



RESEARCH ARTICLE

Mediating Effect of Job Satisfaction and Competitive Advantage between Quality Management Practices and Sustainable Performance: A Conceptual Framework for Hospitals in Guangxi, China

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ARTICLE INFO	ABSTRACT
Received: Jun 21, 2024 Accepted: Aug 15, 2024	Ensuring medical quality and safety remains the eternal theme of medical management. Hospitals should emphasize quality management to achieve sustainable development. However, quality management in hospitals is complex, and evolving practices have increased the challenges of quality management. It remains challenging to realize the organic combination of economic, environmental, and social benefits to achieve high-quality development. Quality management practices are widely recognized as an effective strategic management tool, yet we know little about how these practices can improve job satisfaction, competitive advantage, and sustainable performance. This study aims to investigate the relationship between quality management practices, job satisfaction, competitive advantage, and sustainable performance. Constructing a conceptual framework aims to deepen the understanding of these relationships to enhance hospital management and operations effectiveness. Quality management practices encompass top-level leadership, process improvement, and employee involvement, crucial for hospital operations and service quality. Sustainable performance involves the hospital's long-term development and success in economic, social, and environmental aspects. The significance lies in providing a vital reference for hospital managers. Understanding the mediating role of job satisfaction and competitive advantage between quality management practices and sustainable performance enables managers to formulate better strategies, improve employee satisfaction and competitive advantage to optimize quality management practices, and ultimately enhance hospital sustainable performance. This conceptual framework provides an essential theoretical basis for future empirical studies, facilitating progress and innovation in hospital management and operations.
Keywords	
Quality management practices Sustainable performance Job satisfaction Competitive advantage	
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INTRODUCTION

The changes in social, economic, and environmental factors as well as natural disasters have had a severe impact on the economy and the lifestyle of the people (Yupat et al., 2024). Ensuring medical quality and medical safety is the eternal theme of medical management (Liu et al., 2021). Hospitals make great contributions to the protection and improvement of people's health. In the long term, China will focus on the theme of "high-quality development", and as China's society and economy have entered the "quality era" and are moving towards high-quality development, hospitals must follow the essence of quality and move towards quality development. The National Health

Commission and the State Administration of Traditional Chinese Medicine (SATCM) jointly organized a conference on quality management in China. In 2023, China's National Health Commission (NHC) and the State Administration of Traditional Chinese Medicine (SATCM) jointly issued the "Action Plan for Comprehensively Improving the Quality of Medical Care (2023-2025)," which proposes to use three years to further build quality and safety awareness throughout the industry, improve the quality and safety management system and management mechanism, raise the level of refinement and standardization in medical quality and safety management, and continue to improve the public's satisfaction with healthcare services (Ma, 2023). The Chinese government's initiative reflects the importance and urgency of promoting the high-quality development of hospitals. The reform of health insurance payment method, hospital performance management and hospital quality development index tasks are all forcing hospitals to accelerate innovation drive, improve medical service level, enhance operational efficiency, and promote sustainable development (Xu et al., 2023).

Quality management has become one of the main measures for hospitals to cope with the changing environment (Alsmairat et al., 2023; Tonjang & Thawesaengskulthai, 2022) and numerous hospital administrators have agreed that the wisest hospital strategy is a quality management strategy. By implementing effective quality management practices, healthcare organizations hope to achieve superior performance (Hussain et al., 2023) and thus gain a competitive advantage in the highly competitive marketplace. The goal of total quality management is to achieve higher quality through the coordinated efforts of every stakeholder in quality delivery (Acquah et al., 2023).

However, hospital quality management has a high degree of complexity, and the continuous enrichment of quality management practices has increased the difficulty of hospital management. In China, public hospitals are dominated by the pursuit of maximizing social benefits, always focusing on people's health, and improving the quality and efficiency of medical services. Hospitals also need to focus on long-term development and change from rough management to refined management, to achieve certain economic benefits and ensure career development. How hospitals can realize the organic unity of social, environmental, and economic benefits to move towards the road of high-quality development is still difficult. Do all quality management practices improve organizational performance? How can hospitals choose effective quality management practices among the many quality measures, programs, and philosophies? With scarce resources, a healthcare organization's quality program that includes too many ineffective quality measures will demotivate staff and affect the overall effectiveness of the quality program. Studying the impact of quality management practices on sustainable performance has attracted much interest and attention from scholars and hospital administrators in China.

Although the relationship between quality management practices and performance is a widely researched topic in the literature, most of the available empirical results have centered on quality management practices and performance of industrial firms (Hou, 2022; Liu, 2022; Zhao & Liu, 2020; Zhou & Xu, 2022), with less research focusing on the sustainable performance of hospitals. In addition, the mediating roles of job satisfaction and competitive advantage are still rarely exploited in the literature. As the world's largest developing country, there is a need to conduct research on the relationship between quality management practices and sustainable performance of hospitals in the Chinese context to fill the gap of one of the studies proposed by Akanmu et al., Babu & Thomas (2023; 2021).

This research therefore aims to answer the following two questions:

RQ1. How do quality management practices affect the sustainable performance of hospitals in Guangxi, China?

RQ2. What is the mediating role of job satisfaction, and competitive advantage between quality management practices and sustainable performance of hospitals in Guangxi, China?

This study attempts to propose and empirically test a conceptual model linking quality management practices, job satisfaction, competitive advantage and sustainable hospital performance (economic, environmental and social performance).

2 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Literature Review

Quality Management Practices

In the literature, there exist many quality concepts such as six sigma, business process reengineering, lean manufacturing, lean six sigma, total quality management, etc., whose goal is always to ensure quality competition (Faeq et al., 2021). Quality management refers to all activities of a managerial nature carried out to achieve quality objectives, throughout the business process, ensuring that customer requirements are met at every stage, both internally and externally (Oakland, 2014; M. A. Ahmad, 2022). Emerging quality management theories and quality award criteria have injected fresh blood into the definition of what constitutes quality management practice and its scope (Claver et al., 2003). Quality management is a widely recognized strategic approach that prioritizes continuous improvement of organizational processes, customer satisfaction, and overall business effectiveness (García-Alcaraz et al., 2021; Hussain & Khan, 2020). Mbatha & Garad (2022) view TQM as a process, a management philosophy or culture, with eight fundamental characteristics. philosophy or culture that possesses eight essential characteristics. Namely, culture change, top management, continuous improvement, customer focus and customer satisfaction, employee involvement, teamwork, systems and processes, and training. Quality management is a quality management strategy that aims to achieve long-term success through customer satisfaction. Bytyçi et al. (2023) define total quality management as a belief system that focuses on satisfying customers' needs, which requires organizations to create customer-centered operational techniques by investing in resources to facilitate the orientation of the customer and to satisfy their needs and desires. The concept encompasses numerous practices such as process improvement, employee engagement, customer focus and quality assessment.

Quality management practice in this study is defined as a management philosophy that focuses on customer satisfaction, employee involvement and continuous improvement of work processes and enhances organizational performance (Øvretveit, 2000; Sadikoglu & Olcay, 2014; Dar et al., 2023; Ming, 2023). That is, hospital quality management is a comprehensive reflection of the quality management work of all departments and units in the hospital, as well as a centralized expression of the role of the six elements of the hospital (people, money, materials, equipment, information, and time).

Sustainable Performance

Sustainable performance is the long-term competitive advantage of a business that considers its impact on the natural environment and human society, as well as its ability to achieve economic returns without sacrificing the needs of its stakeholders (Kleindorfer et al., 2005). In the future, the more successful a business is, the more sustainable it will be (Permatasari et al., 2023). In the literature on sustainable business performance, previous studies have focused on the economic aspects of maintaining business operations, but a growing number of studies point to the importance of environmental and social aspects (Verrier et al., 2014; Ilyas et al., 2020). The "triple bottom line" is widely used in the measurement of sustainable performance, including economic, environmental, and social performance (Elkington, 1997; Yadegaridehkordi et al., 2023).

With the help of the general definition of performance, many scholars learned from the general practice of business performance and introduced the concept of performance into the field of health management, which led to the relevant definition of hospital performance (Ioan et al., 2012).

Sustainable performance of hospitals is a complex and dynamic concept. Definitions of sustainable performance of healthcare systems in existing studies have focused on continuous improvement, which can be categorized into three main groups: (1) financial sustainability, (2) sustainability of human resources and acceptance of change by stakeholders, and (3) system adaptation and improvement (Zurynski et al., 2022). By adopting a holistic approach that integrates quality, efficiency, patient satisfaction, employee well-being, environmental responsibility, and social responsibility, hospitals can achieve long-term success in delivering high-quality care, meeting financial obligations, and actively contributing to society. This definition has evolved over time, reflecting the changing priorities and challenges of healthcare. The core connotation of sustainable development is the harmonization of the environment, society, and economy (Wang, 2022). Therefore, measuring hospital sustainability performance can be done with the help of quantitative criteria that reflect a company's capability, vision, and pursuit of sustainability. A widely recognized way to express hospital sustainable performance is to balance economic, environmental, and social benefits (Pederneiras et al., 2023), which is to consider the "triple bottom line" theory in performance issues. This research tends to define sustainable performance of hospitals as the pursuit of long-term robustness in the provision of healthcare services, while considering economic, social and environmental perspectives. This includes achieving balanced and coordinated sustainable outcomes in terms of patients, employees, finances, social responsibility, and the environment. It hinges on maintaining a balance of financial health, social responsibility, and environmental protection alongside healthcare services to ensure that the hospital can continue to provide high quality healthcare to patients in the future.

Job Satisfaction

It is widely recognized by scholars that job satisfaction was first proposed by the American psychologist Hoppock (1935) in his work. Employee satisfaction is one of the psychological aspects that reflect how a person feels about his or her job. The more people love their jobs, the higher their satisfaction (Aziri, 2011). Oshagbemi (2000) defined job satisfaction as "the positive emotional response of an individual to any given job". It also refers to an employee's overall effective evaluation of his/her job. Job satisfaction is a reasonable attitude of an individual towards his/her job and people with high satisfaction usually show positive attitudes while people with low satisfaction show negative emotions. Job satisfaction further implies enthusiasm and happiness for the job and is a key factor leading to recognition, income, promotion, and other goals for achieving fulfillment (Rahman et al., 2019). In essence, job satisfaction is an individual issue. Satisfaction will vary for each employee based on everyone's perception of the value system that applies to them (Sajim et al., 2024).

When studying job satisfaction, the definition of job satisfaction varies depending about the study and different theoretical frameworks are adopted. In this research, job satisfaction in hospitals is defined as the level of satisfaction of staff within hospitals with their jobs, work environment, management, and organizational culture (Alsalamah, 2023).

Competitive Advantage

In early studies, Bain (1956) discussed the characterization of competitive barriers in manufacturing, and Alderson (1965) introduced the concept of "competition by difference" to gradually establish the importance of competitive advantage for corporate strategy formulation (Nayak et al., 2022). Competitive advantage is defined as a firm's favorable position vis-à-vis its competitors, which is the determinant of its success or failure, and the possession of a competitive advantage is the lifeblood of a firm's performance in the marketplace (Ávila, 2022). Mahdi et al. (2019) argued that a firm's sustainable competitive advantage is a dynamic process consisting of an object, a medium, an objective, and an update, which allows the firm to withstand the demands of current competition without having to meet the demands of future competition (Nayak et al., 2022). needs while not risking for meeting future competitive needs. Saluy et al. (2021) and Delery and Roumpi (2017)

argued that human resource practices not only enhance employee competencies, motivation, and opportunities, but also contribute to the firm's sustainable competitive advantage. According to Rasti-Barzoki et al. (2020), the variable dimensions of competitive advantage include differentiation, cost leadership and focus. In the absence of competitive advantage, the company will perform poorly and may lose in competition with similar companies (Wahyuni & Sara, 2020). Whereas Purwanto et al. (2020) showed that industry or firm competitive advantage cannot be dependent on a single factor, whether it is the external or internal environment. Wu et al. (2024) argued that the competitive advantage of a firm is equivalent to superior performance, and that its decomposition is necessary to understand its characterization (value advantage) and its source (competence advantage). Competitive advantage is an advantage over competitors gained by having the ability to do a job well (Ricardianto et al., 2023). Incorporating environmental responsibility into a company's strategic planning is a tangible competitive advantage and a significant contribution to social and environmental well-being (Lima et al., 2024). In this research competitive advantage is defined as a unique advantage or capability that an organization has over its competitors in an area that provides it with sustained success and leadership.

2.2 Hypothesis Development

Quality Management Practices and Sustainable Performance

In recent years, sustainability has gained much attention among stakeholders and organizations around the world (Caiado et al., 2018; Magd & Karyamsetty, 2021). It is widely recognized that the concepts of quality management practices and sustainable business performance are critical to the field (Mohsin et al., 2024). Academics have accumulated a large body of research on the different aspects and degrees of positive impacts that total quality management practices can bring to business performance.

TQM can generate sustainable competitive benefits in organizational performance (Silvestri et al., 2023; Wassan et al., 2022). Mohsin et al. (2024) examined how QM practices can contribute to the achievement of sustainable performance of firms and found that QM practices have a positive impact on both the economic and environmental sustainability of firms. However, the hypothesis of the positive impact of quality management practices on the social sustainability of firms was not supported. The results further suggest that knowledge management has a significant mediating role between total quality management and sustainable performance. There is a strong positive correlation between total quality management and corporate sustainability (AlQershi et al., 2023; Sin et al., 2022; Saha et al., 2022; Ali AlShehail et al., 2022; Magd & Karyamsetty, 2021; Kumar et al., 2020). AlQershi et al. (2023) suggested that managers need to take various measures to implement quality management to improve sustainable performance such as increasing productivity, improving profitability and reducing costs, as well as trying to disseminate a culture of quality throughout the organizational structure. Studies such as Akanmu et al.'s (2023) found dimensions of quality management practices: effective implementation of continuous process improvement, benchmarking testing, quality assurance, service design, and information and analytics have a positive and significant impact on corporate sustainability. Saha et al. (2023) on the other hand, found that quality management has a significant impact on organizational sustainable performance and its three dimensions (economic performance, social performance, and environmental performance).

With the increasing emphasis on the healthcare field, scholars have begun to explore the relationship between quality management practices and hospital performance specifically for the healthcare field, but there are fewer research results on sustainable hospital performance. Xiong et al. (2017) conducted a study on quality management activities in hospitals and found that quality management practices, especially employee relations and process management, significantly affect hospital performance, including performance directly related to healthcare processes and non-healthcare related performance such as satisfaction, financial performance, etc. Puthanveetil et al. (2021) et al.

confirmed the importance of total quality management in improving organizational performance of hospitals in India. The study by Tonjang et al. (2022) found that both quality management practices and dimensions of innovation have a positive positive impact on sustainable performance of hospitals. Zehir et al. (2023) developed that quality management practices now have a significant impact on the financial and operational performance of hospitals.

To summarize, the significant impact of quality management practices on sustainable performance of manufacturing and other service firms has been confirmed by many scholars, based on this, to further explore the relationship of quality management practices on sustainable performance of hospitals, this research proposes the following hypotheses:

H1: Quality management practices have a positive and significant impact on the sustainable performance of the hospital.

Quality Management Practices and Job Satisfaction

The relationship between quality management practices and employee satisfaction has been a topic of great interest, and there is a considerable body of literature that explores various aspects of this relationship. Overall, studies have shown that there is a positive correlation between effective implementation of quality management and increased employee satisfaction (Lepistö et al., 2024; Hamsinah et al., 2023; Riaz et al., 2023; Mostafa & Bisheer, 2023; Faeq et al., 2022; Mo & Borbon, 2022; Babu & Thomas, 2021; Azarian et al. 2020; Ali et al. 2020; Sanjaya, 2018; Prasad & Prabhudesai, 2018). However, this relationship is complex and influenced by multiple factors.

The findings of Addis et al. (2019) showed that there is a significant positive relationship between senior management commitment, active employee engagement, and continuous improvement and employee satisfaction. However, customer centeredness was not significantly associated with employee satisfaction and surprisingly, an unexpected negative correlation was found between teamwork and employee satisfaction. El-Kassem's (2023) study on teachers' job satisfaction found that the implementation of quality management only involvement in decision-making, information, teamwork and salary are the four dimensions that have a positive relationship with teachers' job satisfaction, while the positive relationship of professional development on teachers' job satisfaction is not supported. Top management commitment as well as rewards and recognition are the most influential factors of quality management practices on employee job satisfaction (Aminuddin et al., 2022). Employees' job satisfaction increases when they see their efforts positively impacting customer satisfaction (Riaz et al., 2023). Mostafa & Bisheer's (2023) study found that the highest correlation between total quality management practices and employee satisfaction was employee empowerment. Ming (2023a) explored the impact of total quality management (quality management) on employee satisfaction and performance in the Chinese manufacturing industry, and elements such as employee engagement, training and development, effective communication, supportive leadership, and teamwork, as well as other factors such as empowerment, recognition and rewards, continual improvement, work-life balance, and employee feedback and participation, were identified as key elements in improving employee satisfaction and performance. A study by Lepistö et al. (2024) and others found that that the four TQM dimensions of management/leadership, customer focus, personnel management and risk management were related to personnel satisfaction.

Whereas, in the healthcare sector, the studies of Işık, Škarica et al. (2023; 2021) found a significant correlation between total quality management and employee satisfaction. By analyzing the standard regression coefficients, it was found that for every unit increase in the perception of total quality management, employee satisfaction increased by 0.743 units. Alsalamah (2023) assessed the impact of quality management practices on employee satisfaction in the health sector in Saudi Arabia, and the results of the study showed that customer centricity, continuous improvement, process

management, employee involvement, leadership, significant positive correlation between good vision, communication and integration systems and employee satisfaction.

Overall, research on quality management practices and employee satisfaction suggests that effective implementation of quality management has the potential to achieve positive results. However, realizing this potential requires careful consideration of environmental factors, effective leadership, and continuous improvement efforts to ensure that QM practices are truly empowering and engaging for employees, ultimately improving satisfaction and organizational performance. As a result, this research proposes a hypothesis:

H2: Quality management practices have a positive and significant impact on employee satisfaction.

Job Satisfaction and Sustainable Performance

Job satisfaction is significant in defining organizational success, especially in the service industry (Kurdi et al., 2020). Employee progress, community, and environment play an important role in the sustainable growth of an organization. Therefore, organizations are always looking for ways to improve job satisfaction to enhance performance. Employees are important stakeholders and job satisfaction is often considered as an important factor in organizational performance and success (M. R. Ahmad & Raja, 2021; Hilton et al., 2021; Nguyen, 2020). Successful organizations usually have satisfied employees, while poor job satisfaction can bring an organization to its knees (Galup et al., 2008). A survey by Alrazehi et al. (2021) found that job satisfaction is one of the critical factors in the performance of Yemeni international banking organizations. Employee job satisfaction is crucial for organizations because it affects employee motivation and productivity, which in turn affects the overall performance of the organization (Frutos-Bencze et al., 2022). Deb et al.'s (2023) study supports that some elements of employee satisfaction positively affects the performance of the firm, and they are: organizational infrastructure, leadership and management, salary positively affects the small business firm performance. Higher job satisfaction scores represent the possibility of better operational performance. Although not fully apparent at unusual times, the impact of job satisfaction becomes apparent when the firm experiences negative shocks (Shan & Tang, 2023).

M.-J. Kim & Kim (2020) and others argue that job satisfaction, can have a significant impact on the relationship between CSR and performance. Job satisfaction and competitive advantage also have a positive impact on business sustainability, and the sustainability of a company greatly improves organizational performance (Jermsttiparsert, 2020). A satisfied and dedicated workforce is the cornerstone of maintaining competitive advantage and organizational sustainability (long-term success). Whereas Sanusi & Roostika (2023) and others confirmed that job satisfaction has a positive impact on the sustainable performance of MSMEs. In addition, job satisfaction moderates the effect of digital skills on the sustainable performance of MSME entrepreneurs. Jing et al. (2023) showed that employees in more polluted firms were significantly less satisfied and were less likely to recommend the firms they worked for to their friends. Employee concerns about environmental sustainability are prominent and reducing pollution appears to be a crucial factor in increasing employee satisfaction. Abdelhamied et al. (2023) results indicate that employee satisfaction and "green motivation" contribute significantly to sustainable performance. In addition, the results also showed that employee satisfaction played a fully mediating role between the two variables of green motivation and sustainable performance. Crucke et al. (2022) argued that job satisfaction was found to be positively related to organizational sustainability through the effect of perceived organizational support and social influence potential on PSM.

This shows that organizational sustainability is related to job satisfaction. Medical staff is not only the main force to promote the healthy development of health care but also the main practitioner of hospital reform, and their job satisfaction and motivation are directly related to the quality and performance of hospital medical services. In addition, improving the job satisfaction of hospital

employees mobilizes the work motivation of medical staff, thus promoting the sustainable development of hospitals (Xu et al., 2018).

Therefore, regarding the relationship between job satisfaction and sustainable performance of hospitals, this research proposes the following hypotheses:

H3: Employee satisfaction has a positive and significant impact on Sustainable performance of hospitals.

Quality Management Practices and Competitive Advantage

Quality management is a key factor in achieving competitive advantage in world-class manufacturing industries, and when the external environment causes a change in a firm's competitive advantage, the firm will continue to improve its quality management practices ensuring that the competitive advantage is sustained, thus creating a virtuous cycle (Flynn et al., 1994). It is widely recognized that quality management can generate sustainable competitive advantage (Reed et al., 2000). Total quality management has a positive positive effect on competitive advantage (Alneyadi, 2023; Bidayati et al., 2023; Mehregan et al., 2023; Al Khasabah et al., 2022). Firms that implement total quality management are better able to perceive opportunities, seize them, and reconfigure resources to cultivate the firm's dynamic capabilities to respond to the individualized and diversified needs of today's consumers, thus gaining a better competitive advantage (Ramlawati, 2022; Zhang & Xu, 2017). Masrom et al. (2022) et al. used Malaysian manufacturing firms as a study and found that quality management practices have a significant positive effect on firms' competitive advantage. The study by (Elhawwi, 2022) found a relationship between quality management practices and competitive advantage in Jordanian banks. This means that the principles and practices of quality management can influence the performance of an organization and lead it to progress and prosperity. Implementing quality management can increase patient satisfaction, which leads to competitive advantage and helps hospitals to become more sustainable (Zehir & Zehir, 2023).

Although it is generally accepted that quality management practices have a significant impact on competitive advantage, the dimensions of quality management have implicit characteristics in themselves, interact with each other and are interconnected with supporting resources, creating a mutually reinforcing relationship between the practices. Based on this, this study examines the relationship between quality management practices and competitive advantage in a hospital setting and proposes the following hypotheses:

H4: Quality management practices have a positive and significant impact on competitive advantage.

Competitive Advantage and Sustainable Performance

Competitive advantage is an important concept in the field of strategic management, and scholars generally agree that competitive advantage is closely related to organizational performance. Specifically, Ferreira et al.(2021) stated that competitive advantage puts firms in a rare, valuable, and difficult-to-obtain position, which contributes to superior performance. Waqas et al.(2021) stated that manufacturing firms should focus on their competitiveness and improve product quality performance, which contributes to the firm's environmental performance. Tan et al.(2022) argued that competitive advantage is achieved through environmental strategy and environmental awareness to gain competitive advantage not only improves product performance, but also environmental performance and financial performance. Wang et al.(2022) found that differentiated competitive advantage can improve start-ups' performance by increasing customer loyalty and bargaining power, while cost-leading competitive advantage can attract customers through low-priced products/services and improve start-ups' profitability. Xue et al.(2022) showed that when firms are able to respond to customer needs faster than their competitors, it helps to provide value to customers through new products and services, which enhances innovation

performance. Ricardianto et al. (2023) found that shipping companies in Indonesia can also improve firm performance through competitive advantage. Elgarhy and Abou-Shouk (2023) found that sustainable competitive advantage is the added value of business products and practices that help firms meet customer needs better than competitors, contributing to the realization of economic value and improved market performance.

A study by Innotata & Joung (2022) and others found that competitive advantage has a significant positive effect on hospital performance and verified that total quality management mediated by competitive advantage significantly and positively affects organizational performance. This research proposes a hypothesis:

H5: Competitive advantage has a positive and significant impact on the sustainable performance of hospitals.

Mediating Role of Job Satisfaction

Prior research on quality management practices and performance has examined the direct effects between these two variables and attempted to identify links between them. Employees' productive behavior can mediate the effect of quality management practices on firm performance (Hartono et al., 2023). In addition, according to Trivellas et al. (2009), employee satisfaction plays a mediating role between quality management practices and innovation performance. Hassis et al. (2023) investigated the mediating role of CSR (customer, community, and employee) in quality management practices and organizational sustainability. The results showed that CSR plays a partial mediating role between total quality management and organizational sustainability. The mediating effect of job satisfaction between quality management practices and performance is a complex relationship involving the interaction of multiple factors within the organization.

Quality management practices focus on continuous improvement and quality management, which leads to improved work processes and environments that increase employee job satisfaction. Improved work environment enhances employee loyalty and satisfaction with the organization, which positively affects performance (A. Riaz et al., 2023). The results of Amin et al. (2017) showed that quality management practices are significantly related to employee job satisfaction and hotel performance. Where leadership and customer centricity play a significant role in improving employee satisfaction and hotel performance. Organizations need to enhance total quality management to achieve products or services by effectively meeting the needs of customers and employees to improve organizational performance (Abdullahi et al., 2020).

Overall, the mediating effect of job satisfaction between quality management practices and performance may be multifaceted and depends on the specific implementation of quality management within the organization. Based on this, the following hypotheses are proposed in this research:

H6: Employee satisfaction mediate the relationship between quality management practices and sustainable performance of hospitals.

Mediating Role of Competitive Advantage

According to (Innotata & Joung, 2022; Ukab, 2021; Munizu, 2013), competitive advantage plays a mediating role between total quality management practices and organizational performance. By implementing quality management, an organization can gain competitive advantage, which in turn improves its performance level. A central objective of quality management is to improve the quality of products and services. Through continuous improvement and quality control, organizations can provide higher quality and more reliable products and services. High-quality products and services can create a competitive advantage for the organization by attracting more customers and increasing its market share, thereby improving its performance level. Quality management focuses on

innovation and flexibility within the organization, which makes the organization more competitive and better able to meet patient needs. Quality management reduces the cost of patient visits by improving the quality of healthcare services, low cost and high-quality healthcare services are key factors in the competitive advantage of hospitals and can have a direct impact on the level of performance.

Overall, quality management provides the basis for hospitals to win competitive advantages by improving the quality of healthcare services and reducing the cost of patient visits. These competitive advantages directly or indirectly affect the sustainable performance level of hospitals and make them sustainable. Therefore, this research proposes the following hypotheses:

H7: Competitive advantage mediate the relationship between quality management practices and sustainable performance of hospitals.

Based on the explanation of the hypotheses discussed, the following is a framework for the research model used, as shown in Figure 1.

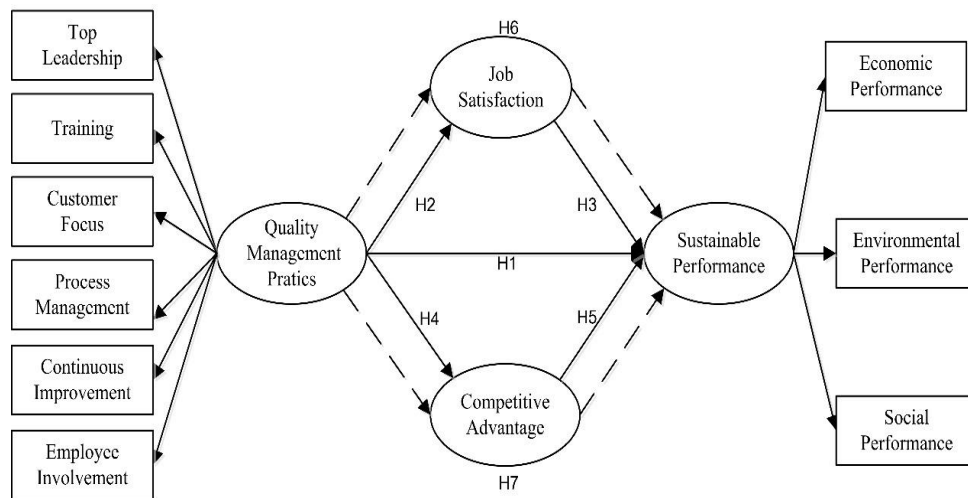


Figure 1. Conceptual Framework.

Source(s): Figure by authors.

3 CONCLUSION

3.1 Discussion

Constructing a conceptual framework aims to deepen the understanding of these relationships to enhance hospital management and operations effectiveness. Quality management practices encompass top leadership, process improvement, and employee involvement, crucial for hospital operations and service quality. Sustainable performance involves the hospital's long-term development and success in economic, social, and environmental aspects. The significance lies in providing a vital reference for hospital managers. Understanding the mediating role of job satisfaction and competitive advantage between quality management practices and sustainable performance enables managers to formulate better strategies, improve employee satisfaction and competitive advantage to optimize quality management practices, and ultimately enhance hospital sustainable performance. This conceptual framework provides an essential theoretical basis for future empirical studies, facilitating progress and innovation in hospital management and operations.

This study postulated the following research questions and on the basis of literature we have answers these questions:

(1) How do quality management practices affect the sustainable performance of hospitals in Guangxi, China?

Quality management to enhance sustainable performance, such as improving productivity, profitability, and cost reduction and striving to disseminate a quality culture throughout the organization. Akanmu et al. (2023) found that dimensions of quality management practices: process improvement, benchmarking, quality assurance, service design, and information and analysis—positively and significantly impact corporate sustainability. Saha et al. (2023) found that quality management greatly influences organizational sustainable performance and its three dimensions (economic performance, social performance, and environmental performance).

(2) What is the mediating role of job satisfaction and competitive advantage between quality management practices and sustainable performance of hospitals in Guangxi, China?

Employee productivity behavior may mediate the effects of quality management on company performance (Hartono et al., 2023). Furthermore, Trivellas et al. (2009) state that employee job satisfaction mediates between quality management practices and innovation performance. Hassis et al. (2023) studied the mediating role of CSR (customer, community, employee) in quality management and organizational sustainability. The results show that CSR partially mediates between quality management and corporate sustainability. The mediating effect of employee job satisfaction between quality management and performance involves multiple organizational factors. Competitive advantage may play a mediating role between quality management practices and organizational performance. By implementing quality management, an organization can gain competitive advantage, which in turn improves its performance level. Quality management reduces the cost of patient visits by improving the quality of healthcare services, low cost and high-quality healthcare services are key factors in the competitive advantage of hospitals and can have a direct impact on the level of performance.

3.2 Implications

This study has some managerial and academic significance.

Based on the findings, hospital leaders and managers can understand that quality management practices can lead to high levels of sustainable performance as well as increase employee job satisfaction and hospital competitive advantage. This is because quality management practices ensure continuous quality improvement involving all functional aspects of the hospital and stakeholder involvement from top to bottom with a focus on customer satisfaction (both internal and external). Quality management practices and job satisfaction are highly relevant in today's business world as it is difficult to find employees who are highly skilled and dedicated at the same time. Patients choose a hospital based on a wide range of information gathered from stakeholders. Often, patients finalize their choice after consulting with relatives or acquaintances who work in that hospital or department. Especially in highly human resource-based industries such as hospitals, attracting quality labor is critical to their service delivery. This study concludes that a hospital strategy based on quality management is important for improving job satisfaction and competitive advantage as well as bringing about higher levels of sustainable performance. For government agencies, the countermeasure suggestions for improving sustainable performance of hospitals proposed in this study based on empirical analysis can provide reference bases at the theoretical and operational levels for the formulation of policies related to the reform of the medical and health system.

3.3 Directions for further research

Future research entails data collection and empirical analysis, examining hypotheses regarding implementation levels and relationships in secondary and tertiary hospitals in Guangxi, China. The

study will investigate how quality management practices contribute to hospitals' sustainable performance. Furthermore, the scope of future research involves testing and validating the model using Structural Equation Modeling (SEM) methods to collect raw data from secondary and tertiary hospitals in Guangxi, building upon a comprehensive review of quality management literature.

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