Mechanisms Driving China-Pakistan Higher Education Cooperation

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Abstract: This study, grounded in educational ecology and stakeholder theory, explores the driving mechanisms behind higher education cooperation between China and Pakistan. It discloses the key factors influencing the higher education collaboration between the two countries and the challenges they are facing. The research reveals that China-Pakistan higher education cooperation is built upon political trust, economic mutual benefit, and cultural exchange. However, challenges such as political instability, security issues, financial constraints in Pakistan, and cultural differences between the two nations pose obstacles to their collaboration, particularly limiting the scale of Pakistani students studying in China due to economic constraints. From the perspective of educational ecology, China-Pakistan educational cooperation is influenced by various factors such as national policies, economic development, and cultural exchange, demonstrating the dynamic interaction between the education system and the external environment. Stakeholder theory clarifies that Chinese universities aim to enhance their influence and attract Pakistani students through cooperation, while Pakistani universities focus on improving educational quality and research standards through collaboration. Teachers and students, as direct beneficiaries of the cooperation, seek knowledge sharing, academic enhancement, and career development. This study provides an in-depth understanding of the complexity of China-Pakistan higher education cooperation, offering theoretical foundations and practical guidance for further deepening cooperation between the two parties. Future collaborations necessitate comprehensive consideration of the demands and expectations of stakeholders while overcoming existing challenges to achieve sustainable development.

Keywords: Educational Ecology, University Stakeholders, Higher Education Cooperation

1. Introduction

The "China-Pakistan Economic Corridor (CPEC)" was proposed by Former Chinese Premier Li Keqiang during his visit to Pakistan in May 2013, aiming to advance and deepen cooperation between the two countries in areas such as energy, security, and economics, to strengthen mutual connectivity, and to promote joint development. The "China-Pakistan Economic Corridor" project is a key component of pragmatic cooperation between China and Pakistan, contributing to the joint construction of "a community of shared destiny". Establishing "a community of shared destiny" between China and Pakistan particularly relies on the foundational role of higher education, providing intellectual support and talent assurance for China-Pakistan cooperation [1]. In 2015, China and Pakistan elevated their strategic partnership to an "all-weather strategic partnership", highlighting the strategic significance of advancing cooperation in higher education to consolidate the profound friendship between the two countries.

Higher education cooperation constitutes a complex ecosystem involving various levels of national, organizational, and individual stakeholders, including governments, universities, teachers, and students. This article constructs a theoretical framework based on educational ecology and stakeholder theory to analyze the driving mechanisms of different stakeholders in China-Pakistan higher education cooperation, examining the motivations and challenges encountered during the collaboration process, and ultimately offering advice for China-Pakistan higher education cooperation.

2. Research Background

2.1 Educational Ecology

The introduction of ecological theory into education can be traced back to the 1930s when Willard Waller proposed "classroom ecology" in *The Sociology of Teaching*. In the 1960s, Eric Ashby and others further integrated educational theory with ecological theory, advocating for "the ecology of higher education". In 1976, American scholar Lawrence Arthur Cremin formally introduced the concept of "educational ecology." Simultaneously, John Eggleston in the UK published "*The Ecology of the School*," which focuses on the distribution of educational resources, marking the formation of educational ecological theory.

Educational ecology is the science of studying the relationship between education and the overall ecological environment (social, spiritual, natural) [2]. Recent western educational ecological research is categorized into three main directions: regional ecological research, school ecological research, and classroom ecological research [3]. In the 21st century, Chinese mainland's research on educational ecology has emerged, exhibiting the trends from macro to micro and from theory to practice. Major research themes include educational ecological balance, educational ecological systems, and applied research using ecological principles and methods^[4]. For instance, Hu Chunlei (2013) applied higher education ecological theory to analyze issues in talent cultivation models at universities^[5]; Hu Ping (2011) proposed that changes in the institutional environment and technological environment brought about by economic structural adjustments would affect the educational philosophy, organizational structure, as well as management and disciplines of higher education^[6]; Yang Lei (2018) analyzed environmental changes and actions of universities under the background of "Double World-Class" from an "environment-community" perspective^[7].

2.2 Stakeholder Theory

The concept of stakeholders was first proposed by the Stanford Research Institute in 1963^[8]. Economist Freeman provided a classic definition of "stakeholders," stating that they are individuals and groups who can influence the achievement of an organization's goals, or who can be affected by the process of achieving those goals^[9]. Then stakeholder theory has been gradually introduced into various disciplinary domains including management, business ethics, law, and sociology. Domestic and foreign scholars have also extensively employed this theory as an analytical framework in higher education.

Higher education institutions involve various stakeholders which can be categorized based on their importance and influence on these institutions. Hu Zixiang (2006) classified stakeholders of universities into three types: Definitive Stakeholders such as government departments, teaching-oriented faculty, researchers, and students; Expectant Stakeholders as exemplified by sponsors, and evaluation organizations; and Latent Stakeholders including high school students, families, communities, businesses, alumni, and media^[10]. Definitive Stakeholders, namely the government, teachers, and students, have a significant impact on higher education institutions. Government acts as a policy maker and fund provider, guiding and intervening in the operation of higher education institutions from a macro perspective. Teachers assume responsibilities encompassing teaching, research, and social services in higher education institutions, while students constitute the foundation of higher education institutions. Therefore, government, teachers, and students are the stakeholders most closely related to higher education institutions.

2.3 Theoretical Framework

This study establishes an integrated framework based on educational ecology theory and stakeholder theory to provide multidimensional and complementary perspectives, enhancing the theoretical applicability. Firstly, educational ecology primarily examines the relationship between educational ecological systems and external environmental factors from a macroscopic perspective, aiding in the comprehension of how educational cooperation between China and Pakistan is influenced and constrained by environmental factors. As an independent ecological system, universities are subsystems of social-ecological systems, influenced by factors such as politics, economics, and culture [11]. For example, international cooperation of universities needs to comply with policies of national education administration departments, while also being affected by policies of other national departments such as culture, technology, immigration, trade, employment, and culture [12]. Secondly, government, teachers, and students are the stakeholders with the closest relationship to higher

education institutions. The support or opposition of stakeholders to universities' internationalization efforts may have an impact on their action plans, which in turn may influence their strategic decisions [13]. Stakeholder theory analyzes the mutual influences between organizations and individuals from a relatively micro perspective, emphasizing the coordination of interests and conflicts within collaborative projects. Finally, China-Pakistan higher education cooperation emerges as a multifaceted cross-border and cross-cultural endeavor, intricately entwined with diverse environmental factors and numerous stakeholders. Given this complexity, reliance on a single theoretical framework may not provide a thorough understanding. Therefore, this study integrates educational ecology and stakeholder theory to analyze the driving mechanisms, challenges, and opportunities of China-Pakistan higher education cooperation, providing theoretical support for formulating effective cooperation strategies and policies.

3. Research Methodology

This study employs a mixed methods approach, integrating qualitative interviews and document analysis, to comprehensively understand the complexity and diversity of Sino-Pakistani higher education cooperation from multiple dimensions. By synthesizing these methods, the study aims to elucidate the key factors facilitating or impeding higher education cooperation between the two countries.

3.1 Qualitative Interviews

Qualitative interviews constitute the cornerstone of this study, aiming to gather in-depth insights and firsthand experiences from respondents. The researchers conducted eight semi-structured interviews, involving five Chinese and three Pakistani university administrators, faculty members, and students. Table 1 summarizes these interviews. These interviews sought to understand the objectives and background of Sino-Pakistani higher education cooperation, collaborative projects, and challenges encountered during collaboration, evaluation of cooperation outcomes, and prospects for future collaboration. Open-ended questions were utilized to encourage participants to freely express their viewpoints and share experiences. Interviews were conducted in both online and offline formats. All interviews were recorded with participants' consent and subsequently transcribed for data analysis.

Interview	University	Title	Duration (minutes)	Form
1	Chinese University 1	Director of Admission Office	58	Online
2	Chinese University 1	Former Dean of International Education College, Professor	38	Online
3	Chinese University 1	International Student Advisor	70	Offline
4	Chinese University 1	Associate Professor, Director of Innovation & Entrepreneurship Center	75	Offline
5	Chinese University 2	Professor	44	Online
6	Pakistani University 1	Student	42	Online
7	Pakistani University 1	Associate Professor	46	Online
8	Pakistani University 2	Assistant Professor	33	Online

Table 1: Interview Sample.

3.2 Document Analysis

In addition to interviews, document analysis is employed in this study. The researchers reviewed relevant websites of Chinese and Pakistani government departments, official websites of universities where respondents are affiliated, and academic journal articles to collect official information, policies, and previous research findings related to China-Pakistan higher education cooperation, complementing and validating interview data.

3.3 Data Analysis

This study integrates and analyzes qualitative interview data with documentary data. By conducting comparative analysis, the study identifies the consistency and discrepancies between different data

sources, thereby enhancing the reliability of research conclusions. Furthermore, the mechanisms of China-Pakistani cooperation in higher education are discussed through an integrated application of educational ecology and stakeholder theory.

This study strictly adheres to research ethics principles, ensuring the confidentiality and anonymity of all interview participants. Proper citation of all sources and respect for intellectual property rights are ensured when collecting and utilizing documentary materials.

4. Analysis of Driving Mechanisms: Integrating Ecological Education and Stakeholder Perspective

4.1 Environmental Factors of Higher Education Cooperation

According to the theory of ecological education, the educational ecosystem is a subsystem within the social ecosystem [14]. China-Pakistan higher education cooperation is influenced by various political, economic, and cultural factors of both countries.

Politically, Pakistan was the first Islamic country to recognize the People's Republic of China and establish diplomatic relations with it. The stable development of bilateral relations, especially since the 21st century, with frequent high-level exchanges and enhanced political mutual trust, has laid a solid foundation for cooperation in education. However, Pakistan has long faced political instability and terrorist attacks, posing a challenge to the sustainability of China-Pakistan higher education cooperation [15].

Interviewee 3

"Our college once organized a study tour to Pakistan for Chinese students, but due to concerns about safety from both students and parents, it was ultimately called off."

Economically, the developmental challenges within Pakistan's economy may hinder the advancement of higher education cooperation between China and Pakistan to a certain extent. Pakistan has limited investment in higher education. From 2012 to 2019, the proportion of Pakistan's education budget to GDP averaged about 2.2%, and the proportion of higher education budget to GDP averaged about 0.25%^[16]. Strengthening international cooperation has become a way for Pakistani universities to attract international resources.

Interviewee 5

"The financial challenges also serve as a motivation or method for them to strengthen external cooperation."

Alternatively, due to insufficient family financial capacity, Pakistani students have to secure government or university scholarship support in order to pursue their education in China.

Interviewee 7

"They were funded on their own and so totally paid by themselves. Though the program was certainly quite subsidized by XXX as well, there were certain things which were subsidized like transportation like many other things. Still, it was challenging for some students. So in my 4th iteration, we were not able to bring the students to Shanghai because of, I would say, 3 or 4 students who were unable to find certain funds to fund themselves."

Cultural differences between China and Pakistan are demonstrated in various aspects such as religions, customs, language, and educational ideologies. Take religion, for instance; China is a multi-religious country but is largely influenced by Confucianism. Pakistan, on the other hand, is an Islamic state where religion plays a significant role in society, profoundly influencing education and social life. Chinese respondents suggest that Chinese students in Pakistan might face difficulties adapting to customs and lifestyle differences. But the interviewees from Pakistan believe that while there are indeed cultural differences between China and Pakistan, they are not the key factors hindering international cooperation.

Interviewee 7

"Because whether you go to China or any other part of the world, certainly, there are cultural differences, so it is but natural to be open to different cultures, right?"

Although the primary focus of the China-Pakistan Economic Corridor (CPEC) is economic

development, it also plays a crucial role in promoting cultural exchanges and mutual understanding between China and Pakistan. According to the interviewee, after the initiation of the CPEC initiative, there has been a notable increase in the interest of Pakistani students towards Chinese culture and the Mandarin language.

Interviewee 7

"But After CPEC, somehow, or I have seen that a there is a special interest of our students in China. For example, I've shown them a video of Three Gorges Dam in 2010, and I've shown the same video in 2017. I saw a complete difference. They were quite attentive, and they were quite open to even the sound of the language, the Chinese language."

4.2 Stakeholder Perspective

Cooperation in higher education between China and Pakistan has long been actively supported and encouraged by their respective governments. The Chinese government positions educational cooperation as an integral component in advancing the "China-Pakistan Economic Corridor," establishing platforms for cultural exchange mechanisms such as the China-Pakistan Economic Corridor University Alliance. Additionally, research institutions like the China-Pakistan Earth Sciences Research Center and the China-Pakistan Intelligent Systems Laboratory have been established, along with the provision of scholarships and research funds, to facilitate academic exchanges and collaboration between educational institutions and scholars from both countries. Despite facing financial challenges, the Pakistani government, in certain collaborative projects, still matches the financial support provided by China, thereby jointly funding educational and research initiatives under the China-Pakistan cooperation framework.

Interviewee 5

"As for cooperation with China, I think they are fully supportive because once they get this project, they still have to match the funds, and this money is not insignificant to them."

For Chinese universities, the primary motivations for collaborating with Pakistani universities include: Firstly, enhancing the influence of Chinese universities. This is achieved through student and faculty exchanges, co-hosting academic conferences, and collaborative scientific research, among other means, to elevate the international reputation of Chinese universities. Secondly, attracting Pakistani students to study in China, thus providing local students with opportunities for localized internationalization.

Interviewee 3

"We hope to enhance the influence of our college in Pakistani universities through short-term projects with Pakistani universities, thereby attracting more Pakistani students to study here."

Pakistani universities mainly aim to provide a platform for Pakistani teachers and students to understand China, and enhance academic standards and international perspectives through cooperation with Chinese universities.

Interviewee 7

"If Chinese schools are AACSB-accredited business schools, our faculty would be delighted to interact with them and understand their teaching standards."

It is undeniable that both China and Pakistan face their own problems and obstacles. Chinese universities confront the challenge of allocation of funds and resources. If the internationalization of universities remains a mere slogan, without any financial support, it will inevitably affect the willingness of schools to participate in internationalization. It is pointed out that Pakistani universities lack autonomy in teaching and research, which is also confirmed by the interviewee.

Interviewee 1

"Junior staff members do not have decision-making power. And if the Chinese university does not have connections with leaders of the Pakistani universities, it is difficult to launch a program."

While Pakistan's higher education development lags behind China's and has limited academic appeal to Chinese universities, Chinese and Pakistani interviewees agree that they benefit from knowledge sharing. Several Pakistani interviewees indicate that collaboration with Chinese researchers has enhanced their academic capabilities and research standards.

Interviewee 8

"As a professional, I learned a lot of things like how we managed the field experience, how we lead a team, time management, and how we can write for different grants. And even due to this project, I won many grants in Pakistan, and still I am working on these grants. Actually, this project is, like, we can say the start of my academic career. And now I am feeling that I became who I am that is due to this study and this project' contribution."

Both Chinese and Pakistani students have apprehension regarding the cultural disparities they may encounter in cooperative exchanges. Nonetheless, Pakistani students care more about the academic enhancement and career development opportunities that may arise from such exchanges.

Interviewee 6

"But after taking the course with XXX, I feel the instructor took us through these skills to research, to write reports, to basically give presentation in a very different style. So basically, these skills were very valuable to me. Now, I started using them in other courses as well. I achieved good grades in more courses as well, just because of gaining these skills."

Interviewee 7

"For example, there was one student, I know who got a job in one of the banks in Pakistan that was going to open a branch in China. This student was only hired in that bank because he has good exposure of China, only because he has visited once as well as we pushed him to do that homework."

5. Discussion and Conclusion

According to educational ecology, the education system is considered a component of the social system, influenced by various factors such as politics, economics, culture, and more. Previous studies on China-Pakistan higher education cooperation have predominantly concentrated on universities, neglecting the impact of external environmental factors. By introducing ecological theories of education, the China-Pakistan higher education cooperation is examined within the broader context of the social system, facilitating a more comprehensive analysis. Politically, Pakistan's unstable political situation and security issues significantly affect the progress of China-Pakistan cooperation projects. Pakistan's financial difficulties and insufficient family economic resources for students hinder China-Pakistan higher education cooperation primarily for economic reasons. Although cultural differences are considered by teachers and students from both China and Pakistan, they do not emerge as the main obstacle to their participation in cooperation.

The stakeholder theory emphasizes the necessity for organizations to consider and achieve a balance between the needs and expectations of various stakeholders. Previous studies on the collaboration between China and Pakistan in higher education have primarily approached the topic from the viewpoint of individual entities, overlooking the diverse demands of multiple stakeholders. Conflicting interests among stakeholders, however, are the key barriers to cooperation. This study reveals that, firstly, Chinese universities aspire to augment their influence via collaboration with Pakistan, attracting exceptional Pakistani students to pursue studies in China. Nonetheless, Pakistani families frequently encounter difficulties in meeting tuition and living costs, while the financially constrained Pakistani government grapples with obstacles in providing enduring funding. Secondly, the Pakistani government and universities seek to leverage collaboration to attract external resources, bolstering their own disciplinary development and talent cultivation. Nevertheless, the academic appeal of Pakistan is limited. Despite the fact that Pakistani teachers and students may be enthusiastic and optimistic about China-Pakistan cooperation, their Chinese counterparts show relatively modest interest in participating in such collaboration.

Therefore, two recommendations are proposed for the future higher education cooperation between China and Pakistan.

- 1) In the planning of collaborative projects, it is crucial to take into account the diverse needs and expectations of all stakeholders involved, such as governments, universities, faculty, and students. This approach may help to ensure mutually beneficial cooperation while encouraging more participation and engagement.
- 2) Efforts are supposed to be made to reconcile the conflicting interests and challenges encountered in cooperation. For instance, to address the economic burden of Pakistani students, the Chinese

government can provide increased scholarship support. Similarly, as for the issue of low interest among Chinese personnel in collaboration, sustainable funding support could be provided, which is likely to encourage the academic collaboration between Chinese and Pakistani faculty.

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