



China's education sector: Investigating factors to improve business operational efficiency in a highly competitive environment

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ABSTRACT

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The purpose of this study is to investigate the human factor, organisational factor, and political factor for enhancing business operational efficiency in a highly competitive environment in China's education sector. On a global scale, China has garnered recognition for its achievements in the field of education. However, there are significant differences in higher education resource allocation among the many Chinese provinces as a result of the pursuit of scale and speed, as well as unequal development across the country. Therefore, there is a need to investigate the factors that influence the operational efficiency of the Chinese educational sector in a highly competitive environment. A cross-sectional design was utilised to conduct an online survey with 121 education sector employees. According to the findings, the organisational factor is the strongest predictor of business operational efficiency, followed by the political factor. The human factor, however, was not a significant predictor. This study discovered that changes in organisational and political factors can have an impact on the operational efficiency of any educational sector. As a result, it is suggested that clear reporting and an organised hierarchical structure be implemented across all departments. As a result, the educational institute will be able to maintain its business operational efficiency more easily.

Contribution/Originality: This research unveils the nuanced interplay of organizational, political, and human factors on operational efficiency within China's education sector. Contrary to prevailing beliefs, it underscores the non-significance of the human element, prompting a re-evaluation of traditional paradigms in educational operational strategies.

1. INTRODUCTION

China's domain has become an exploration platform for the global populace ever since it opened its doors to global economies for the purpose of trade and commerce (Thongsri, Shen, & Bao, 2020). In the same way, China has established global recognition in the education sector. However, the increased influx has caused a number of institutions operating in China's education sector or concerned with the education sector to encounter complexities

and barriers that have gradually led to a deficiency in the provision of education. According to Tseng, Tran, Ha, Bui, and Lim (2021), each Chinese immigrant acts as a conduit for the propagation of Chinese culture, which has resulted in the expansion of both private and public education-related businesses in China. Numerous factors can be identified as having an effect on the business operational efficiency of educational institutions in China. Diverse learning styles and education and teaching pedagogies are the factors that prevent China's educational institutions from outperforming in terms of their business operational efficiencies (Chen, Li, & Chen, 2021).

Concerning business operational efficiency, it is not a one-time project; rather, it requires the collective effort of managerial executives to optimise the procedure, equipment, human, and financial resources. In addition, the political aspect has remained essential in illustrating the transformation and ideological underpinnings that encompass the deprivation of business operational efficiencies in China's educational institutions (Poole et al., 2021). Moreover, the recent emergence of a pandemic on a global scale in the educational sector has prompted concern. Emergence from the Chinese locality has impacted the imagery of the Chinese economy on a substantial scale (Akpan, Udoh, & Adebisi, 2022). Students stranded in the middle of an affected domain have become a source of concern for the Chinese government, resulting in a decline in financial and profit margin efficiency. The altered circumstances have created a state of panic and compelled institutions to implement models of operations, teaching, and educational pedagogies that are difficult to adapt for both students and instructors (Wong, Cheah, & Dorai, 2023).

In addition, the development of the Chinese private education sector has remained preoccupied with the centrally planned economic transformation and the nation's general trend towards decentralization (Chen & Lin, 2021). To attain higher education, however, a greater proportion of students from around the world are drawn to China. However, the recently implemented RES (Remote Education System) and DLS (Distance Learning Systems) have had an impact on the implementation of policies for China's education sector. Managing business operations and activities has become crucial for the Chinese government due to the fact that the country's educational system is now geared towards social stability and economic development based on the national goal of modernization (Wu, Zhang, Zhu, & Zhou, 2020). Since the education sector has been closely tied to China's social and economic development, it has resulted in gains and losses that have been manifested uniquely during and after the pandemic's prevalence.

The current investigation has revealed that the Chinese education sector has been in jeopardy as a result of the mental health problems faced by students during and after the pandemic. In addition, changing attitudes towards postsecondary education, declining birth rates, and stagnant economic development have rendered educational institutions vulnerable and unstable (Song, Du, & Tan, 2018). In addition, Chinese parents who send their children abroad for higher education have begun to question the legitimacy and dependability of educational institutions. According to Cooke, Wang, and Bartram (2019), Chinese outbound travel to western nations has been declining due to shifting demographics, unstable political factors, and an increase in the local capacity for higher education. In addition, the increasing preference of Chinese parents to send their children abroad has complicated the process of recruiting students (Lee & Lee, 2022). This study has never established a correlation between economic and political stability and the operational efficiency of businesses (Fang, Razzaq, Mohsin, & Irfan, 2022). The outbreak has significantly harmed China's economy. China's added value in terms of size, investment, and consumption decreased by 13.5%, 24.5%, and 20.5% annually in the first two months of 2020, and the unemployment rate reached 6.0%, according to data released by the National Bureau of Statistics of China on April 17. China's GDP growth rate decreased by 6.8% during the first quarter of 2020 (Zou, Huo, & Li, 2020). In addition, the current study has never provided justifications for the distinction between educational institutions operating in China's public and private sectors (Tseng et al., 2021). As a result of the pursuit of scale and speed, as well as unequal development throughout the nation, there are substantial disparities in the allocation of resources for higher education among China's many provinces (Shahzad, Ferraz, Nguyen, & Cui, 2022). Due to the unequal allocation of resources for higher education,

some students may face not only a heavy academic load but also unfair competitive demands, resulting in a more unequal outcome. Under these conditions, the Chinese government desires to provide higher education in a more efficient manner that fully utilises the resources at its disposal to meet the rising student demand and ultimately ensure that higher education achieves balanced development (Farooq Sahibzada, Xu, Afshan, & Khalid, 2021). In addition, the pandemic has led to serious violations of human rights, such as slander and discrimination. Consequently, educators are concerned about discrimination if they are also infected with COVID-19, and they must regularly inform students about the virus (Chen et al., 2021). In these circumstances, teachers may experience a variety of psychological phobias, such as fears of contracting the coronavirus and fears of an infestation in the school. Teachers who experience psychological stress, such as worry, may develop symptoms such as burnout (Qiao, Chen, & Zhang, 2021).

1.1. Underpinning Theory

According to operational management theory, the political ability to transform labour, raw materials, and technology into basic commodities is managed to ensure effective operational management. Sjödin, Parida, Jovanovic, and Visnjic (2020) noted that implementing effective measures is further defined as the development and implementation of plans. Individuals involved with business-related operations across educational sector institutions in the Chinese economy are therefore required to utilise the capacity for constructing actionable decisions. In addition, supply chain management, creativity, technology management, networking skills, and analytic reasoning are functions performed by the organisation that appear to be essential for determining effective business operations (Provis, 2017). As far as theoretical conceptualization is concerned, it will be investigated whether the human factor, which consists of managers, staff, and administration, participates in financial and operational management procedures or actively determines the things that have been mandated for completion. Strategic objectives may determine everything else, including negative aspects, according to Zimon, Tyan, and Sroufe (2019). The determination of operational efficiency also considers the sequence of assets that must be acquired for the accomplishment of business objectives.

2. LITERATURE REVIEW

2.1. Business Operational Efficiency in Competitive Chinese Educational Institutions

According to Khan and Shireen (2020), business operational efficiency is a measurement of allocating resources in terms of how much profit is generated and how much capital is required to operate the business. It is the ratio of output to input. If the operational efficiency of a business is increased, its output or profit will also increase. Researchers suggest that the efficiency and effectiveness of various educational institutions can be improved by implementing business operational efficiency, which is a crucial aspect of educational institutions. Multiple inputs and outputs can be easily managed using this method, which has no parameters (Taye, Sang, & Muthanna, 2019). China's higher education companies are preparing for a "substantial" impact on their commercial business as a result of Beijing's implementation of regulations prohibiting for-profit instruction in essential school courses in an effort to reduce household expenditures.

China's current massive education sector is expected to expand significantly in the coming decades as families educate their children to operate in a market that is far more diverse than their own. In addition, despite the desire of Chinese consumers to invest in education, international companies face a number of entry barriers (Mamajonov, Bazarov, Uralov, Djumabaeva, & Rahmatov, 2019). The Chinese government, which maintains absolute oversight control over academics, is typically suspicious of foreign engagement in teaching. In addition, directors, administrators, and technicians who are prominent executives of a global education service company with a fixed place of business in China and who are temporarily migrating as prospective students will be permitted entrance to a currently recognised institution. The Chinese education industry is widely regarded as one of the most difficult

and competitive in the world. Students in China who want to pursue their dreams in any field must take an admissions exam, which determines their future career options. This examination is known as the Gaokao in China, and approximately ten million students take it annually (Lu, Shi, & Zhong, 2018). Some Chinese educational experts believe that non-Chinese students are incapable of comprehending the difficulty of the Gaokao, and that a single point reduction in any subject can severely limit a student's opportunities or aspirations. Researchers have identified China's ever-increasing population as the primary cause of the country's increasingly competitive environment. Everyone around the world is aware that China has the largest population in the world; as a result, not only education but other sectors of China, such as employment opportunities, are also very limited, and applicants must be exceptional if they wish to attend their dream university or work for one of the best companies in China (Zhang, Yan, & Chen, 2021). According to Chen (2022), it has been observed in China that students are taking additional coaching classes to survive in this hypercompetitive educational environment. However, the Chinese government prohibited these government classes and urged young students to take some time off from studying, as excessive studying can be detrimental to their mental and physical health.

On the other hand, parents believe that this is not the right initiative taken by the government and that this could result in students receiving poor scores on the Gaokao due to the intense competition and the limited number of available seats; consequently, children must devote their free time to studying to ensure a better future. Chinese students clearly become exhausted as a result of these intensely competitive exams, according to a study by Lew et al. (2021). Furthermore, numerous cases of Chinese students attempting suicide to escape this competitive environment have been reported. However, this is extremely alarming for parents and educational institutions, who must recognise that the mental health of young students is being severely compromised by peer pressure. Parents and teachers are required to provide these young children with proper counselling in which they are made aware that it is acceptable if they are unable to study at the institution or obtain a job with the organisation of their choice, but that suicide for these reasons is not acceptable (Luo & Su, 2018). On the other hand, government organisations should investigate this issue and attempt to establish as many educational institutions and offer as many courses as possible in order to increase the number of opportunities and reduce student competition.

2.2. Factors Impacting the Business Operational Efficiencies in the Chinese Education Sector

Kaufman (2015) observed that operational efficiency quantifies a company's capacity to overcome resource utilisation and maximise profit margins. However, numerous factors, such as inventory management, manufacturing, and resource utilisation, influence operational efficiency. Operational efficiency differs from productivity in China's educational institutions due to the optimal emphasis placed on generating greater outcomes with the same inputs (Bag, Wood, Xu, Dhamija, & Kayikci, 2020). The authorities must maintain a record of operational efficiencies, as this will facilitate the time, money, and effort optimization of the project. The operational efficiency of educational institutions augments their growth potential and significant valuation. Keeping track of the factors affecting the operational efficiency of a business enables the nation's authorities to take effective measures to address the obstacles and complexities (Kazancoglu, Kazancoglu, & Sagnak, 2018). Managing the business operational efficiencies of China's educational institutions facilitates the adoption of strategic decisions. The primary objective of such acknowledgements is to increase revenue by decreasing expenses in order to increase employee and customer satisfaction. As the current research focuses on the education industry, the ultimate consumers will be students and their parents or guardians.

Additionally, Dutta, Choi, Somani, and Butala (2020) show that a variety of factors affect the educational sector's operational efficiency and competitive advantage. The author went on to explain that the recent prevalence of the pandemic has exposed the organisations associated with the education sector in China to vulnerability and danger, leaving institutions and authorities without the option to move operations and activities from physical infrastructure to remote infrastructure. Managing teaching- or non-teaching-related tasks manually and remotely

can be challenging and complicated (Madakam, Holmukhe, & Jaiswal, 2019). Since then, nearly every student, teacher, and non-instructional staff member has been trained to perform manual tasks with ease. However, the paradigm shift has increased the workload of non-faculty members, which has led to an increase in waste, error, and uncertainty. The development of such factors has resulted in a backlog of work and a consistent increase in scale.

2.3. Human Factors

There is a mismatch or incompatibility between the features of workspaces, such as required skills and competencies, and the characteristics of job seekers, such as expertise, level of education, and preferred location. In addition, competence is the ability to consistently apply a collection of pertinent knowledge, skills, and abilities in a particular role or work situation to successfully carry out essential job responsibilities or activities (Kwon & Lee, 2019). In addition, there are no suitable instructional methods in place; consequently, procedures are unable to function correctly, resulting in poor performance evaluations and decreased production output. As one of the most esteemed professions in China, teachers play a pivotal role in evaluating the human factor for the operational efficiency of Chinese educational institutions. According to Statista (2022), there are 18.44 million full-time teachers in China, including 6.6 million primary school teachers and 3.91 million junior secondary school teachers, or 39 percent of the total number of teachers. According to Wang (2014), the recruitment process for teachers is conducted on a national scale, and every teacher is required to pass a qualification exam to ensure that they are capable of meeting basic educational requirements. Thus, human factors, such as teachers, can be viewed as crucial to the operational effectiveness of the Chinese education institute. Consequently, we hypothesised:

Hypothesis: Human factors have a positive effect on business operational efficiency.

2.4. Organisational Factor

When a company's monitoring is inadequate, there will never be sufficient accountability for preventing problems, errors, accidents, and injuries. In addition, businesses would have been unable to function properly in the absence of appropriate instructional methods, resulting in decreased employee performance and decreased business performance. Fractional and general harmony are used in model parameters to provide job support and confidentiality (Liu, Han, Li, Gupta, & Sivarajah, 2022). In addition, a poorly designed layout can result in increased traffic, higher industrial automation costs, more accidents, and less inventory space. Literature demonstrates that the Chinese educational system is one of the largest in the world, with over 260 million students in approximately 514000 schools throughout the Chinese state (Sun & Sun, 2022). When compared to other countries' educational systems, China's is said to be both large and diversified (Rui, 2014). China has been managing its educational system despite its enormous population and vast territory, despite the fact that the institute has been divided into three levels: the national level, the provincial level, and the township level. This educational institution is primarily responsible for managing and providing high-quality education. This division of the education system ensures the operational efficiency and quality of educational institutions in China. Consequently, we hypothesised:

Hypothesis: Organisational factors have a positive effect on business operational efficiency.

2.5. Political Factor

The world has been dramatically transformed by technological progress and the accelerating pace of globalisation. In this regard, the Chinese economy has been regarded as one of the most influential global economies in the late 20th and early 21st centuries in terms of globalisation and technological reform. Since the last decade, academic professionals have conducted the most research on the reform of China's educational policies. According to Zhang, Rosen, Cheng, and Li (2018), under the influence of China's political dynamics, Chinese educational systems, such as the Shanghai educational system, reported significant changes. As the first one was implemented in 1978, the author also concluded three politically motivated educational reforms of the Chinese

educational system. Due to the significant impact of the Cultural Revolution and the incorporation of the Compulsory Education Law, the entire educational system was reconstructed during the initial reformation of the Chinese educational system, which lasted from 1978 to the 1980s and was characterised by its efficiency-oriented nature (Marginson, 2018). This law mandates that every child must complete elementary and secondary school as a minimum requirement for basic education. In addition, Marginson (2010) demonstrates that during the initial phase of educational system reformation, the Chinese government promoted economic transformation and developed the socialist market economy mechanism. Education has appeared to be the foundation for the nation's economic growth. In addition, Chen (2011) stated that the architect of Chinese reform and development, Deng Xiaoping advocated "let a few become rich first," highlighting the significance of elite student education for economic growth (Huang, Wang, & Li, 2015). As a result, few schools and institutions of higher education were rebuilt for the advanced education of elite students. In response to the dynamic political and governmental influence in China, efficiency, effectiveness, and competition emerged in the educational system.

The second Chinese educational reform from the 1990s to the 2000s was equality-oriented (Cheung, Yuen, Yuen, & Cheng, 2016). According to Zhang et al. (2018), this second phase of reformation emphasises children's basic education rights. The Chinese government makes efforts to ensure that all children have access to basic education, regardless of race, culture, or religion. In this regard, Wang (2014) asserts that key public schools were closed and transformed into a crucial pillar to ensure children's access to education. Eliminating the knowledge gap between rural and urban areas, such as the knowledge and education gap between the developed eastern region and the less developed western or inland regions of China, is one of the primary priorities or goals of this second Chinese educational reformation. In addition, the government sought to eliminate the disparity in socioeconomic status that prevents hundreds of students from exercising their right to an education. The government and political parties create and put into practice plans to improve the general operational efficacy of Chinese educational institutions in order to guarantee that children have access to their fundamental rights to education. Through the formulation of appropriate educational policies, the Chinese government aimed to address the basic educational needs of children more susceptible to low socioeconomic status, students with physical or learning disabilities, and students from ethnic minority groups. Consequently, it can be concluded that government and political factors play a significant role in the operational efficiency and competitive advantage of the Chinese educational system. Consequently, we hypothesised:

Hypothesis: Political factors have a positive effect on business operational efficiency.

Following an analysis of the theory and relevant literature, we developed the following conceptual framework refer to Figure 1.

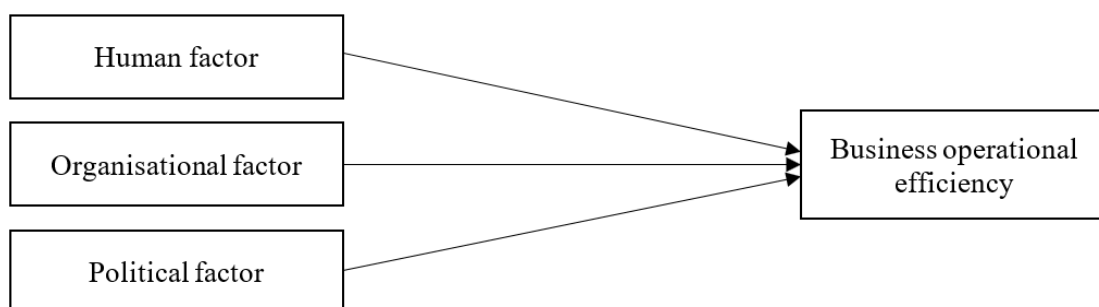


Figure 1. Conceptual framework.

3. METHODS

3.1. Samples

The sample size used to collect data for this study consists of 121 individuals from the education sector who responded to a survey regarding the factors to improve business operational efficiency in China's education sector in

a highly competitive environment. Based on the G-Power analysis, the current sample size of 119 is adequate to achieve the desired statistical power of 0.95, significance level of 0.05, and expected effect size of 0.15. Therefore, it can be concluded that the sample size of 121 is sufficient, and the results can be relied upon.

Table 1 displays the demographic profile of the respondents. This study's respondents were primarily between the age of 30-39 (41.3%), 18-29 (40.5%), and 40 and older (18.2%), in that order. Regarding gender, 53.8% of respondents were male, while the remaining 46.2% were female. Following those with an undergraduate degree (29.8%) and those with a high school diploma (7.4%), respondents held postgraduate degrees in the majority (62.8%) of cases. Most study participants (91.7%) were non-academicians, while only 8.3% of respondents were academicians.

Table 1. Demographic profile of respondents (N=121).

Demographic	Categories	Frequency	Percentage (%)
Age	18-29	49	40.5
	30-39	50	41.3
	40 and above	22	18.2
Gender	Male	65	53.8
	Female	56	46.2
Education qualification	High school	9	7.4
	Undergraduate	36	29.8
	Postgraduate	76	62.8
Job position	Non-academician	111	91.7
	Academician	10	8.3

3.2. Instruments

This study collected data from education sector employees using a questionnaire. For the demographic profile, the following information was collected: gender, age, education qualification, and position. The business operational construct consists of five items adapted from Shah, Anwar, and Hussain (2021) and scored on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). "I believe that enhancing business operational efficiency will improve the education sector in China" is an example of one of the items. Three human factors items were adapted from Jabbour et al. (2019) using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). "Collaboration with coworkers is effective for enhancing business operational efficiency in the education sector" is an example of an item. Three items were adapted from Paais and Pattiruhu (2020) for organisational factors, using the 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). An example of an item is "appropriate goals established by the organisation improve the operational efficiency of the educational sector." Three political factor items were adapted from Bahoo, Alon, and Paltrinieri (2020) using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). A sample item is "policies and rules for school business operations are effectively communicated to improve business operational efficiency in the education sector." The range of Cronbach alpha values is between 0.84 and 0.87.

3.3. Data Analysis

The data was analysed using SPSS 27.0 (Statistical Packages for the Social Sciences). Multiple analyses were performed to ensure that the study met its goals. The data were subjected to descriptive analyses to determine the frequency distribution of the respondents' backgrounds and the research variables. Then, we examined how human factors, organisational factors, political factors, and business operational efficiency were related to one another using a Pearson correlation analysis. Finally, a linear multiple regression analysis was conducted to identify the factors that predicted business operational efficiency. All statistical tests were conducted using a significance level of 0.05.

4. RESULTS

Table 2 displays the results of a Pearson correlation analysis between the human factors, organisational factors, political factors, and business operational efficiency. The results showed a significant positive relationship between human factors and business operational efficiency ($r = .678, p < .001$). The findings of this study suggested that faculty, staff, and the management of the educational institution all had a positive impact on a company's operational efficiency. Organisational factor also correlates positively with operational efficiency in businesses ($r = .691, p < .001$). This indicated that educational institutions and the corporate sector play a significant role in the operational efficiency of educational institutions. There was a significant correlation between political factors and the operational efficiency of businesses ($r = .694, p < .001$). This indicated that political transformations and ideological foundations are crucial to the operational effectiveness of the educational institution.

Table 2. Descriptive statistics and correlations among variables (N = 121).

No.	Variables	Mean	SD	1	2	3	4
1.	Business operational efficiency	3.75	0.486	1			
2.	Human factor	3.87	0.497	0.678**	1		
3.	Organisational factor	3.90	0.691	0.691**	0.733**	1	
4.	Political factor	3.75	0.731	0.694**	0.781**	0.688**	1

Note: ** $p < 0.001$.

Table 3 displays the results of the linear multiple regression analysis examining the predictors of business operational efficiency. The results indicated that the combination of human factors, organisational factors, and political factors significantly explained 57.9% of the variance in the operational efficiency of businesses. The strongest predictor of business operational efficiency was found to be organisational factors ($\beta = .340, p .01$), followed by political factors ($\beta = .320, p < .01$). However, it was discovered that the political factor was not a significant predictor of business operational efficiency ($\beta = .180, p = .09$). Thus, hypothesis H2 and H3 are supported, while H1 is not.

Table 3. Predictors of business operational efficiency (N = 121).

Criterion variable	Predictor variable	F	R ²	df	Beta	T	p
Business operational efficiency	Human factor	53.539**	0.579	-3,117	0.18	1.686	0.09
	Organisational factor				0.34	3.703	<0.01
	political factor				0.32	3.205	< 0.01

Note: ** $p < .01$.

5. DISCUSSION

The purpose of this research is to determine the impact of human factors, organisational factors, and political factors on business operational efficiency in a highly competitive environment in China's education sector. The findings indicate that organisational factors were the most significant predictors of operational efficiency in businesses, followed by political factors.

The research findings demonstrate that organisational factors have a significant impact on the operational efficiency of a business. Correspondingly, Liu et al. (2022) asserted that without appropriate instructional strategies, firms would not have been able to operate efficiently, resulting in poor employee performance and decreased business performance. According to Rui (2014), China has successfully managed its educational system despite its massive population and vast territory. The institute is divided into three distinct levels: national, provincial, and municipal. Due to this separation of the educational system, Chinese educational institutions will operate more efficiently and adhere to higher standards. The rapid development of China's higher education system has coincided with the country's robust economic expansion. China still has a significant educational disparity compared to

developed nations, but it has recently begun providing high-quality facilities and stable funding for higher education in an effort to close the gap (Jiang, Lee, & Rah, 2020).

In addition, the results of the study indicate that political factors have a significant impact on the operational efficiency of businesses. According to Zhang et al. (2018), under the influence of China's political dynamics, Chinese educational systems, such as the Shanghai educational system, reported significant changes. In addition, Marginson (2010) demonstrates how the Chinese government supported economic change and established a socialist market economy mechanism during the early stages of educational reform. Education has been suggested as the foundation for the nation's economic development. According to Chen (2011), only a handful of colleges and universities were renovated to accommodate the advanced education of wealthy students. Due to dynamic political and governmental influence, the Chinese educational system developed efficiency, effectiveness, and competition. This demonstrates the impact of the political aspect on operational efficiency in the highly competitive education sector of China. Moreover, the second reformation phase, according to Cheung et al. (2016), focuses on the fundamental educational rights of children. The Chinese government works to ensure that all children, regardless of race, culture, or religion, have access to a basic education. This second wave of Chinese educational reform aims to close the knowledge gap between rural and urban areas, such as between China's developed eastern region and its less developed western or inland region. In addition, the administration worked to eliminate the socioeconomic gap that prevents hundreds of students from exercising their right to an education. Thus, the political aspect plays a crucial role in influencing operational efficiency in China's education sector's highly competitive environment. Similarly, the prior literature supports the study's findings, as Wang (2014) explains that the Chinese government and political parties develop and implement appropriate strategies to improve the overall operational efficiency of Chinese educational institutions in order to guarantee children's access to their basic education rights. Through the formulation of appropriate educational policies, the Chinese government aimed to address the basic educational needs of children more susceptible to low socioeconomic status, students with physical or learning disabilities, and students from ethnic minority groups. Consequently, it can be concluded that government and political factors play a significant role in the operational efficiency and competitive advantage of the Chinese educational system.

The findings of this study indicate there is no link between the human factor and operational efficiency in China's education sector's highly competitive environment. According to Kwon and Lee (2019), teachers are crucial when examining the human component of the operational effectiveness of Chinese educational institutions because teaching is one of the most prestigious professions in China. In addition, the literature suggests that, as part of the national teacher recruitment procedure, every teacher must pass a qualifying exam to demonstrate that they are qualified to meet the fundamental standards of education. In this approach, according to Wang (2014), instructors and other human variables can be viewed as crucial to the effectiveness of the Chinese educational system. In contrast, the findings of this study refute the hypothesis of a significant relationship between the human factor and operational efficiency. This inaccuracy or insignificance may occasionally occur if the data does not encompass the full range of possible variable values.

6. RECOMMENDATIONS

This study demonstrates that organisational and political factors can influence the operational efficiency of any educational sector's business operations. Despite the fact that the literature suggests that human factors have a significant impact on the effectiveness of the Chinese educational sector, the findings of this study do not support these claims. On the basis of the study's findings, the following recommendations have been made to improve the effectiveness and efficiency of business operations within the Chinese educational sector.

Liu et al. (2022) suggest, in the context of the organisational aspect, that goal setting should be the priority of the organisation or educational sector in order to ensure the smooth operation of the business operations of an educational institution. In response, Zhang et al. (2018) elaborated that an educational sector simultaneously

performs multiple operations, such as those related to marketing, staff recruitment, and student enrollment. As a result, it is advised that the company set realistic objectives for clear reporting and a well-organized hierarchical structure encompassing all departments. Consequently, the educational institution will have an easier time maintaining its operational efficiency. In addition, Wang (2014) suggests that organisations and the educational sector must communicate and delegate responsibilities to staff, administration, and other stakeholders. Appropriate allocation of responsibilities based on need, workforce maturity level, and other factors will help the organisation adapt to changing technological and environmental demands. According to Kwon and Lee (2019), effective communication and clarification of organisational policies to all key stakeholders are crucial for increasing the operational efficiency of a business or educational sector. However, it is suggested that organizations communicate their policies to ensure conflict-free business operations. The findings of the study demonstrated a significant relationship between the political aspect and operational efficiency; indeed, Lee, Kwon, and Pati (2019) have recommended that appropriate policies be developed to prevent the widening of the education gap between districts. As a result, the Chinese government needs to concentrate on the overall situation. In addition, Rui (2014) suggests that the relevant managers and administrators in China must be provided with policy recommendations and improvement directives to enhance the effectiveness and calibre of higher education institutions (HEIs). In addition, the results demonstrated that China's educational system could provide higher education more efficiently by utilising its available resources more effectively to meet the rising student demand and presumably ensure higher education's sustainable growth. For the sake of efficient operations, it is recommended that responsibilities be distributed equitably and appropriately among all stakeholders and employees.

7. CONCLUSIONS, LIMITATIONS, AND FUTURE RESEARCH

The current study emphasised the factors that have an impact on the business operational efficiencies of China's educational institutions. As a result, the current study made contributions to determining the positive effects of the business operational efficiency of educational institutions and considering measures and approaches that adequately treat the institutions' operational concerns. On the basis of the extensive literature review and the explanation of the Operational Management Theory, an appropriate research framework was developed for the formulation of the hypothesis. According to our research, organisational and political factors are the primary drivers of business operational efficiency in China's education sector. Therefore, this research will aid government bodies in China's education sector in introducing strategic, effective policies for conducting business efficiently. In addition, it will assist business owners in adopting various strategies for the efficient operation of their enterprises. Quantitative data has been gathered through the use of primary data collection. Nevertheless, it can be determined that the study's findings are trustworthy, genuine, and plausible. However, future researchers may use or consider the findings of this study to cover another industry, such as service and hospitality.

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Institutional Review Board Statement: The Ethical Committee of INTI International University, Malaysia has granted approval for this study (Ref. No. INTI/UEC/2023/018).

Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

Competing Interests: The authors declare that they have no competing interests.

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