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Research Article

Perceptions, Challenges, and Opportunities of Chinese Language Learning in Punjab and Sindh, Pakistan: Exploring the Role of CPEC

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China-Pakistan Economic Corridor (CPEC) projects and Confucius Institutes in Pakistan encourage Chinese language (CL) learning for education, jobs, and other activities. The study explores CL learners' attitudes, obstacles, and motivations in Punjab and Sindh, Pakistan, and the CPEC's role in promoting CL education. The research uses a mixed-methods approach to obtain quantitative and qualitative data. The data collection comprised a 5-point Likert scale study with 19 closed-ended and two open-ended questions. Results suggest that both provinces' students favor CL learning. However, the Mann–Whitney *U* test indicates Sindh learners' perspectives, and motivations differ significantly. They generally support CL learning but express concerns about their local language and culture, leading to resistance against foreign language influence in their province. The study illuminates' student attitudes, obstacles, and motivations in Punjab and Sindh CL learning. The research also explores the potential impact of CPEC on CL education and identifies postproficiency opportunities for learners. These findings influence educational policymakers, language educators, and stakeholders in Pakistan to encourage CL learning. Ultimately, the research is aimed at enhancing CL education in Pakistan, enabling learners to benefit from language proficiency in the context of growing socioeconomic ties between Pakistan and China.

1. Introduction

Language matters encompass not only grammar but also the societal consequences of community, ethnicity, politics, and the economy. Therefore, when considering language as a symbol of governmental prestige, it is crucial to take into account its political, social, and economic implications [1, 2]. With the increasing demand for multilingual and highly skilled foreign language professionals due to globalization, higher education institutions play a vital role in meeting this demand. Foreign languages are learned for various purposes, such as education, business, and employment. While English has traditionally been considered the lingua franca, the economic stability of China and the China-Pakistan Economic Corridor (CPEC) initiative have led to a surge in CL learners worldwide, including in Pakistan [3].

The global phenomenon of "Mandarin Fever" gained momentum after China implemented its soft power policy and engaged in educational, cultural, and economic exchanges with other countries. This led to the establishment of CL institutes and Confucius Institutes (CIs) around the world. China strategically utilizes soft power to achieve its goals, and promoting CL is a significant aspect of its strategy [4]. The Ministry of Education emphasizes that teaching Chinese as a foreign language is aimed at promoting Chinese culture and language, enhancing political and economic associations, and asserting China's international supremacy [5]. Although English remains the predominant global language, Chinese as a foreign language

has garnered increasing attention and influence on the international stage.

China's deepening contribution and collaboration with Pakistan's economy have also had an impact on education [6]. The CPEC, initiated by both governments in 2013, has resulted in a noticeable increase in the number of CL learners, making Chinese the popular foreign language in Pakistan. Urdu serves as the national language and English as the official language of Pakistan; there is no independent language policy beyond the constitution. However, references to language policy can be found in legislative declarations and educational policies. Pakistan has a linguistically diverse population, with 73 different dialects, and a total of 66 languages excluding similar ones [7].

English holds significant importance as a powerful communication tool in both domestic and international contexts, playing a crucial role in Pakistan's education system from schools to colleges and universities. Following the initiation of CPEC, numerous educational institutions have started offering CL courses and promoting its learning. Proficiency in CL has become an attractive skill for job opportunities within CPEC. Many public and private institutes in Pakistan play an active and significant role in promoting CL. Along with Chinese universities, CIs have also collaborated with Pakistani universities. The government of Pakistan has established CIs with the assistance of the Chinese Ministry of Education for CL promotion. In April 2005, the first CI of Pakistan was founded at the National University of Modern Languages (NUML), Islamabad. The tremendous economic prospects brought about by CPEC have increased Pakistani interest in learning CL and culture. Two CIs were present before the CPEC, and after the initiation of the CPEC, three more have started in Pakistan [8]. CL instruction received a significant change during the COVID-19 epidemic. The pandemic did create difficulties, such as the change to online learning, it also gave people the chance to begin or continue their distant CL learning. However, due to the significance of CPEC, there remained a demand for those with CL expertise. Pakistan's Higher Education Commission [9], whose vision plan calls the CPEC a "game changer," emphasizes the necessity for higher education institutions (HEIs) to generate competent individuals for this huge project. The Minister of Federal Education and Professional Training stated that 28 HEIs initiated CL courses for 50,000 students in 2017 with the goal of doubling enrollment by 2018 [10]. More than 25,000 CL learners in Pakistan imply a strong increase; however, this aim has not been met [6]. The first CL department in NUML began with 13 students in 1970, then raised up to 460 CL learners in 2017. After the CPEC announcement, NUML officials claimed a 300% increase in course enrollment from 50 to 200 students at each level on October 13, 2019 [10].

Both Pakistan and China are taking steps to overcome language barriers. Chinese universities and CIs have collaborated with Pakistani universities to teach CL. Among the Pakistani population, various programs for CL promotion have been introduced. As a result of the impacts of CPEC projects, the Government of Pakistan has made CL teaching compulsory from grade six onward in all schools in the Sindh province [11–13]. In the Punjab province, some universities have introduced Chinese as a mandatory course, and certain private schools have included Chinese in their curriculum. However, there is resistance from individuals in different areas of Pakistan who oppose the addition of any foreign language to their culture.

Previous researches have primarily scrutinized the responses of CL learners in a singular institution or region [11] or concentrated on the instructional approaches employed by CL instructors in particular regions [10]. However, these studies have neglected to investigate the attitudes and behaviours of learners towards CL learning and promotion [14]. The current study is aimed at addressing the research gap identified in prior literature. The examination and comparison of the perspectives of CL learners from two distinct geographical regions in Pakistan with regard to their view of CL learning, promotion, and motivations are the novelty of this research.

A mixed-methods research design has been adopted to evaluate the perspectives of CL learners in Pakistan. A 5-point Likert scale closed-ended questionnaire along with two open-ended questions was used to find out the learners' perceptions. The findings demonstrate a growth in CL learning and advancement in Pakistan since the start of CPEC, which has led to more opportunities for employment for CL experts. Furthermore, compared to their counterparts in Sindh province, CL learners in Punjab province exhibit a noteworthy propensity to support and promote CL education, according to the data analysis. This study also seeks to comprehend the determinants that motivate learners to persist in their CL education and investigate the influence of the CPEC on fostering language learning in Pakistan. Additionally, it endeavours to identify and address the challenges encountered by language learners. CL instructors and professionals ought to collaborate together to develop a culturally relevant curriculum and training for the career preparedness of the learners. Government-industry partnerships and language awareness initiatives can use evidence-based CL education programs for its promotion.

2. Literature Review

2.1. Influence of Chinese Language. CL has a large number of native speakers and learners worldwide [15]. It is taught as a foreign language both in China and internationally, with the number of learners increasing steadily [16, 17]. This emphasis on teaching Mandarin to nonnative speakers began in the late 1900s when China focused on enhancing its soft power [18]. The Chinese government initiated various cultural programs, establishing CIs and language institutes abroad to strengthen cultural diplomacy [19]. As a result, the phenomenon known as "Mandarin Fever" spread globally, leading to the establishment of CIs and Confucius Classrooms [18]. China's collaboration with Pakistan through the CPEC further deepened their economic and educational ties [6, 20, 21]. Given the linguistic and cultural differences between the two countries, learning each other's language has become crucial [22].

In acknowledgment of the Belt and Road (B&R) Initiative, the Ministry of Education of China has developed a comprehensive structure to promote CL [23, 24]. Universities have

also actively contributed by publishing counseling information to promote CL in B&R countries [23, 25]. The Ministry of Education's report reveals that approximately 70 countries have incorporated CL into their education systems, and 180 countries are engaged in CL learning and promotion, with over 25 million CL learners worldwide. Additionally, CL has been designated as the official language of the United Nations World Tourism Organization [26].

To promote CL internationally, CIs, Confucius Classrooms, government-supported and voluntary teachers [27], and Chinese proficiency tests play key roles [28]. Chinese, as a foreign language, has gained significance in the fields of education and research [29]. The CIs, established in 2004, are nonprofit public organizations under the oversight of Hanban, an organization connected to the Chinese Ministry of Education. Their objectives include enhancing international understanding of China, fostering educational and cultural cooperation, and creating a multicultural world by promoting CL and Chinese culture overseas. The Confucius Institute network comprises CIs, which collaborate with colleges and institutions, and Confucius Classrooms, which partner with secondary schools [30].

2.2. Global Expansion of Chinese Language Education. The ongoing growth of the Chinese economy and the support provided by Hanban have incentivized numerous countries to establish CL institutes and promote the language within their borders. While some countries have experienced a decline in the popularity of CL due to political issues, many Asian nations remain enthusiastic about CL learning. Indonesia, for instance, recognizes CL as the sixth foreign language taught in universities, with its ranking steadily increasing over time. The government of Indonesia officially introduced CL education in 2000, allowing universities to offer CL courses and administer the CL proficiency test (HSK). Currently, there are eight CIs and approximately 30 universities in Indonesia offering CL courses [31].

Similarly, Japan has witnessed a rapid increase in the demand for CL learning. Chinese is considered the primary foreign language, an optional language for certain school entrance exams, and is offered as a subject in nearly all universities. Among the foreign languages taught in Japanese high schools, Chinese ranks at the top, with 497 schools teaching it as a foreign language [26].

Beyond Asia, CL is also gaining popularity in the UAE. The first CI in the Arab world was established in Dubai in 2011, followed by the opening of other language institutes in Bahrain and Abu Dhabi [32]. These CL institutes actively organize cultural exchange events to engage and encourage Arab communities to learn CL. In Saudi Arabia, the first CL institute was established at King Saud University in 2019, providing training to CL teachers to promote the language in schools across the country [33].

The United States has been a leading country in terms of the number of CIs and Confucius Classrooms [30]. The first CI opened in the US in 2013, followed by a second one in 2014. By 2018, there were 538 Confucius Classrooms and 106 CIs in the country. However, the perception towards CIs in the US shifted over time. In 2010, members of a US university protested against them, but no CIs were closed at that time [34]. From 2014 to 2017, five schools decided to shut down their CIs [30]. The trend of CI closures continued between 2018 and 2020, with nine more CIs closing due to various political issues [35].

In New Zealand, Mandarin Chinese has gained significant popularity as a foreign language in the past decade. Since 2015, Mandarin Chinese has been given top priority in the country's schools [36]. The establishment of a trade relationship between China and New Zealand in 2017 prompted the New Zealand China Council to discover that over 65% of New Zealanders have a positive attitude towards Mandarin and are willing to teach Chinese in schools. Within a year, the number of students enrolled in CL learning soared to 70,000 [37]. However, the popularity of Chinese has since decreased, with Japanese, Spanish, and French gaining more recognition than CL at universities in New Zealand [37].

2.3. Emergence of CL Learning in Pakistan. Language policy plays a crucial role in determining the language of instruction in any country [38]. This decision is rarely made solely on academic grounds but is influenced by social, economic, and political factors. The language chosen for education holds significant power as it determines which linguistic group will have authority and privilege [39]. In countries like Pakistan, where English had dominance during the colonial period and later became the language of the elite minority, it continues to hold prominence. While there is no specific document outlining Pakistan's language policy, references to language policy can be found in the 1973 Constitution and various legislative and educational policies [40].

According to Pakistan's language policy, Urdu is designated as the national language, and there is a provision stating that it should become the official language within fifteen years from a specified start date. However, English currently holds the status of the official language until it is replaced by Urdu [39].

In Pakistan, there is a growing belief among the people that emphasis should be placed on learning CL rather than English, given the significance of the CPEC and its expectations. With China demonstrating its strength and power in the global economic landscape, CL learning has gained popularity in Pakistan since the initiation of CPEC [3]. Chinese companies operating in Pakistan require local employees who can interpret and translate the Chinese language to communicate with the local population. This demand is expected to increase rapidly, creating job opportunities for professionals with proficiency in CL, particularly in CPEC projects [22]. As business and trade between the two countries continue to rise, local traders also seek individuals with a command of CL. In response, the Pakistani government has offered fully funded scholarships for competent students to study at various universities in China, and some public educational institutes in Pakistan have introduced free CL courses.

According to Dr. Zhang Wei, director of CI Islamabad, proficiency in Chinese is regarded as a superior requirement for utilizing the opportunities for a bright future in CPEC

projects [8]. It is preferred for users not only in terms of employability but also in both academic and business circles because these initiatives are primarily managed by Chinese-owned entities [41]. It suggests that CL could become more empowered in the context of CPEC compared to English, which is now the language of empowerment in terms of employment [42, 43].

The CPEC has increased demand for Chinese language proficiency, leading to the addition of CL courses to university degree programs. Other language institutions have also offered CL courses. The Technical Education and Vocational Training Authority (TEVTA), a government-backed technical education organization in Punjab, has introduced CL short courses. However, CL learning has quickly become one of the most popular options for those seeking TEVTA-compliant short courses [44]. The number of CL learners has multiplied over the past several years. More than any other foreign language learner, "26000–30000 students are studying Chinese at various levels in Pakistan" [8, 45]. The current phase of this language's promotion demonstrates that learners are fusing it with other foreign languages, such as English, making their current linguistic proficiency the linguistic capital of the market. Furthermore, as the Chinese value efficiency in this language, the large investment made in the CPEC project by the Chinese corporations encouraged the study of CL.

Different researches have been conducted to examine the correlation between language and the socioeconomic inclusivity of CPEC's infrastructure projects. Researchers have examined how multilingual abilities influence the social hierarchy in Pakistan. This study provides significant insights into the interaction between language, infrastructure, and social hierarchy, elucidating how language influences opportunities and hierarchies within the country [44]. Another researcher noted the potential economic benefits of having a bilingual workforce in CPEC projects. They recommended that both nations use the CPEC as a platform to promote their indigenous languages in an effort to reduce socioeconomic disparity. It also underlined the critical role that languages play in managing the economy [46]. In another study, the effects of CPEC on CL learning were explored. It is revealed that the favourable environment for CL learning has increased because of CPEC in terms of economic development [3].

The literature review highlights the growing significance of CL learning and promotion worldwide, leading to the establishment of CIs and other language institutes. In Pakistan, the first CI was established in 2005, and currently, there are five CIs and two Confucius Classrooms operating in the country [47]. Ali and David conducted a study in the Sindh region in which they looked at how the locals felt about the government's implementation of CL as a subject [11]. Researchers posited that the compulsory Chinese education in Sindh can be perceived as an instance of linguistic imperialism. This viewpoint raised apprehensions regarding the potential disregard for local languages. However, this study exclusively concentrated on individuals who were CL learners from the province of Sindh, neglecting to incorporate participants from other areas within Pakistan. Similarly, Khan et al. [10] reported the responses of CL learners from Sindh, but they only targeted one university. Their study sought to comprehend how policymakers interpreted the recently implemented policy of Chinese as a foreign language at a prestigious public engineering institution in Sindh. They interpreted student's varying attitudes to the execution of the policy. In another research, Ilyas et al. [48] highlighted CPEC as a driving force behind CL learning and promotion in Pakistan, emphasizing the employment opportunities for CL experts in CPEC projects [49]. Their research focused on the strategies adopted by CL instructors, but it did not explore the perception of CL learners. Previous research, which mostly focused on Pakistan's Sindh province while missing a more comprehensive view, overlooked the important component of comprehending the learners' own perceptions. Additionally, further investigations remain to be done about the idea of linguistic imperialism and a specific way to realize its effects on local culture and languages. These differences show that additional study is required to fully understand CL education in Pakistan, including research that covers a larger geographic reach, varied participant backgrounds, learner perspectives, and a thorough investigation of essential ideas. Thus, the gap lies in the exploration of learners' perceptions towards CL learning and also in the comparison of their approaches across different regions of the country. The present study is aimed at covering these research gaps. As CPEC has been attracting the people of Pakistan to work on these projects, it is of prominence to scrutinize the understanding of the motivations behind CL learning and promotion. Thus, the current research is aimed at addressing this gap and shedding light on the perspectives, motivations, problems, and opportunities for CL learners in different regions of Pakistan.

2.4. Research Questions. This research is aimed at exploring the perceptions of CL learners in Punjab and Sindh regarding CL learning and promotion within their respective provinces. To address these gaps and issues, the research questions (R1-R4) were formulated as follows:

R1. What is the overall perception of learners about CL learning and promotion in Punjab and Sindh?

R2. What problems are CL learners facing in Punjab and Sindh, and what inspires them to continue CL learning?

R3. Is there any role of CPEC in the promotion of CL in Pakistan?

R4. What opportunities can learners avail after learning CL in Pakistan?

3. Methodology

A mixed-methods technique is used to analyze the general perception of CL learners in two provinces of Pakistan. Quantitative data was collected from 19 closed-ended questions in the questionnaire. Two open-ended questions were included in the qualitative analysis, which complemented the statistical analysis of the research data.

3.1. Setting and Participants. This research was conducted in both CIs and other public and private CL institutes located in Punjab and Sindh provinces. Punjab was selected due to

its higher population, development, and the highest literacy rate among all provinces. In this province, three CIs have been established, and CL is offered as a compulsory subject in some universities. Sindh, on the other hand, was chosen as it has the second-highest literacy rate in Pakistan, and its capital city, Karachi, is an industrial hub. One CI has been established in Sindh as well. Additionally, these provinces were selected because the CPEC route passes through various cities within them. With the initiation of CPEC projects, the socioeconomic development of these provinces has become closely linked to the progress of CPEC (Figure 1).

A total of 135 students from Punjab and Sindh provinces voluntarily participated in this survey (Table 1). In compliance with regional law and institutional regulations, an ethical assessment and permission were not necessary for the study involving human participants. To take part in this study, participants gave their written informed consent. Any potentially identifiable photographs or data included in this article were published with the participant's written informed consent. These students were attending elementary and intermediate-level Chinese language classes at their respective institutes. The elementary class consisted of students who had recently started learning Chinese, while the intermediate class included students who had completed the basic levels of Chinese and were now at an intermediate level. In Punjab, 41 participants were enrolled in the elementary level and 29 in the intermediate level. In Sindh, 38 participants were at the elementary level, while 27 were at the intermediate level. Out of the total participants, 70 were from Punjab province and 65 were from Sindh province. The participants included both graduates and undergraduates, with 23 graduates and 47 undergraduates from Punjab, and 20 graduates and 45 undergraduates from Sindh. A total of 60 valid responses were obtained from each province, resulting in a combined total of 120 questionnaires used for the analysis.

3.2. Research Instruments. The questionnaire used in this study consisted of three sections: participants' profiles, 19 closed-ended questions, and 2 open-ended questions. The closed-ended questions were categorized into four sections, including general perception about CL learning and promotion, inspiration for CL learning, CL learning strategies in Pakistan, and perception about challenges in promoting CL. The participants provided basic information such as gender, study level, and province name in the participant's profile section. The questionnaire did not require participants to provide their names, ensuring anonymity and allowing them to express their thoughts and feelings openly.

The closed-ended questions were analyzed using a 5-point Likert scale, ranging from "1 = strongly disagree" to "5 = strongly agree." Additionally, two open-ended questions were included to gather more explanatory and supportive information related to the closed-ended questions. These open-ended questions were placed at the end of the questionnaire, and participants were asked to share their suggestions for CL promotion in Pakistan and their thoughts on the future of CL learners in the country.

The questionnaire was designed to encompass all the necessary elements for CL learning and promotion in Pakistan. It underwent review by professors and experts to ensure it aligned with the research objectives. English was used to design the questionnaire since it is taught as a second language in Pakistani primary schools, and the participants of this study were university students who were proficient in English. The researchers took two steps to collect information from participants: first, explaining the purpose of the questionnaire in both English and the participants' local language, and second, providing explanations for terms used in the questionnaire, such as "code-switching" and "language imperialism," using synonyms or simplified meanings to ensure clarity and avoid confusion.

3.3. Data Collection and Analysis. The data collection for this study was conducted in several steps. First, the researcher informed the language institute and teachers about the survey's purpose. The questionnaire was then distributed to participants during their free time after class, and it took approximately 12 minutes to complete. The researcher explained the aim of the questionnaire to participants and provided clear explanations of different terminologies. Participants were also given the opportunity to ask questions freely.

The data processing involved three stages. In the first stage, the proportions of selected answers for the 19 closed-ended questions were calculated using Excel. This allowed the researchers to address study questions Q1 and Q2, which focused on students' understanding of CL and their enthusiasm for its promotion. The next stage involved importing the Likert scale responses into SPSS and using the Mann–Whitney U test to compare the means of the two groups (Punjab and Sindh). This statistical test was used to identify any significant differences between the groups in terms of various domains of CL learning and promotion. The Mann–Whitney U test was chosen because the independent variable was ordinal and divided into two groups.

Finally, the open-ended questions were analyzed to examine the participants' elaboration of their perceptions. Out of the 120 valid questionnaires, 98 participants responded to the open-ended questions. However, only 95 of these responses were considered relevant, as three responses were deemed irrelevant. For instance, one participant provided a response that solely focused on their CL learning experience in relation to Q1. The participants in the survey were labeled as P1-P120, with P1-P70 representing participants from Punjab and P71-P120 representing participants from Sindh.

4. Results and Findings

4.1. Reliability Indices. Cronbach's alpha is commonly used to assess the internal consistency reliability of Likert scale items [50]. However, researchers have increasingly turned to omega as a more reliable alternative [51, 52]. Omega has been found to provide better estimates of internal consistency reliability [53–55]. In social sciences, values of 0.70 or higher are considered "acceptable" for questionnaire consistency. In this study, Cronbach's alpha values were computed using SPSS. In addition to Cronbach's alpha, we also

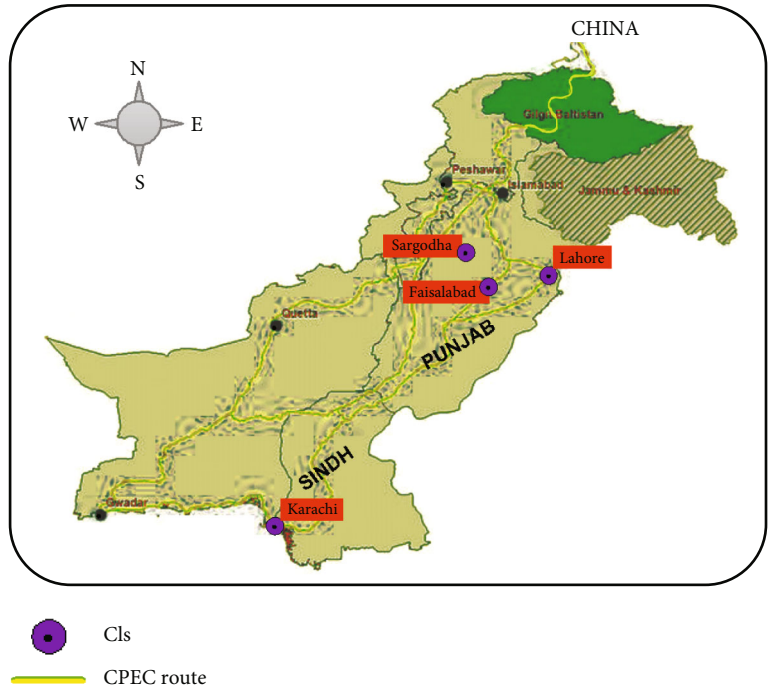

Figure 1: The study focuses on two geographical regions, namely, Punjab and Sindh, which encompass the CIs and the connecting CPEC routes.

Table 1: Participants' demographic information.

Demographic characteristics	Frequency		Percentage	
	PJ	SN	PJ	SN
Total participants	70	65	51.85	48.15
Gender				
Male	46	43	34.07	31.85
Female	24	22	17.78	16.30
Academic level				
Graduates	23	20	17.04	14.81
Undergraduates	47	45	34.81	33.33
Chinese proficiency level				
Elementary	41	38	30.37	28.15
Intermediate	29	27	21.48	20.00

PJ: Punjab; SN: Sindh.

generated omega values using Hayes and Coutts's OMEGA macro in SPSS [55]. These statistics (Table 2) demonstrate the consistency of the items included in the survey.

4.2. Convergent and Discriminant Validity. To assess the validity of the questionnaire, several studies were conducted. According to the previous research [56], construct validity and reliability can be determined by examining loadings, average variance extracted (AVE), and composite reliability (CR). Hair et al. [56] suggest that loadings should be above 0.60, AVE should be above 0.5, and CR should be above 0.70. In Table 3, the AVE and CR values were found to be above the thresholds of 0.5 and 0.7, respectively. After removing problematic items, all remaining loadings exceeded the threshold of 0.60. Therefore, it can be inferred that the measures used in this study demonstrate adequate convergent validity and reliability (Table 3).

Discriminant validity was also assessed following the recommendation of Fornell and Larcker [57]. They suggest comparing the square root of the AVEs with the correlations or comparing the AVEs with the square of the correlation values. In Table 4, the off-diagonal correlation values are lower than the square roots of the AVEs (bolded), indicating sufficient discriminant validity. Therefore, it can be inferred that the measures used in this investigation demonstrate adequate divergent validity. Overall, the results suggest that the construct validity of this study is credible, and the approach has psychometrically sound qualities (Table 4).

Table 2: Reliability indices.

Perception	Items	Cronbach's α		McDonald's ω	
		PJ	SN	PJ	SN
Overall perception	Q1-Q19	0.912	0.902	0.929	0.915
The general perception (GP)	Q1-Q6	0.890	0.843	0.911	0.855
Inspirational factors (IF)	Q7-Q11	0.871	0.839	0.889	0.850
Learning strategies (LS)	Q12-Q16	0.887	0.869	0.913	0.898
Perception about challenges (PC)	Q17-Q19	0.830	0.826	0.870	0.848

Q: question.

4.3. Descriptive Analysis. Table 5 and Figure 2 present the descriptive analysis of each item and dimension of CL learners in Punjab and Sindh. The dimension of inspiration for CL learning (IF) has the highest values in Punjab (4.03 ± 0.82). In Sindh, respondents have the highest values for challenges in the promotion of CL (PC) (3.72 ± 1.00), while Punjab shows less concern about this dimension (3.51 ± 0.99) as indicated in Figure 2 with a green circle.

4.4. Analysis of Questionnaire Dimensions. Further, we have analyzed each dimension separately. Table 6 and Figure 3 indicate the responses of general perceptions about the learning and promotion of CL from Q1 to Q6. Q1 stated, "You are well aware of the promotion of CL in Pakistan (especially in your province)." Responses from both provinces are different (83.44% for Punjab and 35% for Sindh). Although the significant percentage indicated by analysis of CL learners of Sindh was "strongly agree" or "agree" for Q1, CL learners of Punjab showed more agree (46.7%) than strongly agree (36.7%) for Q1. None of the CL learners in Punjab showed a strong disagreement, while 1.7% of CL learners in Sindh strongly disagreed.

Different responses towards Q2, "CL is becoming more important in Pakistan," were collected from CL learners in Punjab and Sindh (78.3% Punjab and 38.3% Sindh). The responses of CL learners from Punjab were quite balanced for "strongly agree" and "agree," but the responses of CL learners from Sindh were prominently more for "agree" than "strongly agree" for Q2. In the statements of Q3-Q6 of this section, the responses about the reasons for CL promotion in Pakistan, the CL learning environment in the province, the easy access to CL learning institutes, and the development of literacy skills after learning Chinese as a foreign language were collected. Surprisingly, the responses of CL learners from Punjab mostly supported "agree," while CL learners from Sindh were mostly on the "neutral" side. In general, CL learners of both provinces support CL learning, although CL learners of Punjab were more supportive compared to Sindh's CL learners. In response to Q4-Q6, CL learners of Punjab were 56.7%, 51.7%, and 81.7% "agree," respectively, while CL learners of Sindh were 38.3%, 38.3%, and 45% "agree" and most participants responded towards "neutral" responses (Figure 3).

In the second section, inspiration for CL learning (Table 7 and Figure 4), 66.6% of participants from Punjab considered the media as the reason for CL promotion (Q7). However, 15% were "neutral," and about 18% did not agree with this statement. 20% of participants from Sindh agreed with this statement, while 43.3% were unsure about it. In response to the question about whether the scholarships offered by Chinese universities are the reason for CL promotion (Q8), more than 78% (51.7% "agree" and 26.7% "strongly agree") participants of Punjab showed an agree response, while 40% of the participants of Sindh showed an agree response. Relative to Punjab, it was a very low response. None of the Punjab participants disagreed, while on the other hand, more than 20% of Sindh participants (18.3% and 15% strongly disagreed and disagreed, respectively) disagreed with the role of the media. In response to Q9, 80% and more than 63% of participants in Punjab and Sindh, respectively, agreed that there would be more job opportunities after CL learning. Although 25% of Sindh participants disagreed with this statement, in the case of Q10 and Q11, more than 90% of Punjab participants and more than 78% of Sindh participants, respectively, responded "agree" and "strongly agree" to Q10. In comparison, 95% in Punjab and 61.7% in Sindh agreed to Q11.

The findings of the CL learning strategies in Pakistan (Table 8) explain that most of the participants in Punjab agreed with CIs as the best tool for CL promotion (66.7% "agree" and 23.3% "strongly agree"). To this question, 38.3% of Sindh participants "agreed" while only 10% "strongly agreed." 38.3% of participants were "neutral," and more than 13% "disagreed." Responses to Q13 (curriculum designing) and Q14 (Chinese as a compulsory course) showed different responses. In response to Q13, 95% of Punjab and 63.4% of Sindh respondents "agreed" with the statement. More than 60% of Punjab participants, while a far lesser percentage (28.3%) of Sindh agreed with Q14, and more than 48% disagreed with adding Chinese as a compulsory course in different degree programs in universities. Responses about class discussions in Chinese, avoiding code-switching, received a significant percentage from the participants in Punjab (71.6%), while only 38.3% of Sindh "agreed" responses were collected. In the case of Q16, 85% of Punjab and 43.3% of Sindh "agreed," while about 40% of Sindh remained neutral (Figure 5).

In the last section of the questionnaire, responses to Q17–Q19 explained the challenges in promoting CL learning (Table 9). Response to Q17: "CL learning can cause language imperialism in your province." 40% of Punjab participants and nearly 70% of participants of Sindh "agreed" with this statement of linguistic imperialism. Responses to Q18 (CL learning will affect your local language) showed

Table 3: Convergent validity analysis.

Dimension		Items	Loadings	CR (>0.7)	AVE (>0.5)
GP	Q1	You are well aware of CL promotion in your province (Punjab/Sindh).	0.769	0.901	0.604
	Q2	CL is becoming more important in Pakistan.	0.761		
	Q3	Pak-China relations are the reason for CL promotion in Pakistan.	0.753		
	Q4	You are satisfied with the CL learning environment in your province.	0.815		
	Q5	You have easy access to CL learning institutes.	0.793		
	Q6	CL promotion assists in developing literacy skills.	0.771		
IF	Q7	Media (Chinese movies and dramas) is the reason for CL promotion.	0.749	0.886	0.609
	Q8	In your opinion, scholarships offered by Chinese universities to Pakistani students are the reason for CL promotion.	0.763		
	Q9	There will be more job opportunities after CL learning.	0.791		
	Q10	You get inspired by the CPEC projects currently progressing in Pakistan.	0.796		
	Q11	CL is becoming more popular because it is the language of an economically strong country.	0.801		
LS	Q12	CIs are the best tool for CL promotion in Pakistan.	0.787	0.900	0.643
	Q13	A curriculum designed according to the local culture will help CL learning and promotion.	0.808		
	Q14	In your opinion, it is a satisfying step for CL promotion to add Chinese to different degree programs.	0.823		
	Q15	There should be class discussions in CL during CL learning, avoiding code-switching.	0.794		
	Q16	CL is promoted by developing interschool and community programs through stakeholders' sponsorship.	0.798		
PC	Q17	CL learning can cause language imperialism in your province.	0.826	0.845	0.646
	Q18	In your opinion, CL learning will affect your local culture.	0.793		
	Q19	CL teaching in Pakistan by local teachers is challenging in CL promotion.	0.791		

45% and 68.3% "agreed," respectively, collected from Punjab and Sindh. In Q19, "teaching Chinese language in Pakistan by local teachers is challenging in promoting CL," 80% of "agreed" responses from Punjab and 48.3% of "agreed" responses from Sindh were gathered, while 18.3% of Sindh participants "disagreed" with this statement. Data analysis showed the difference in the percentages of participants in Punjab and Sindh. While responding to open-ended questions, some participants from both provinces gave suggestions and showed a supportive attitude towards CL learning (Figure 6).

4.5. The Mann–Whitney U Test. The Mann–Whitney U test was carried out when and in which situations the perceptions of CL learners from two provinces fluctuated notably. In Table 6, the responses of Q1-Q8 and Q10-Q19 were considered significant as $p < 0.05$. The test revealed a significant difference in the CL learning and promotion perceptions of

Table 4: Fornell–Larcker criterion-based discriminant validity.

	GP	IF	LS	PC
GP	**0.777**			
IF	0.700**	**0.780**		
LS	0.593**	0.645**	**0.802**	
PC	0.619**	0.579	0.517**	**0.803**

**Correlation is significant at the 0.01 level (2-tailed). The bold diagonal values represent each dimension's square root of the AVEs.

Table 5: Descriptive analysis of each item and dimension.

Item	Region	Mean	SD	Dimension	Mean	SD
Q1	PJ	4.13	0.85	GP	3.93	0.82
	SN	3.17	0.98		3.13	1.06
Q2	PJ	3.97	0.82			
	SN	3.12	1.06			
Q3	PJ	3.88	0.87			
	SN	3.12	0.96			
Q4	PJ	3.88	0.94			
	SN	3.37	1.16			
Q5	PJ	3.53	1.07			
	SN	2.97	1.09			
Q6	PJ	4.18	0.39			
	SN	3.03	1.12			
Q7	PJ	3.72	1.03	IF	4.03	0.82
	SN	2.72	1.08		3.26	1.06
Q8	PJ	3.90	0.97			
	SN	2.88	1.14			
Q9	PJ	3.88	0.94			
	SN	3.50	1.14			
Q10	PJ	4.25	0.60			
	SN	3.77	0.96			
Q11	PJ	4.38	0.59			
	SN	3.42	0.98			
Q12	PJ	4.13	0.57	LS	3.94	0.79
	SN	3.37	1.03		3.14	1.03
Q13	PJ	4.28	0.56			
	SN	3.50	1.05			
Q14	PJ	3.65	0.94			
	SN	2.60	1.11			
Q15	PJ	3.68	1.10			
	SN	3.02	0.98			
Q16	PJ	3.93	0.80			
	SN	3.23	0.98			
Q17	PJ	3.20	0.97	PC	3.51	0.99
	SN	3.87	0.81		3.72	1.00
Q18	PJ	3.28	1.12			
	SN	3.92	1.00			
Q19	PJ	4.03	0.88			
	SN	3.38	1.18			
Total	PJ	73.92	10.62	Overall	15.40	3.43
	SN	61.93	12.37		13.25	4.15

the participants. Hence, these results support the research questions for this study. In Q1 (CL promotion awareness), participants from Punjab gave more supportive responses than Sindh participants. The analysis of Q2 (CL becoming important) revealed the responses of participants of both provinces, mainly in agreement, but more positive perspectives were gathered from Punjab. Participants from Sindh were supportive towards Q3 (the reason for CL promotion), but overall, participants from Punjab agreed more. In response to Q4 (CL learning environment) and Q5 (access to CL institutes), more Punjab participants agreed than Sindh. More than 80% of the participants of Punjab responded towards agreed and strongly agreed with Q6 (development of literacy skills), while for Q7 (role of media) and Q8 (scholarship opportunities), more than 66% of participants in Punjab were supportive. In response to Q10 (CPEC projects inspiration) and items Q11, 12, 13, 14, 15, and 16 (perception about learning strategies) received the same responses from the participants of Punjab; they were more supportive towards agreement and strongly agreed for every item. In the case of Q17 (language imperialism) and Q18 (effect on local culture), more Sindh participants agreed and strongly agreed, 70% and 68.3%, respectively. In the last question, Q19 (CL teaching by local teachers), more participants from Punjab were supportive. From the Mann–Whitney U test, it was revealed that more Punjab participants agreed with CL learning and promotion in their province as compared to the participants from Sindh.

4.6. The Effect Size. The effect size (r) was estimated using the formula $r = Z/\sqrt{n}$, where n is the number of respondents in the Punjab and Sindh provinces. Cohen labeled it into three levels both for positive and negative r coefficients [58]: small (0.1-0.3), medium (0.3–0.5), and large (0.5–1.0) effect and similarly for negative r coefficient, small (-0.1 to -0.3), medium (-0.3 to -0.5), and large effect (-0.5 to -0.1). Given that most Z-values were negative, the absolute value of the r coefficient was considered. According to the Mann–Whitney U analysis (Table 10 and Figure 7), the dimensions GP (Q1-Q6) and IF (Q7-Q11) have effect sizes small to large with average medium effect sizes of 0.406 and 0.372, respectively. Item 6 in the GP construct, the mean rank for Punjab was 79.48, and for Sindh was 41.53, verifying the dominance of supportive participants of Punjab over the participants of Sindh with a large effect size ($r = 0.634$). Item 11 in GP construct, the mean rank for Punjab was 77.39, and for Sindh was 43.61, verifying the dominance of supportive participants of Punjab over the participants of Sindh moving towards large effect size ($r = 0.535$). LS (Q12-Q16) and PC (Q17-Q19) have effect sizes small to medium, with average medium effect sizes of 0.409 and 0.308, respectively. Item 14 in LS construct the mean rank for Punjab was 75.41 and for Sindh was 45.59, confirming the more supportive responses of Punjab over Sindh with medium effect size ($r = 0.446$). In the last domain (PC), the results fluctuated dramatically to items 17 (mean rank Punjab = 49.23 and Sindh = 71.78; $r = 0.345$) and 18 (mean rank Punjab = 50.93 and Sindh = 70.08; $r = 0.285$), which showed the dominance of supportive participants of Sindh over Punjab, for language imperialism and effect on local culture. Item 19 in the PC domain, the mean rank for Punjab was 70.25, and for Sindh was 50.75, showing the dominance of supportive participants of Punjab over the participants of Sindh moving towards a small effect ($r = 0.293$) for challenges about CL teaching by local teachers in CL promotion.

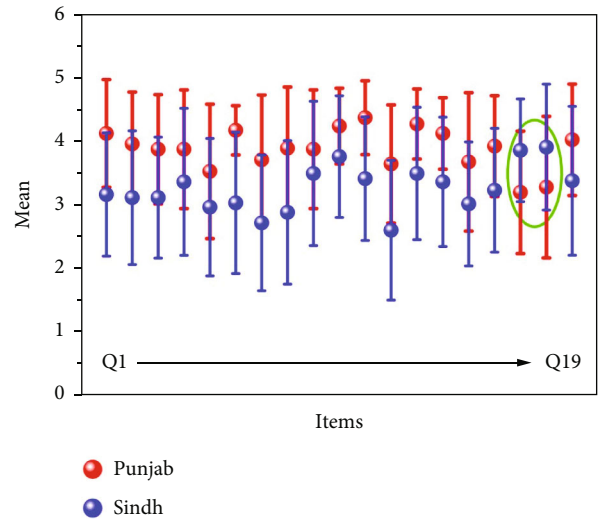

Figure 2: Comparison of mean values with SD of all items for Punjab and Sindh.

Valid responses were obtained from 95 questionnaires (for open-ended questions), while the remaining responses were not considered. Out of these 95 participants, 86 individuals provided suggestions for CL promotion, while 9 expressed doubts about CL learning as a foreign language. Participants who had a positive attitude towards CL learning showed support for CL learning and promotion in Pakistan. Their suggestions varied, such as P17 mentioning the potential opportunities for CL learners in CPEC projects, and P73 suggesting the need for more CIs in Sindh. Some participants highlighted the benefits of learning multiple languages, as stated by P20 who emphasized that learning more languages leads to more opportunities. On the other hand, there were participants who did not support CL learning and expressed concerns about potential linguistic imperialism in their province. These doubts were reflected in comments like P82's concern about the Chinese language suppressing the local languages of Sindh. The cultural differences between Pakistan and China also raised concerns for some participants. Notably, some participants provided comments indicating disagreement with CL learning, such as P90 who expressed concerns about the impact of CL learning on local culture.

Urdu serves as the national language of Pakistan, while English is used as an official language. In addition to these languages, various regional languages are spoken within the provinces. Participants from Sindh expressed concerns that the introduction of CL in their province could lead to the suppression of their local languages and culture. The analysis of open-ended questions revealed that a significant percentage of CL learners from Punjab showed support for CL learning and promotion in their province. However, CL

Table 6: Percentages of Punjab and Sindh CL learners' responses for Q1–Q6.

Items	Strongly disagree (%)		Disagree (%)		Neutral (%)		Agree (%)		Strongly agree (%)	
	PJ	SN	PJ	SN	PJ	SN	PJ	SN	PJ	SN
Q1	0	1.7	6.7	25	10	38.3	46.7	25	36.7	10
Q2	0	13.3	6.7	5	15	43.3	53.3	33.3	25	5
Q3	0	8.3	6.7	10	23.3	48.3	45	28.3	25	5
Q4	0	8.3	15	15	5	23.3	56.7	38.3	23.3	15
Q5	0	18.3	28.3	5	5	38.3	51.7	38.3	15	0
Q6	0	18.3	0	5	0	31.7	81.7	45	18.3	0

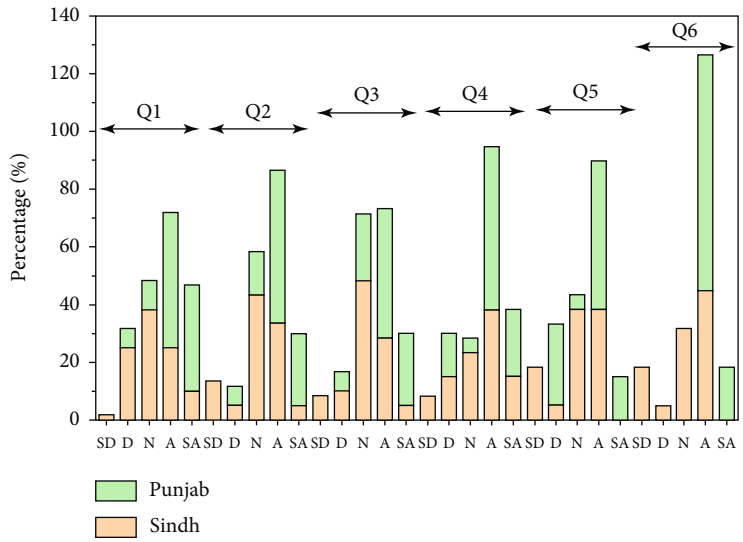

Figure 3: Percentages of Punjab and Sindh CL learners' responses for questions Q1–Q6. SD: strongly disagree; D: disagree; N: neutral; A: agree; SA: strongly agree.

Table 7: Percentages of Punjab and Sindh CL learners' responses for Q7–Q11.

Items	Strongly disagree (%)		Disagree (%)		Neutral (%)		Agree (%)		Strongly agree (%)	
	PJ	SN	PJ	SN	PJ	SN	PJ	SN	PJ	SN
Q7	0	16.7	18.3	20	15	43.3	43.3	15	23.3	5
Q8	0	18.3	15	15	6.7	26.7	51.7	40	26.7	0
Q9	0	5	15	20	5	11.7	56.7	46.7	23.3	16.7
Q10	0	5	0	6.7	8.3	10	58.3	63.3	33.3	15
Q11	0	5	0	15	5	18.3	51.7	56.7	43.3	5

learners in Sindh viewed CL learning and promotion as a form of linguistic imperialism that could negatively impact their local culture. These findings align with the research conducted by Ali and David [11] regarding the linguistic suppression of local languages in Sindh.

5. Discussion

5.1. Overall Perception of Learners. In this research, the perceptions of CL learners in Punjab and Sindh towards CL learning and promotion were examined through a survey. Participants from different CL learning institutes in the two provinces provided responses to closed-ended and open-ended questions. The data collected through the questionnaire (Table 6 and Figure 3) supported previous studies by [11] which highlighted the potential issue of language imperialism in Sindh due to CL learning as a foreign language. Punjab participants showed a more positive response regarding the awareness of CL promotion at the provincial level. The Mann–Whitney *U* (Table 10 and Figure 7) test indicated that CL learners in Punjab have a stronger inclination towards CL learning and promotion compared to CL

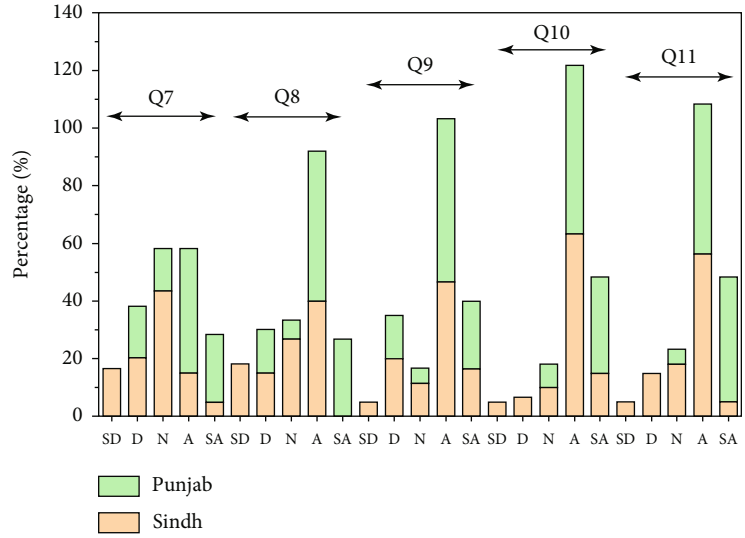

Figure 4: Percentages of Punjab and Sindh CL learners' responses for questions Q7–Q11.

Table 8: Percentages of Punjab and Sindh CL learners' responses for Q12–Q16.

Items	Strongly disagree (%)		Disagree (%)		Neutral (%)		Agree (%)		Strongly agree (%)	
	PJ	SN	PJ	SN	PJ	SN	PJ	SN	PJ	SN
Q12	0	8.3	0	5	10	38.3	66.7	38.3	23.3	10
Q13	0	5	0	15	5	16.7	61.7	51.7	33.3	11.7
Q14	0	20	15	28.3	21.7	23.3	46.7	28.3	16.7	0
Q15	8.3	10	5	16.7	15	35	53.3	38.3	18.3	0
Q16	0	8.3	10	8.3	5	40	66.7	38.3	18.3	5

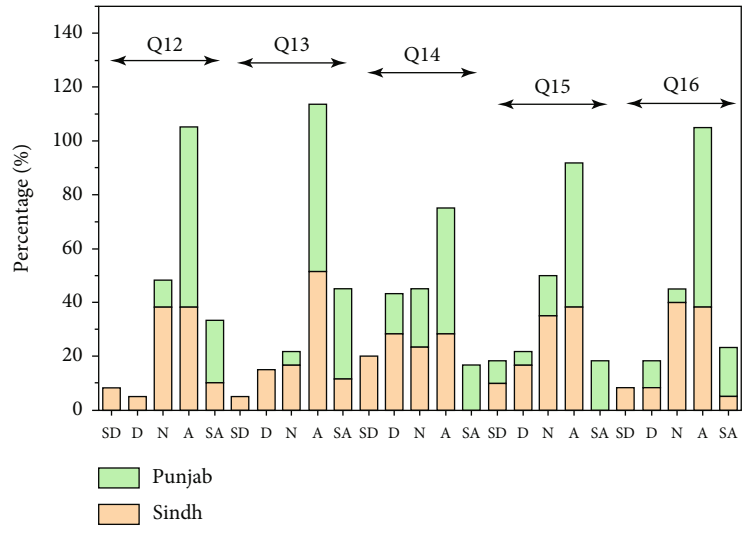

Figure 5: Percentages of Punjab and Sindh CL learners' responses for questions Q12–Q16.

learners in Sindh, which aligns with findings reported by other researchers [10, 11]. Participants from Sindh showed a significant preference for class discussions using code-switching. This aligns with the findings of Hu et al. [59] who observed that code-switching is predominantly supported by learners at lower proficiency levels. Overall, participants from Punjab displayed a positive attitude towards CL promotion in Pakistan, particularly in relation to China-Pakistan relations.

Table 9: Percentages of Punjab and Sindh CL learners' responses for Q17–Q19.

Items	Strongly disagree (%)		Disagree (%)		Neutral (%)		Agree (%)		Strongly agree (%)	
	PJ	SN	PJ	SN	PJ	SN	PJ	SN	PJ	SN
Q17	8.3	0	8.3	5	43.3	25	35	48.3	5	21.7
Q18	5	1.7	21.7	6.7	28.3	23.3	30	35	15	33.3
Q19	0	10	8.3	8.3	11.7	33.3	48.3	30	31.7	18.3

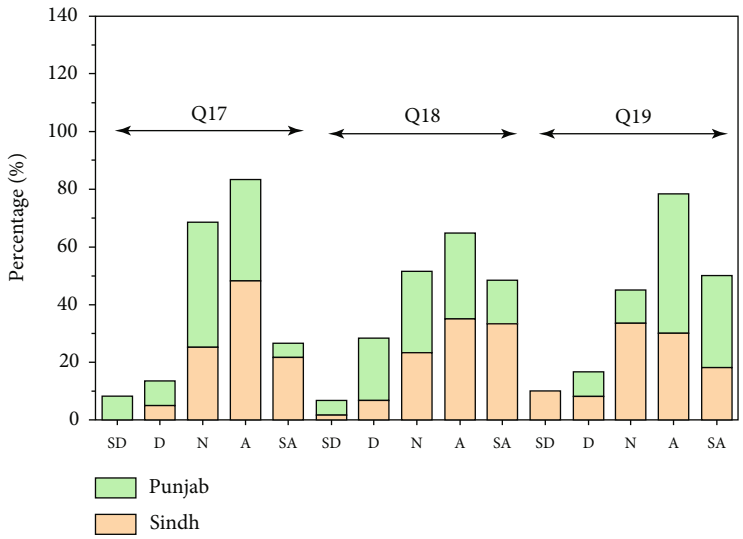

Figure 6: Percentages of Punjab and Sindh CL learners' responses for questions Q17–Q19.

5.2. Problems and Inspirations. Regarding CL learning methodologies and difficulties in CL promotion, participants had divergent opinions. In the quantitative study, many assertions about the difficulties of CL learning were incorporated. The satisfaction with the CL learning environment and the ease of access to the language institutes was shared by more than 50% of participants from Punjab and less than 40% of participants from Sindh. This percentage showed how hard it was for students in each province to learn CL. Participants from Sindh expressed greater worry in the dimension "PC" than participants from Punjab did over the possibility of linguistic imperialism and its potential consequences on local culture. These findings are consistent with the findings of Ali and David [11] regarding the linguistic suppression of local languages in Sindh. However, 80% of the participants from Punjab agreed with the statement regarding the tough environment that the local CL instructor may establish in the classroom and it also aligns with the findings of previous research. They are worried about the CL learning methodologies used in their province, as seen by the high proportion. The planned curriculum, which was customised to the local culture, and the CIs were seen to be useful instruments for promoting and teaching CL. The CL students from Punjab strongly agreed with this point of view, which is consistent with Gill's analysis of the Confucius Institute project [60].

The analysis of questionnaire data in Tables 7–9 and the Mann–Whitney U test analysis in Table 10 examined the perception and attitude of CL learners from Punjab and Sindh towards CL learning. In the section on the inspiration for CL learning, factors such as scholarships offered by Chinese universities, job opportunities, and CPEC projects were analyzed as sources of inspiration for CL learners from Punjab. However, participants from both provinces expressed support for CL learning as a foreign language.

5.3. Role of CPEC. The findings highlighted the significant role of CPEC in CL learning in Pakistan. Most participants expressed a keen interest in CL learning, including participants from Sindh who also showed agreement. In the dimension "IF," more participants from Punjab agreed towards the inspirational factors of CL as compared to those of Sindh. 90% of participants from Punjab showed their consent towards the CPEC projects, and 95% also accepted that CL is becoming more popular because it is the language of an economically strong country. More job opportunities for CL learners are also an inspirational factor, and 80% and more than 63% of participants from Punjab and Sindh agreed to it, respectively. Ying [61] established a connection between CPEC projects and CL learning, predicting an increased demand for CL learning in Pakistan as CPEC progresses. Asif [47] emphasized the global prominence of the Chinese language due to China's international trade activities, with CPEC being a potential catalyst for Chinese culture, CL learning, and promotion in Pakistan. After analyzing the responses, it was evident that participants from Punjab showed a higher agreement towards CPEC as a reason for CL learning compared to

Table 10: Result summary of Mann–Whitney U test.

Items		Mean rank	Mann–Whitney U	Wilcoxon W	Z	Asymp. sig. (2-tailed)	Effect size (r)
Q1	PJ	76.42	845	2675	-5.217	0.000	0.476
	SN	44.58					
Q2	PJ	74.43	963.5	2794.5	-4.648	0.000	0.424
	SN	46.58					
Q3	PJ	73.43	1024	2854	-4.292	0.000	0.392
	SN	47.57					
Q4	PJ	68.31	1331.5	3161.5	-2.622	0.009	0.239
	SN	52.69					
Q5	PJ	69.38	1267.5	3097.5	-2.958	0.003	0.270
	SN	51.63					
Q6	PJ	79.48	661.5	2491.5	-6.944	0.000	0.634
	SN	41.53					
Q7	PJ	75.08	925	2755	-4.737	0.000	0.432
	SN	45.92					
Q8	PJ	75.49	900.5	2730.5	-4.997	0.000	0.456
	SN	45.51					
Q9	PJ	66.01	1469.5	3299.5	-1.884	0.060*	0.172
	SN	54.99					
Q10	PJ	68.50	1320	3150	-2.890	0.004	0.264
	SN	52.50					
Q11	PJ	77.39	786.5	2616.5	-5.857	0.000	0.535
	SN	43.61					
Q12	PJ	74.08	985	2815	-4.677	0.000	0.427
	SN	46.92					
Q13	PJ	73.31	1031.5	2861.5	-4.496	0.000	0.410
	SN	47.69					
Q14	PJ	75.41	905.5	2735.5	-4.884	0.000	0.446
	SN	45.59					
Q15	PJ	72.14	1101.5	2931.5	-3.896	0.000	0.356
	SN	48.86					
Q16	PJ	73.41	1025.5	2855.5	-4.431	0.000	0.404
	SN	47.59					
Q17	PJ	49.23	1123.5	2953.5	-3.774	0.000	0.345
	SN	71.78					
Q18	PJ	50.93	1225.5	3055.5	-3.124	0.002	0.285
	SN	70.08					
Q19	PJ	70.25	1215	3045	-3.215	0.001	0.293
	SN	50.75					

*Indicates the $p > 0.05$ (not significant).

participants from Sindh. The establishment of new CIs in different cities of Pakistan following the development of CPEC further underscored the importance and popularity of CL among the people of Pakistan. The findings regarding employment availability after CPEC are consistent with the studies by Sher et al. [62], Khalil et al. [63], and Kanwal et al. [64]. However, there were variations in the perceptions of participants in the present study regarding CL learning.

5.4. Opportunities for CL Learners. The CPEC projects in Pakistan are providing increased opportunities for CL learners, which is consistent with the findings of Saad et al. [65] and Sher et al. [62]. During this survey, more "agreed" responses were received from Punjab. 80% of participants from Punjab and about 60% of Sindh participants agreed that they could avail themselves of more job opportunities after learning the Chinese language.

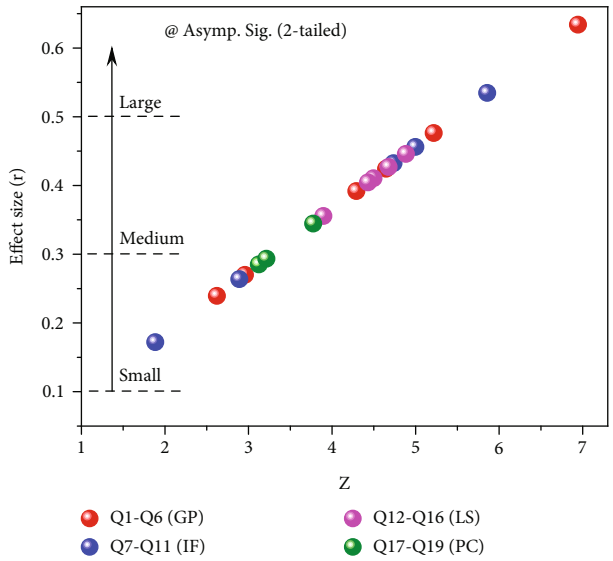

Figure 7: Effect size plot for all items based on the Mann–Whitney *U* test.

The findings of this research were consistent with previous studies regarding CL learning as a foreign language. However, this study differed in investigating the perceptions of CL learners regarding CL learning and promotion in two distinct geographical regions. The results revealed notable differences between CL learners in Punjab and Sindh. Most CL learners from Punjab expressed support for CL learning, with a majority indicating "agree" responses to various statements. In contrast, CL learners from Sindh were more inclined towards "disagree" and "neutral" responses than "agree." While they were supportive of CL learning, they also viewed it as a potential cause of language imperialism and a threat to their province's local languages, which aligns with the findings of previous researches [11, 46]. A significant percentage of CL learners from Sindh responded with "neutral" and "disagree" regarding awareness of CL promotion in their province, suggesting a possible lack of CL institutes, with only one CI present in Sindh [66]. Their inclination towards "agree" regarding linguistic imperialism may explain their reluctance to embrace CL learning in their province, as they perceive it as a potential detriment to local culture and languages [11].

6. Conclusions

This research presents a quantitative and qualitative analysis of CL learners' perceptions regarding CL learning and promotion. The findings suggest that CL learning and promotion have increased in Pakistan following the initiation of CPEC, and individuals with expertise in CL can benefit from job opportunities within CPEC. Additionally, the data analysis indicates that CL learners from Punjab province show greater support for CL learning and promotion compared to those from Sindh province.

Based on the data analysis, several implications can be drawn from this study. Firstly, there is a need for increased awareness about the importance of CL learning as a foreign language and its promotion. Establishing more CL learning institutes in Sindh can help familiarize learners with CL learning and provide easier access to CL education. These institutions can serve as valuable resources for students, offering high-quality language training, cultural activities, and educational materials. CPEC is viewed as a transformative initiative by officials and policymakers, and its projects in business, architecture, and transportation can generate numerous employment opportunities in a society with high unemployment rates [22]. This presents a significant opportunity for the CL learners' community in Pakistan.

Secondly, proper guidance and awareness about the relevance of CL learning in the context of CPEC can contribute to increased support and participation in CL learning, particularly in Sindh province. In designing CL learning strategies, the curriculum should align with the local environment and cater to the needs of CL learners [67–69]. Classroom discussions should be conducted in CL, avoiding code-switching to English or any local language. It has been observed that lower-level learners prefer code-switching to aid their understanding of terms [59]. Adopting these approaches can help change learners' perceptions towards CL learning.

Lastly, CL learning in Pakistan should be conducted in a manner that respects and preserves the local culture and languages. Some participants expressed concerns about the potential linguistic imperialism associated with CL learning. It is essential to address these concerns and ensure that CL learning does not marginalize or oppress local languages. This research holds relevance for developing countries and other researchers in Pakistan.

6.1. Countermeasures. A comprehensive strategy including various stakeholders is advised based on the article's primary conclusions.

(i) Language teachers should work with specialists to develop a CL curriculum that emphasizes useful skills and cultural awareness while also offering cutting-edge teacher preparation

(ii) A task group should be formed by policymakers to develop measures, such as teacher incentives and scholarships for top students, that tie CL instruction to the objectives of the CPEC

(iii) To ensure that students are prepared for careers relevant to CPEC, industry leaders should actively participate in workshops to create the curriculum and provide internships

(iv) Campaigns to raise public awareness should emphasize language's contribution to employment generation. Through exchange initiatives and campaigns, cultural institutions and the media may promote intercultural understanding

(v) Government-industry collaborations can make it easier to fund and execute policies that are based on evidence

Research institutes can perform research to support these policies. In the context of CPEC, this group effort

guarantees a comprehensive approach to successful CL acquisition.

6.2. Limitations and Future Work. While we made efforts to provide consistent answers to the research questions, it is important to acknowledge the limitations of this study. Firstly, the research was conducted in only two provinces of Pakistan, and future studies should consider including other provinces for comparative analysis. This would provide a broader understanding of the topic across different regions of the country. Secondly, a longitudinal research design would allow for capturing the evolving dynamics of CL learning and promotion in Pakistan over time. Thirdly, this study focused on CL learners at the elementary and intermediate levels, and future research should include advanced-level learners to gain insight into their perception of CL learning and promotion. Lastly, the data collection for this research relied solely on a questionnaire, which limited the ability to obtain more in-depth information regarding the perspectives of CL learners. Therefore, future studies could consider implementing comprehensive questionnaire-based data collection methods to gather more detailed insights on CL learning and promotion.

Data Availability

The article encompasses all the data used in this investigation. If you need any additional information, please contact the corresponding author.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

Acknowledgments

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