability, and coherence of the research survey**

Dimensions	Macro-system	Exo-system	Meso-system	Micro-system	M	SD	KMO	$\alpha$
Macrosystem	1				3.520	0.979	0.835	0.807
Exosystem	**0.581	1			3.110	0.821	0.726	0.719
Mesosystem	**0.632	**0.602	1		3.390	0.840	0.897	0.864
Microsystem	**0.297	**0.596	**0.403	1	2.595	0.905	0.734	0.697
Overall					3.167	0.890	0.901	0.901

Notes: \*\*  $p < 0.01$ ,  $M$  = Mean,  $SD$  = Standard deviation.

Table 2 shows that each dimension of the ecological theory's four layers has a Cronbach alpha of at least  $\alpha \geq 0.697$  and a KMO  $\geq 0.726$ , all above the commonly recommended value of  $\geq 0.60$ . In addition, the overall coefficient alpha test resulted in a marvelous value of  $\alpha = 0.907$ , While the KMO test for sampling adequacy depicts a meritorious value of  $KMO = 0.901$ , and Bartlett's test of sphericity was significant ( $\chi^2(528) = 5548.484, p < 0.05$ ). In other words, the research instrument meets the standardized criteria of validity, coherence, and internal consistency (Cronbach 1951, Kaiser and Rice 1974).

In addition, the authors invited 15 students from the participants for interviews to collect additional qualitative data. The interviews were transcribed and analyzed using NVivo software version 12. Table 3 further provide detailed characteristics of the qualitative sample.

**Table 3. Demographic profile of the qualitative sample (N = 15)**

Variable	Description	(N)
Gender	Male	9
	Female	6
Degree	Ph.D.	6
	Master	7
	Bachelor	2

Variable	Description	(N)
Source of funding	Scholarship	13
	Self-sponsored	2
Field of study	Business	4
	Natural and applied sciences	8
	Social sciences	2
	Humanities	1

## 5. Results

To begin with, 54.4% of the participants had no other international education before coming to China, while 41.07% had previously studied in China, and 4.53% had studied in other countries. In addition, China was the primary destination for 62.67% of students, while 37.33% have applied to other countries such as (the USA, 14.4%; Canada, 12.53%; the UK, 11.2%; France, 11.2%) before choosing China. Furthermore, among the 67.5% scholarship-funded students, 35.73% were on the Chinese scholarship council (CSC); 18.67% on a university scholarship; 6.13% on provincial scholarship; 4% city scholarship; 3.47% on Confucius Institute Scholarship and only 1.87% on BRI scholarship. Further, 8.27% had other scholarships such as MOFCOM, CRBC, CAS-TWAS, and Youth of Excellent China (YES) scholarships as the source of funding.

### 5.1. Microsystem/ interpersonal layer

The students' immediate environment often consists of their interpersonal relations and interactions with friends, relatives, teachers, and education agents in school, Confucius institute, and cultural centers. As the theory argues, these actors can directly influence students' decision-making through recommendation and/or recruitment. Seven variables were observed and classified in the students' microsystem with a Cronbach alpha of  $\alpha = 0.697$  and  $= 0.734$ . Bartlett's test of sphericity was significant ( $\chi^2(21) = 449.120, p < 0.01$ ). In addition, all variables were significantly correlated, as shown in Table 4.

Congruent with Bronfenbrenner theory and guided by Yu et al (Yu et al 2021) refined model, this study found that the diaspora and alumni who had been or currently being in China were the strongest influencers within the microsystem of students decision-making process to study in China, as exemplified by its mean  $M = 2.89$  and  $M = 2.85$ , respectively. Intriguingly, family or relatives at home were less critical than those currently in China or those who had been there ( $M = 2.81, SD = 1.487$  vs.  $M = 2.89, SD = 1.606$ ). Students relied more on the African diaspora in China for recommendations and guidance to navigate the way to Chinese higher education institutes. The quantitative data also corroborate this finding.

**Table 4. African students' microsystem/interpersonal layer**

Variables	1	2	3	4	5	6	M	SD	KMO	$\alpha$
A relative lived/ studied in China							2.89	1.487		
Alumni of this institution	**0.368						2.85	1.508		
Relatives in my home country	0.098	**0.219					2.81	1.606		
Presentations at my school	*0.106	**0.146	**0.351				2.50	1.575	0.734	0.697
Confucius institute/ Cultural center	**0.135	**0.216	**0.409	**0.474			2.41	1.526		
Education agency	0.036	*0.102	**0.306	**0.380	**0.419		2.39	1.441		
A recruiting agent recom- mendation	**0.250	**0.356	**0.144	**0.156	**0.203	**0.316	2.33	1.483		

Notes: \*\* $p < 0.01$  \* $p < 0.05$ ,  $M$  = Mean,  $SD$  = Standard deviation

*I came to China because I have an uncle who is doing business in Guangzhou, and he frequently comes to China. I want to work in commerce too. So, he helped me with [the] application and visa process. (M1)*

*Actually, my family did not want me to come to China, but because I have a university friend who came to China before me on a scholarship, I also applied to her university and got a chance. (F3)*

In both [M1] and [F3] cases, the diaspora was the main factor in their decision to study in China, though their purposes were different. For [M1], studying in China was only a path to engage in commercial activities following his uncles' footprints, while [F3] came to China for her academic pursuit.

On the other hand, as a nested establishment into African universities under a joint-management framework, Confucius institute<sup>1</sup> is the main means of the Chinese government to introduce Chinese language and Chinese culture to African youth. As expected, the Confucius institute played a pivotal role in introducing the Chinese language and culture, thence attracting African students through presentations and/or recruitment. The university choice for many students was mainly influenced by Confucius institute personnel as one male participant stated:

<sup>1</sup> Note that there are currently 61 Confucius institutes and 48 Confucius classrooms established at African universities. In addition, 30 African universities set up Chinese language departments or Chinese as a major in their curriculum. China sent about 5500 Chinese language teachers and volunteers to 48 African countries (The State Council Information Office of the People's Republic of China 2021).

*“To be honest, I did not have a clue on how to choose a university. The application process was so complicated, and I did not know which university [is] better; so the lady working in Confucius institute helped me submit my application to the university she was working in before... [so] I just chose based on her recommendation!” (M7)*

Therefore, as the PCA results show, it was true to infer that Confucius institute and students’ personnel connections with the African diaspora in China were the principal components in the African students’ microsystem with eigenvalues of ( $\lambda=2.526$ ) and ( $\lambda=1.326$ ), both explaining 55.027% of the total variance. Educational agencies and education agents played a minor role in influencing African students’ decision to study in China perhaps because China has not commercialized its higher education market yet.

### 5.2. Mesosystem/institutional layer

As an extension of the microsystem, the mesosystem consists primarily of the institutional environment and the interconnections within. The services and features of a particular institution, such as education quality, ranking, prestige, size, communication efficiency, and admission process, substantially impact students’ choice. Table 5 demonstrates the correlations, mean and standard deviation of variables within the students’ mesosystem.

**Table 5. African students’ mesosystem/institutional layer**

Variables	1	2	3	4	5	6	M	SD	KMO	$\alpha$
The quality of education							3.85	1.209		
The prestige of a degree/diploma	**0.708						3.70	1.248		
Program availability	**0.518	**0.515					3.66	1.275	0.867	0.849
Attractive conditions for admission	**0.508	**0.445	**0.390				3.40	1.294		
The speed of the admissions process	**0.349	**0.405	**0.445	**0.408			3.38	1.329		
Financial support	**0.348	**0.368	**0.303	**0.410	**0.363		3.31	1.439		
Effective communication	**0.549	**0.561	**0.524	**0.435	**0.516	**0.393	3.26	1.289		

**Notes:** \*\* $p < 0.01$ ,  $M$  = Mean,  $SD$  = Standard deviation

The quality and prestige obtained the highest mean among other institutional factors (combined mean  $M = 3.77$ ), indicating that African students yield more emphasis on quality education from prestigious universities. Although male participants scored higher than females regarding quality and prestige, differences between genders were statistically insignificant  $F(1.373) = 0.18, p = 0.665$ . Additionally, the admission criteria and process to prestigious institutions were salient concerns for students before choosing a particular institution. The availability of desirable programs ( $M = 3.66, SD = 1.275$ ) and attractive admission criteria ( $M = 3.40, SD = 1.294$ ) added to flexible admission process ( $M = 3.38, SD = 1.329$ ) with effective communication with the student ( $M = 3.26, SD = 1.289$ ), all co-contribute significantly to African students' mobility to a particular institution. However, students tend to carefully negotiate quality, cost, and opportunity before applying or accepting an admission offer. African students from humble economic backgrounds tend to lean more to cost-effectiveness even if that meant sacrificing some quality and prestige, as it can be gleaned from (M6) experience:

*“I applied for a top university [for] two times, the first time I was rejected, the second time, I got half scholarship, but I did not take it because life in Beijing is expensive, so after working two years in my country, I applied for this university and got admitted with full scholarship.... Although not the best but still better than universities in my home country.” (M6)*

Noteworthy here is that most scholarship-granting and distribution depend on the university recommendation. Therefore, the amount of financial support offered by the institution through one of the scholarships mentioned above is also a key factor for students to decide which university to attend, though this economic factor would more crystallize in the exosystem. Yet it is worth mentioning that universities' financial support was more important for female students than their male counterparts ( $M = 3.42$  vs.  $M = 3.36$ ), albeit the difference was statistically insignificant  $F(1.373) = 1.12, p = 0.289$ . Nevertheless, it was deduced based on the quantitative data that quality and prestige explained 53.295% of the variance ( $\lambda = 3.731$ ) and therefore was the major component in the students' mesosystem. In other words, the key influential factor in selecting a particular institution.

### 5.3 Exosystem/socio-cultural layer

Well acknowledged in the pull-push model that students are 'pushed' by unfavorable socio-economic conditions in the country of origin and 'pulled' by favorable ones in the destination. In ecological systems theory, the socio-economic and cultural aspects are an extension of the mesosystem. In other words, they reflect the institutional environment of the individual. Table 6 demonstrates the importance of the economic factors, the mass media, and educational services and their influence on students' decision of mobility to China. Table 6 below shows Means, Standard deviation, KMO, and Cronbach alpha  $\alpha$  of the variables consisting of the African students' exosystem.

The affordability of living expenses and the cost of mobility to China compared

to other countries make China a desirable destination for a comprehensive portion of students from humble socio-economic backgrounds. Therefore, it was by no surprise that the availability of financial support under the aegis of various scholarships ranks as the main factor in students' exosystem ( $M = 3.74$ ,  $SD = 1.353$ ).

**Table 6. African students' exosystem/socio-cultural layer**

Variables	M	SD	KMO	$\alpha$
Availability of financial support (scholarships, aid) to study in China	3.74	1.353		
Opportunities to do business with China in the future	3.64	1.376		
The cost of studying in China in comparison to other countries	3.54	1.301		
Opportunities to work and reside in China	3.15	1.458	0.726	0.719
University/College websites	3.12	1.588		
Websites/publications that rank universities and colleges	3.02	1.595		
Online forums and blogs	2.68	1.558		
Chinese embassy	2.65	1.611		
Education fair	2.52	1.537		

Notes:  $M$  = Mean,  $SD$  = Standard deviation

Furthermore, the data shows that the commercial drive of doing business with China in the future was more important than the incentive for migrating and settling in China. This finding implicates that those African students look at China as an opportunity for a brighter and prosperous future; it also foresees even stronger Sino-African economic ties in the future. The economic factor was critically important, as exemplified by its grand mean ( $M = 3.51$ ,  $SD = 0.986$ ). However, males were more economically wise than females, whereas, once again, financial support was more important for females ( $M = 3.58$ ,  $SD = 1.186$ ) than for male students ( $M = 3.49$ ,  $SD = 1.225$ ). The economic drive glares out from the quantitative data as the key component for some participant decision to study in China:

*I study international trade because China is the biggest trade partner of my country.... if I have a degree [from China] and I can speak Chinese, I would have more opportunities to work or do business in China. (M4)*

*For me, I just study [to get] the language to be able to help my family find some products or ask Chinese factories about what we are looking for, and because I would work with my brother in Yiwu city later. (M8)*

Furthermore, the media presence in our quotidian life and its role as a communicative environment (Madianou and Miller, 2013) and a source of information (Westerman et al 2014) presume its climacteric capacity of shaping students' decision-making. The data shows that universities websites were the primary digital source of information, followed by publications and websites that rank universities such as Times higher education, QS world university ranking, Shanghai ranking. Students also relied on online forums and blogs on Quora, Reddit, Facebook, and Instagram to gather more information from current or former students. Whereas information provided by the embassy or education fairs was of trivial use. Comparatively, the media's impact ( $M = 2.93$ ,  $SD = 1.254$ ) was higher than students' interpersonal connections ( $M = 2.84$ ,  $SD = 1.066$ ), the difference was statistically significant  $F(1,373) = 6.16$ ,  $p = .013$ ). Yet, females tend to depend more on media sources while males depend more on their personnel connections. Some participants articulated:

*You hear [China] every day in the media, when I was searching for universities in Europe online through ranking websites, I also saw some Chinese universities. I just applied to two universities and luckily got one admission, and because life in China is cheaper, [so] I decided on China. (F4)*

*It's important to know what others think about studies in China before you come. I was hesitant. Some blogs and YouTube videos talk about racism against Africans, but I still come because I want to see myself. (M2)*

For the participant [F4] and many others, applying to China was in part serendipity, and the other part was the last resort. The high cost of mobility added to tuition fees in Europe and North America prevents more and more African students from continuing their higher education in these destinations. The generous scholarship package whereby China offers 40% of all scholarships offered to sub-Saharan Africa eases the tremendous economic burden for students with limited financial abilities.

It can be inferred that although African students rely on the internet as a source of information, they treat the information carefully before making their decision. Nevertheless, both the media ( $\lambda = 2.823$ ) and the economic factors ( $\lambda = 1.910$ ), as principal components of the exosystem, explained 52.59% of the total variance and were significantly correlated with  $r = 0.279$ ,  $p < 0.01$ . To put it differently, economic factors (i.e. cost of living, scholarship availability, and post-graduation opportunities) alongside the media influence (viz., ranking websites and publications) were binomial determinants in the students' exosystem.

#### 5.4 Macrosystem/global layer

Since the reform and opening policy, China embarked on a journey for economic development to catch up with the west and lift its population out of poverty. As a result, China has achieved remarkable results in all terrains within the last four decades. For African students, China is an example to follow for economic and social development.

With that being said, Table 7 unsurprisingly shows that the Chinese economic growth and China’s world status had the highest impact factors within the entire ecological system of the African students with  $M = 3.89$ ,  $SD = 1.239$ .

**Table 7. African students’ macrosystem/global layer**

Variables	1	2	3	4	M	SD	KMO	$\alpha$
China’s reputation as a safe country					3.89	1.239		
China’s political and social stability	**0.520				3.84	1.264	0.835	0.807
The reputation of the’ education system	**0.532	**0.519			3.38	1.307		
Economic growth world growing status	**0.554	**0.474	**0.455		3.29	1.340		
Ease of getting a Chinese study visa	**0.356	**0.395	**0.395	**0.374	3.20	1.366		

**Notes:** \*\* $p < 0.01$ ,  $M$  = Mean,  $SD$  = Standard deviation

Moreover, as many African countries lack social and political stability, China’s social stability and reputation as a safe country were of special importance, especially for females, as exemplified by its mean ( $M = 4.02$ ,  $SD = 1.178$ ), and significant level  $F(1.373) = 4.086$ ,  $p = 0.044$ . Consequently, safety and stability explained 56.823% of the total variance as the principal component ( $\lambda = 2.841$ ) in the student’s macrosystem. In the meantime, African youth also consider the reputation of the education system and the visa policy of the destination country. Therefore, it was established that China’s economic achievement and social stability were the backbones of its soft power to attract African students. The qualitative data also substantiate this finding.

*It’s very hard to get study opportunity in Europe or America, they have a lot of requirements.... Also, it is hard to get a visa, sometimes even if you have admission. Not like China, they don’t ask for more requirements or high GRE, GMAT or other exam scores. (M9)*

*You know China is becoming more and more important in the world. Soon it would become [the] first economic power and maybe even superpower. So, it is good to be allocated here. I also think China is safe and well developed. That’s why I continued my studies here. (F5)*

*Studying in Europe or America is no longer a fashion; I think the cost is too high, it does not worth it. Studying in China is more affordable and can help open more opportunities because China is becoming the biggest economy in the world. (M3)*



Furthermore, Bronfenbrenner later included the chronosystem that encompasses the concept of time and major events that occur and influence a person's life. In this vein, the Chinese 'going out' policy and the aim to internationalize Chinese higher education institutions under multi-national projects and frameworks, e.g. FOCAC, BRI, and 20 + 20 program, are major historical events that significantly co-contribute to the recent increase of African students' mobility to China. Furthermore, on every session of FOCAC meetings, China makes new pledges under the human capital development section for African countries. For instance, in 2018, China promised 50,000 scholarships to African students for 2019–2022, an increase of 20,000 on the previously awarded scholarships (Lefifi and Kiala 2021). In addition, the Chinese strategy for deepening reform and opening-up added to the recent Built and Road Initiative boosted and spurred the international students' mobility to China (Bhandari and Blumenthal 2011).

## **6. Discussion**

This study shows that mobility per se was not an innate idea but rather an outcome of influential factors in the students' environments. In a globalized world where students respond to international events more interactively than ever before, thanks (in part) to the media role, the global layer had the utmost influence in raising African students' interest in China. The looming opportunities on the horizon of China's rise in the global scene made most of them jump on the bandwagon and join their peers in the pursuit of their own Chinese dream. To some, the mobility to China was a strategic choice (i.e. preparatory stage for future opportunities); to others, it was the choice of last resort, if not only a stepping stone towards mobility to Europe or North America. In this respect, our study aligns with previous studies (Brown 2012, Gbollie and Gong 2020, Lei et al 2021, Mulvey 2021) and argues that each African student sees mobility to China as a *modus operandi* to achieve their personal aspirations in which economic gains were overt.

Furthermore, the diaspora or social network role was notable in increasing education mobility (Beech 2015, Li et al. 2021), and the role of family and peers, congruent with Bronfenbrenner's theory, was apparent (Bronfenbrenner 1979). However, the family influence was not decisive compared to their Chinese peers, whereby studying abroad is a family project; hence, family influence is paramount (Diana and Wen 2013). Nonetheless, African students' dependency on diaspora and personnel connection posits an inherent cultural trait expressed by the African proverb, "If you want to go far, go together".

The maxim mentioned above is often quoted by Chinese leaders when emphasizing the common destiny of the Sino-African people. In this respect, the amount of financial support provided by multi-governmental levels in the form of grants or scholarships is but to demonstrate the Chinese dedication to achieve the vows and commitments made in the previous sessions of the FOCAC summits (King 2014). In any case, the generous financial support unraveled the economic

perturbations for 67.5% of participants in this study and was a key institutional factor in choosing China as a study destination (Hodzi 2020, Lei et al. 2021). However, the role of the scholarship package will not be exaggerated. African students yield more emphasis on the quality and prestige of the targeted institution before they compete for a scholarship opportunity. This suggests two points: one is that scholarship is a complementary magnet of the institution; two is that African students highly regard their chosen university's ranking and reputation. In this point, our study illustrates a commonality between African students and Chinese students who are less driven by cost and more motivated by the taken-for-granted university's status based on its ranking (Cebolla-Boado et al 2018).

For all that, the economic growth and China's steadily growing world status were the most pulling magnet for African students at the macrosystem level instead of the exosystemic dimension. African students are aiming to capitalize on their study in China for future economic gain, as demonstrated by their willingness to do business with China or work and reside in the country. In this respect, they resemble their Chinese peers, who also see mobility as a tool to maintain and maximize their social advantages (Yang 2020). In the same vein, this study corroborates Haugen's finding of stronger potential Sino-African economic ties, as more and more African students turn 'traders' (Haugen 2013).

## **7. Conclusions and implications**

All in all, the idea of mobility to China is influenced by multi-layered and multi-dimensional systems. This study found that relatives and/or African diaspora in China and Confucius institute were the key influential factors in the students' microsystem. The second circle of the African students' environment was concerned with the institutional factors in which students, especially graduates, yielded more weight on the quality and prestige of their targeted institution. The third layer reveals that economic factors such as cost of mobility, business and work opportunities, and the availability of financial support were decisive factors for students to decide on a particular university. In the meantime, the media stream surrounding China's rise and its relationship with African countries played a significant role in raising the African students' interest in mobility to China. What is more, digital media, such as ranking websites and publications, was among the primary sources during their information-gathering stage. The final layer of this study concludes that China's remarkable economic achievements, alongside its reputation as a safe and stable country, were the most influential macro-level factors that fascinated and spurred African students' flow to China and Chinese higher education institutions.

This study highlights implications for various stakeholders to take evidence-based interventions. First, understanding the role of the individuals' environment enables governments in the sending countries to take appropriate measures (e.g. providing quality education, better career prospect, and more investment in their higher education sector) to prevent the 'brain-drain' phenomenon. Second,

receiving countries (China) could capitalize on their current attractive factors while ameliorating the weakest points in their attraction. For instance, the current African diaspora, especially students, are China's gate to more potential applicants in the future. Therefore, both government and university authorities must ensure a better impression and experience for those sojourners. Third, for universities and student affairs, comprehending what motivated students to choose their institutions would allow them to adapt a better recruitment strategy to attract the right candidates to the right programs. To illustrate, universities should maintain an efficient presence in the digital world and provide communication channels with potential applicants to avoid misinformation and dissatisfaction upon enrollment. In short, grasping the interplay of the aforementioned layers would allow all stakeholders to modulate or even engineer the propensity of international students' mobility.

However exploratory, this study adds valuable literature to the still sparse research on African international students and provides useful insights into international students' mobility to China as an emerging destination. Besides, the research seems to indicate that for many African students, studying abroad in China is more of a wager on China becoming the superpower in the 21st century. Not to mention that the sustainability of this trend would be contingent on the continuity of the financial support provided by Chinese HEIs on the one hand and the satisfaction of current students on the other hand. The high expectations and pursuit for quality and prestige pose plenty of research questions on the current students' satisfaction with learning and living in China, especially during the Covid-19 pandemic. Future research in these areas would have a significant academic contribution.

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