

# Relationship Between Students' Perceptions of Doctoral Value and Satisfaction with University Services in Kenyan Universities in the Post-COVID-19 Era

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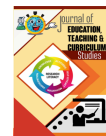


## Abstract

This study investigates the relationship between doctoral students' perceptions of the value of their programmes and their satisfaction with university services in selected Kenyan universities in the post-COVID-19 era. Employing a descriptive survey design, data were collected from 63 doctoral students using a structured questionnaire. Perceived doctoral value was measured using a modified multidimensional value scale, while satisfaction with university services was assessed using the SERVPERF instrument. Data were analysed using descriptive and inferential statistics, including Pearson's product-moment correlation and Kendall's tau-b correlation. The findings revealed a positive and statistically significant relationship between perceived doctoral value and satisfaction with university services ( $r = .264, p < .05$ ). Kendall's tau-b analysis further confirmed a moderate positive association ( $\tau_b = .21, p < .05$ ). Students who perceived greater value in their doctoral programmes reported higher satisfaction with the quality, reliability, and responsiveness of university services. The results underscore the importance of strengthening functional, social, and emotional value dimensions within doctoral education to enhance institutional effectiveness and student experience in the post-COVID-19 context.

## Introduction

Doctoral education represents the highest level of academic training and plays a critical role in national development by producing advanced knowledge, fostering innovation, and training highly skilled professionals. Universities offering doctoral programmes are therefore expected to provide not only rigorous academic training but also supportive institutional environments that enhance students' experiences and outcomes. In recent years, doctoral education has increasingly been evaluated through the lens of student experience, satisfaction, and perceived value, reflecting broader shifts in higher education toward accountability and quality assurance.



The COVID-19 pandemic profoundly disrupted higher education systems worldwide, compelling universities to adopt emergency measures such as remote teaching, virtual administration, and digital research support. In Kenya, universities transitioned rapidly to online platforms to sustain academic continuity and institutional operations (Stevens et al., 2021). While these changes enabled continuity, they also exposed weaknesses in service delivery systems, including communication delays, technological limitations, and uneven access to resources (Mandillah et al., 2022). In the post-COVID-19 era, doctoral students have become more attentive to how universities deliver services and whether these services align with the value they expect from doctoral education.

Perceived value in higher education extends beyond academic content to include functional and affective dimensions associated with institutional services. Cengiz and Kirkbir (2007) conceptualise perceived value as a multidimensional construct comprising functional elements such as facilities, service quality, personnel professionalism, and cost, alongside affective elements such as emotional satisfaction and social prestige. Applied to doctoral education, this framework suggests that students evaluate the worth of their programmes based not only on scholarly rigour but also on how effectively universities support their academic and administrative needs.

In Kenya, doctoral education has expanded significantly over the past decade, driven by national policies emphasising research capacity and advanced training. Despite this growth, concerns persist regarding service quality, administrative efficiency, and the overall doctoral student experience. The Commission for University Education (CUE) continues to stress quality assurance and institutional accountability, particularly in light of post-pandemic transformations. Understanding how doctoral students perceive the value of their programmes in relation to university services is therefore essential for improving institutional performance and sustaining doctoral programme credibility.

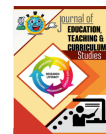
This study addresses the question: *What is the relationship between doctoral students' perceptions of the value of their programmes and their satisfaction with university services in the post-COVID-19 era?* By focusing on this relationship, the study provides empirical evidence to the limited literature on doctoral value perceptions in African higher education contexts.

The specific objectives of the study were to assess doctoral students' satisfaction with university services, examine their perceptions of the value of doctoral programmes, and determine the relationship between perceived doctoral value and satisfaction with university services in selected Kenyan universities.

### **Theoretical Framework**

The study is grounded in Expectancy-Value Theory (EVT) (Wigfield & Eccles, 1992) and the Multidimensional Model of Perceived Value (Cengiz & Kirkbir, 2007). EVT posits that individuals' motivation and satisfaction are shaped by their expectations of success and the value they attach to an activity. Within doctoral education, students' satisfaction with university services reflects both their expectations of institutional performance and the perceived worth of their academic and financial investment. When institutional services meet or exceed expectations, students are more likely to perceive higher value in their doctoral programmes.

Cengiz and Kirkbir's (2007) model complements EVT by offering a structured understanding of perceived value. Functional value encompasses tangible and operational aspects such as facilities,



service quality, personnel professionalism, and cost efficiency, while affective value includes emotional satisfaction and social recognition. In doctoral education, functional value is reflected in reliable administrative systems, accessible resources, and effective communication, whereas affective value emerges through feelings of trust, institutional pride, and professional identity.

Integrating these frameworks allows for a holistic interpretation of doctoral students' experiences, recognising that satisfaction with university services and perceived programme value are interdependent constructs shaped by both rational evaluation and emotional engagement.

### Conceptual Framework

The conceptual framework guiding this study posits a direct relationship between student satisfaction with university services and the perceived doctoral value that results. Student satisfaction, the independent variable, is comprehensively assessed across five critical dimensions of service quality: tangibles, reliability, responsiveness, assurance, and empathy. These aspects of service provision are hypothesised to influence the dependent variable, perceived doctoral value, which is segmented into its functional and emotional components. Furthermore, the model incorporates socio-demographic factors such as age and gender as intervening variables. The framework integrates the SERVPERF performance-based evaluation of service quality with the multidimensional perceived value theory by Cengiz and Kirkbir (2007) that suggests that the pathway and strength of the impact of service satisfaction on the perceived value of the doctoral degree is not uniform, but rather moderated or mediated by the inherent socio-demographic characteristics of the students, thus providing a nuanced understanding of value creation in the higher education context. Figure 1 illustrates these relationships.

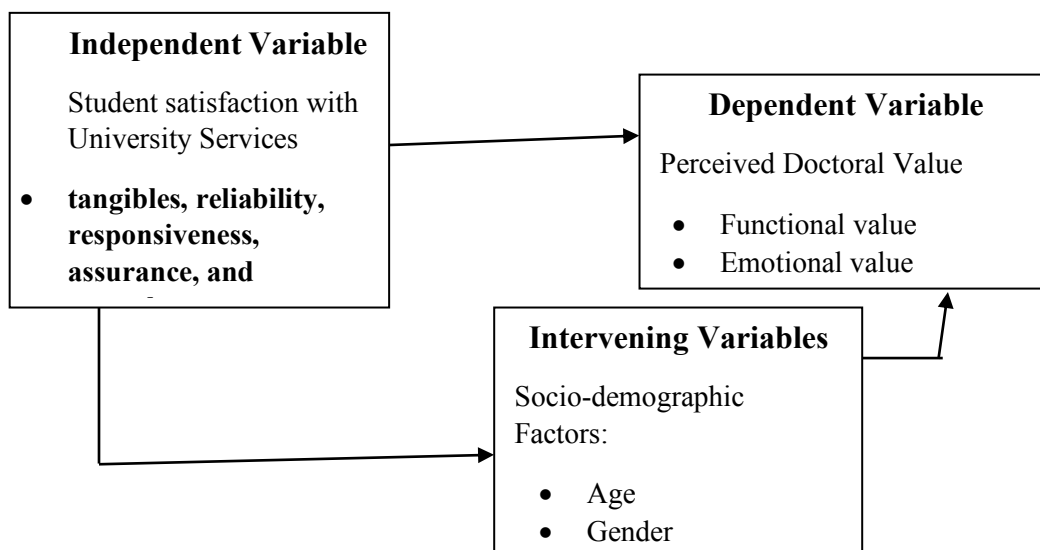
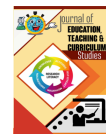


Figure 1: Conceptual Framework

### Literature Review

The quality of university services plays a pivotal role in shaping student satisfaction and perceived value, particularly at the doctoral level, where academic and administrative needs are highly



specialised. Cavallone et al. (2024) emphasise that doctoral students' satisfaction is influenced by both educational services, such as access to qualified faculty and learning resources, and non-academic services, including administrative efficiency, communication, and physical infrastructure. Their findings suggest that doctoral satisfaction acts as a key predictor of career preparedness and institutional loyalty (Cengiz & Kirkbir, 2007).

Similarly, Belash et al. (2015) demonstrate that stakeholders' satisfaction in higher education depends heavily on the perceived reliability and responsiveness of institutional systems. In the Kenyan context, Ndaba and Naidoo (2024) identify digital transformation as a significant determinant of service quality following the COVID-19 pandemic. They argue that universities that rapidly integrated digital platforms for communication, registration, and research support reported higher levels of student satisfaction.

Perceived value extends beyond functional benefits to include emotional and social dimensions. According to Lim (2020), emotional value encompasses students' feelings of enjoyment, trust, and novelty, while social value reflects the prestige and reputation associated with programme completion. In doctoral education, emotional and social values manifest through a sense of belonging to an intellectual community and the societal respect accorded to the PhD credential (Teo, 2023).

Empirical research in the African higher education setting further associates perceived value with the image of the institution and quality of service. According to Mgaiwa (2021), perceptions of employability, administrative efficiency, and academic support were also important factors that impacted student satisfaction in Tanzanian universities. Moreover, Yang and Tiangiao (2022) document that PhD students' satisfaction is positively associated with interest in academic careers, indicating that perceived value affects short- and long-term identity development.

All these findings are in line with the hypothesis that service delivery, in terms of timeliness of communication, adequacy of resources, and professional behaviour, increases students' perceptions of doctoral value (Abdul-Rahaman, 2023). On the other hand, perceived value is reduced by inefficiencies, slow responsiveness, or poor facilities, irrespective of the academic rigour (Day, 2020). This study contributes to the literature by quantifying this relationship within the Kenyan context, where post-pandemic adjustments continue to redefine institutional norms.

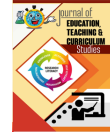
## **Methodology**

### ***Study Design***

A descriptive survey research design was employed to examine the relationship between doctoral students' perceptions of programme value and satisfaction with university services. This design was appropriate because it allowed for the systematic collection of quantitative data to describe existing conditions and analyse relationships among variables without manipulation.

### ***Study Population and Sampling***

The target population consisted of doctoral students enrolled in selected private Christian universities in Kenya. A census approach within a purposive-convenience sampling framework was adopted, in which all accessible doctoral students were invited to participate. A total of 70 questionnaires were distributed, and 63 were returned fully completed, yielding a response rate of 90%.



### ***Data Collection Instruments***

Two instruments were used. Perceived doctoral value was measured using a modified version of the multidimensional perceived value scale developed by Cengiz and Kirkbir (2007), capturing functional and affective dimensions. Satisfaction with university services was measured using the SERVPERF scale (Cronin & Taylor, 1992), which assesses service quality across five dimensions.

### ***Data Collection Procedures***

The questionnaire was distributed electronically to doctoral students at the dissertation stage of their studies who were accessible to the researchers through institutional networks and professional contacts. The use of an online survey platform was considered appropriate given the post-COVID-19 context and the continued reliance on digital communication within higher education institutions. Participants received a brief introduction outlining the study's purpose, the voluntary nature of participation, and assurances of confidentiality and anonymity.

### ***Validity and Reliability***

Content validity was established through expert review by scholars in higher education research. Reliability analysis showed high internal consistency. The standardised SERVPERF scale reports a Cronbach's alpha coefficient above .90, indicating excellent reliability, while the self-developed perceived doctoral value scale also demonstrated acceptable reliability ( $\alpha > .70$ ).

### ***Data Analysis***

Data were analysed using IBM SPSS Statistics version 26. Descriptive statistics summarised respondents' perceptions, while Pearson's product-moment correlation examined the relationship between perceived doctoral value and satisfaction with university services. It was used because the data met the assumptions of continuity and linearity, making it appropriate for examining the strength and direction of relationships among the key variables in this study. Kendall's tau-b correlation was used to confirm associations among ranked variables and to account for ordinal measurement and tied ranks. Statistical significance was set at the 0.05 level (two-tailed).

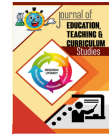
### ***Ethical Considerations***

Ethical standards for research involving human participants were strictly observed throughout the study. Approval to conduct the research was obtained from the relevant institutional authorities, and participation was voluntary. All respondents were informed of the study's purpose and provided informed consent before completing the questionnaire, with the assurance that they could withdraw at any time without penalty.

To protect participants' rights, anonymity and confidentiality were maintained by excluding all personally identifying information from the data collection process. Data were securely stored and used solely for academic purposes, and findings were reported in aggregate form to prevent identification of individual respondents or institutions. The researchers adhered to principles of integrity and transparency in data handling, analysis, and reporting.

### **Results**

Descriptive results indicated moderate to high satisfaction with university services across most SERVPERF dimensions, particularly tangibles, reliability, and assurance. Areas related to empathy and



individualised attention received comparatively lower ratings, indicating opportunities for improvement.

Pearson correlation analysis revealed a positive and statistically significant relationship between perceived doctoral value and satisfaction with university services ( $r = .264, p < .05$ ). This indicates that higher satisfaction with service quality is associated with stronger perceptions of doctoral programme value. To further validate this relationship, Kendall's tau-b correlation was conducted and showed a moderate positive association ( $\tau_b = .21, p < .05$ ), confirming the robustness of the findings.

### **Discussion**

The findings demonstrate a clear and statistically significant relationship between doctoral students' perceptions of programme value and their satisfaction with university services. This relationship supports both Expectancy-Value Theory and the multidimensional perceived value framework, emphasising that students' evaluations of doctoral education are shaped by institutional performance as well as emotional and social considerations.

Consistent with Cavallone et al. (2024) and Belash et al. (2015), the results highlight the importance of reliable, responsive, and empathetic service delivery in shaping students' value perceptions. The strong reliability of the SERVPERF scale further strengthens confidence in these findings. In the post-COVID-19 context, functional service quality—particularly communication, digital infrastructure, and staff professionalism—emerges as a critical determinant of doctoral value perception.

The study underscores that universities must treat service quality and perceived value as interconnected constructs. Enhancing administrative efficiency and fostering trust-based institutional relationships contribute not only to satisfaction but also to sustained doctoral engagement and institutional reputation. The use of a convenience sample and reliance on self-reported data were limitations of this study, but they did not significantly affect the study's findings.

### **Conclusion**

This study established a significant positive relationship between doctoral students' perceptions of programme value and satisfaction with university services in selected Kenyan universities. The findings, supported by both Pearson's and Kendall's tau-b correlations, confirm that institutional service quality plays a pivotal role in shaping doctoral students' evaluations of their programmes' worth.

Universities are encouraged to adopt comprehensive service quality frameworks grounded in the SERVPERF dimensions, invest in functional resources such as facilities and digital systems, and strengthen affective engagement through empathy, transparency, and student-centred practices. Continuous assessment of perceived value and service satisfaction should be embedded within institutional quality assurance processes.

By aligning functional efficiency with emotional and social dimensions of perceived value, Kenyan universities can enhance doctoral student experiences, improve programme credibility, and strengthen their position in the evolving post-COVID-19 higher education landscape.



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