



Understanding Student Preference for Universities Over TVET Colleges: A Conceptual Analysis of Perceptions and Institutional Factors

Malebo Suzan Mulaudzi¹, Rachel Tholakele Khoza²

^{1,2}University of Johannesburg, Johannesburg Business School, South Africa

Abstract

The persistent preference of students for universities over Technical and Vocational Education and Training (TVET) colleges in South Africa remains a critical concern, particularly in the context of youth unemployment and ongoing skills shortages. Despite the strategic role of TVET institutions in providing practical, industry-relevant skills, enrolment patterns continue to favour traditional university pathways. This conceptual study examines the determinants of students' preference for universities over TVET colleges, with a specific focus on perceptions of digital readiness. Drawing on Human Capital Theory, Social Influence Theory and Institutional Theory, the study integrates traditional factors awareness, employability expectations, curriculum relevance and institutional credibility with contemporary digital transformation perspectives. A conceptual research design is adopted, grounded in a narrative and critical review of recent literature, through which key constructs and relationships are synthesised into an integrated framework. The synthesis indicates that limited awareness of TVET opportunities, negative societal perceptions, perceived differences in employability outcomes and institutional factors such as infrastructure and reputation shape student preferences. Perceptions of digital readiness play a significant role in shaping student choice, with universities generally perceived as more digitally advanced and better aligned with the Fourth Industrial Revolution, while TVET colleges are often viewed as less digitally equipped. The study contributes a digitally grounded conceptual perspective on student preference and provides practical insights for policymakers and institutions seeking to enhance the relevance, competitiveness and attractiveness of vocational education in South Africa.

Keywords: Student preference; TVET colleges; universities; digital readiness; digital transformation; higher education choice; South Africa

1. Introduction

South Africa's Technical and Vocational Education and Training (TVET) colleges were redesigned after 1994 to produce the artisans and technicians on whom the country's industrial base depends, with an explicit mandate to bridge mass post-school enrolment and a labour market starved of intermediate skills [1, 2]. Three decades on, school-leavers continue to choose universities first. TVET enrolment lags, public esteem stays low, throughput rates are weak and graduate unemployment persists in ways that contradict the sector's developmental promise [3, 4]. The Fourth Industrial Revolution (4IR) has sharpened the puzzle: employers now expect graduates to combine technical competence with digital fluency and adaptability [5, 6], and the COVID-19 pandemic exposed the digital fragility of many vocational institutions, widening the perceived distance between universities and TVET colleges [1, 7, 8].

Why, then, do students continue to prefer universities over TVET colleges? How do awareness, social influence, employability expectations and institutional characteristics interact to produce this preference, and how do digital readiness perceptions reshape an already lopsided choice in a 4IR economy? Although scholarship on TVET, on student career choice and on digital readiness has grown rapidly, these strands have run in parallel rather than in dialogue. This paper bridges them, drawing on Human Capital Theory, Social Influence Theory and Institutional Theory to develop an integrated conceptual framework of student preference in South African post-school education one that places digital readiness perceptions at its centre rather than at its margins. South Africa's TVET sector confronts a paradox of persistent under-utilisation. Vocational education is consistently identified as critical to addressing youth unemployment and skills shortages, yet students continue to favour universities at the expense of strategic alignment with labour market need [3, 6]. Negative public perceptions, weak articulation between TVET qualifications and further study, and limited awareness of vocational career pathways entrench the pattern [2, 9]. The challenge has taken on new dimensions in the digital era. As employers increasingly expect digital competencies, perceptions of how well institutions prepare students for digitally mediated work have become consequential to higher education choice [5, 10]. Universities are routinely positioned as more digitally advanced and 4IR-aligned, while TVET colleges are often perceived as digitally



underdeveloped [7, 11]. Existing scholarship, however, treats these phenomena in isolation. Studies of career choice focus on socio-economic and peer influences but rarely engage with digital perceptions; work on digital readiness focuses on infrastructural deficits but rarely connects to the moment of student choice. There is no coherent conceptual account that integrates traditional determinants of higher education choice with the digital readiness perceptions now refracting them. This study addresses that gap. The study aims to develop a conceptual framework that explains the determinants of student preference for universities over TVET colleges in South Africa, with particular attention to perceptions of digital readiness. It seeks to synthesise traditional determinants of higher education choice with contemporary digital readiness considerations, advancing scholarly understanding of student preference patterns and providing an integrated basis for policy and institutional response within South Africa's 4IR agenda. The primary research question is: What factors shape student preference for universities over TVET colleges in South Africa, and how do perceptions of digital readiness contribute to this preference? Three secondary questions extend the inquiry: How do awareness, societal perceptions and employability expectations influence student choice between universities and TVET colleges? What institutional factors – infrastructure, reputation, curriculum relevance shape student preferences? And How can existing theoretical perspectives be integrated into a conceptual framework that explains student preference for universities over TVET colleges in a 4IR context? In addressing the research questions, the study pursues four objectives: to examine the role of awareness, societal perceptions and employability expectations in shaping student preferences; to analyse institutional factors influencing higher education choice; to explore the influence of digital readiness perceptions on student decision-making in the South African post-school context; and to synthesise these elements into an integrated conceptual framework that explains student preference for universities over TVET colleges.

The remainder of the paper is structured as follows. Section 2 reviews the related literature across five thematic clusters. Section 3 details the research methodology. Section 4 develops the theoretical foundation drawing on Human Capital Theory, Social Influence Theory and Institutional Theory. Section 5 presents the findings across six interrelated themes. Section 6 proposes the integrated conceptual framework. Section 7 sets out the implications for policy and practice, and Section 8 concludes the paper.

2. Review of Related Literature

The relevant scholarship is reviewed across five thematic clusters that surface the constructs the framework will integrate.

2.1 TVET in South Africa

The South African TVET sector inherits a difficult institutional history. The apartheid legacy shaped vocational education as a racially stratified, under-resourced system [2]. Post-1994 reforms sought to reposition TVET as an 'institution of choice', yet low public esteem, underfunding, weak articulation with universities and poor graduate outcomes continue to constrain the sector [1, 3]. [4] show how structural and attitudinal barriers compound for students with disabilities in Gauteng TVET colleges, while [3] demonstrates that misalignments between National Certificate (Vocational) qualifications and both employer expectations and university entry requirements restrict graduate progression.

2.2 Student Perceptions and Career Choice

Career choice in vocational education is shaped by personal interest, parental guidance, perceived employability and peer influence [12, 13, 14, 15]. Within South African TVET, [9] shows that limited understanding of career pathways contributes to disengagement and poor completion, while [16] report that perceptions of TVET attractiveness vary along demographic lines unrelated to programme quality. [17] and [18] identify information asymmetry and perceived employability as the dominant determinants of TVET institutional choice in East African contexts.

2.3 Digital Readiness and E-Learning

Digital readiness has expanded rapidly as an object of TVET research post-pandemic. [11] find that South African TVET engineering lecturers hold positive attitudes towards technology-assisted teaching but report significant digital skills deficits. [7] report inconsistent e-learning integration at a Free State TVET college, while [19] documents foundational digital competency gaps among first-year students. [8] trace these gaps upstream



to under-resourced secondary schools, [20] and [21] identify lecturer competence and institutional support as critical determinants.

2.4 Institutional Reputation and Employability

Institutional reputation and graduate employability are tightly coupled in higher education choice. [17] and [15] identify reputation and infrastructure as primary drivers of TVET selection, findings corroborated for South Africa by [2]. On employability, Mbambo and du Plessis [6] establish a significant relationship between TVET students' digital skills deficits and poor throughput, [22] document a substantial divergence between students' self-perceived work readiness and employer expectations, [10] show that perceived digital-era work readiness predicts employability competency, and [23] attributes weak job-entry preparedness to limited industry exposure.

2.5 4IR and Digital Transformation in TVET

4IR discourse has reshaped expectations of South African post-school education. [1] argues that the pandemic exposed a substantial distance between policy aspirations and TVET institutional capacity. [5] treats 4IR preparedness as a stakeholder construction constitutive of institutional legitimacy, while [6] link student digital skills directly to throughput, framing 4IR competence as a precondition for vocational success. 4IR readiness now operates as a foundational expectation rather than an optional modernisation agenda.

3. Research Methodology

The study is conceptual, based exclusively on secondary data, employing a narrative and critical literature review with thematic synthesis. No human participants were recruited and no primary data were collected. Methodological choices follow [24] for conceptual research design, [25] for narrative review and [26] for thematic analysis trustworthiness. Searches were conducted across six databases Scopus, Google Scholar, Web of Science, ScienceDirect, JSTOR and EBSCOhost combining key constructs through Boolean operators ('TVET South Africa', 'university preference', 'digital readiness TVET', '4IR TVET', 'employability TVET', 'higher education choice South Africa'), supplemented by snowballing from reference lists. Sources were included where published in English between 2011 and 2025 and focused on TVET, higher education choice, digital readiness or career readiness in South African or comparable developing country contexts; foundational theoretical works prior to 2011 were retained where conceptually indispensable. Thematic synthesis followed the six phases set out by [26]: familiarisation, initial coding, searching for themes, reviewing themes, defining and naming themes, and producing the report. Trustworthiness was supported through the four criteria credibility (triangulating evidence across sources), transferability (rich contextual description of the South African TVET environment), dependability (documenting analytical decisions) and confirmability (maintaining a traceable trail from coded passages to themes). The six themes were then mapped to the three theoretical lenses and synthesised into the conceptual framework in Section 6, with each directional pathway supported by at least two sources from the reviewed literature.

4. Theoretical Foundation

Three theoretical lenses inform the framework. Human Capital Theory conceptualises education as an investment in productive capacity yielding future returns in employability and earnings; students rationally compare expected returns on competing pathways [10, 13, 22], and digital competencies are increasingly central to perceived returns [5, 6]. Social Influence Theory addresses how attitudes and decisions are shaped by parents, peers, teachers and reference groups, operating through informational and normative channels; African scholarship consistently shows career choice mediated by these influences [9, 12, 13, 14, 15]. Institutional Theory examines how legitimacy, conferred by reputation, accreditation and visible markers of quality, conditions individual choice [2, 17]; South Africa's differentiated post-school system has established universities as the most legitimate destination, with TVET colleges positioned as less prestigious [1, 3], and digital readiness now contributes to institutional legitimacy by signalling alignment with contemporary 4IR expectations [5, 11].

5. Findings

Six interrelated themes emerge from the synthesis, each engaged critically and linked explicitly to student preference.



Theme 1: Societal Perceptions of TVET

Societal stigma is a powerful constraint on TVET attractiveness, but scholars account for it differently. [3] treats stigma as an outcome of structural articulation failures; [4] locate it at the intersection of disability and vocational identity; [2] trace it to the historical-symbolic ordering of South Africa's differentiated post-school system. These accounts capture different facets of a layered phenomenon-structural, intersectional and historical. Scholars further disagree on whether perceptions are malleable through targeted intervention [16] or sedimented in the political economy of unemployment [9, 23]; the evidence supports a middle position where perception shifts most reliably when narrative work and substantive institutional change move together. For student preference, prospective students rarely encounter empirical employment data; they encounter narratives transmitted through family, peers and media that position TVET as second-best, driving university choice by social default. Under Social Influence Theory, the channels that transmit stigma must also become those through which TVET's repositioning is propagated.

Theme 2: Perceived Employability Differences

[6], [22] and [10] converge on the digital framing of TVET employability but diverge on its locus; [6] place it on the supply side (graduates lack digital competencies), [22] in self-perception (students underestimate readiness), and [23] in curriculum design and limited industry exposure. The three readings triangulate three reinforcing weaknesses, implying complementary interventions. For student preference, prospective students lack disaggregated labour market data on TVET versus university outcomes; what they have is a generalised perception, now travelling through a digital register, that university graduates fare better. Read through Human Capital Theory in 4IR terms, expected returns to a TVET investment depend on perceived digital readiness as much as on perceived technical training, so university preference partly tracks a digitally inflected employability calculation that disadvantages TVET.

Theme 3: Digital Readiness and Technology Infrastructure

South African TVET literature documents real digital readiness deficits infrastructural constraints, lecturer skills gaps and student competency gaps [6, 7, 11, 19] that [8] trace upstream to under-resourced secondary schools. Scholars locate the deficit at different system levels (lecturer capability, platform usability, school-level digital inequality), amounting to a system-level diagnosis that requires whole-of-system responses. For student preference, digital readiness has two faces: the institutional-real and the perceptual. Under Institutional Theory, what shapes preference is the visible markers of digital readiness, not the underlying capability. Improvements in digital infrastructure must therefore be accompanied by deliberate communication; otherwise the perception lag persists and prospective students continue to choose universities on perceptual grounds.

Theme 4: Institutional Reputation and Credibility

Two competing accounts of reputation run through the scholarship. The first treats it as a reflection of underlying institutional quality; the second, drawn from Institutional Theory, treats legitimacy as its own resource, partially decoupled from underlying performance. [17] shows that perceptions of credibility persist even when programmes improve, while [8] and [7] show students basing judgements on visible markers devices, connectivity, modern facilities that can be improved relatively quickly. The implication is a dual-track logic in which substantive quality improvement is necessary but not sufficient, requiring deliberate reputation management alongside quality work. For student preference, university choice is reinforced by reputational asymmetries that predate the moment of decision; universities benefit from longer histories of investment and the structural privileging of academic over vocational qualifications, leaving TVET colleges to encounter a credibility ceiling that depresses enrolment even where programme quality is sound.

Theme 5: Awareness and Understanding of TVET Pathways

Where prospective students do not understand what TVET qualifications offer or what careers they lead to, the choice between TVET and university is not a genuine comparison but a default to the more familiar option [9, 16, 17]. [12], [13] and [14] underscore the role of parental and peer guidance, suggesting that awareness work must engage the wider social environment rather than the prospective student alone. For student preference,



university choice partly tracks the unequal visibility of options rather than considered comparison. Awareness intersects with digital readiness perceptions: students who learn about TVET through outdated websites or thin digital outreach infer that TVET institutions themselves are digitally underdeveloped, so the communicative infrastructure of TVET becomes part of how its institutional substance is perceived.

Theme 6: 4IR Preparedness and Future Employability

The sixth theme draws the other five together. 4IR readiness has become central to how students, families and employers evaluate post-school institutions [5, 6, 10]. [5] treats 4IR preparedness as a stakeholder construction; [6] connect it to throughput and labour market outcomes; [10] link it to individual employability competency. These contributions disagree on what 4IR preparedness requires a skills agenda, an institutional reorientation agenda, or a self-efficacy agenda implying complementary investments rather than mutually exclusive ones. For student preference, perceptions of 4IR preparedness operate as a perceptual lens through which the other five themes are now refracted, shaping awareness, societal perceptions, employability expectations, institutional reputation and perceived digital readiness. Where TVET is seen to lag the 4IR, every other determinant tilts further towards university choice. Repositioning TVET requires reframing the meaning of vocational education in a digitally mediated society, not just upgrading digital infrastructure.

6. Proposed Conceptual Framework

The themes synthesised in Section 5 imply a system of directional relationships among eight constructs: awareness of TVET opportunities, social influence, 4IR preparedness, digital readiness, institutional reputation, employability expectations, student perceptions and student preference decisions. The framework organises these into four layers: an antecedent layer (awareness, social influence, 4IR preparedness) carrying the contextual forces in which choice is made; a mediating institutional layer (digital readiness, reputation, employability expectations) carrying the institutional-level evaluations students form; a synthesising perceptual layer (student perceptions) through which the other layers translate into preference; and an outcome layer (student preference decisions).

Eleven directional relationships connect these constructs (Table 1). Each pathway is anchored in a theoretical lens and supported by at least two sources from the reviewed literature, ensuring that the framework rests on a demonstrable evidential base rather than conceptual assertion alone.

Table 1. Directional Relationships in the Proposed Conceptual Framework

Path	Relationship (Source → Target)	Theoretical Anchor	Justification and Literature Support
R1	Awareness perceptions → Student	Social Influence (informational)	Limited or inaccurate information about TVET produces weaker perceptions of attractiveness [9, 16, 17].
R2	Social influence → Student perceptions	Social Influence (normative)	Parents, peers, teachers and media shape evaluation of post-school options [9, 12, 13].
R3	Social influence → Awareness	Social Influence (mediating)	Information about TVET reaches students through social channels, so the social environment moderates the awareness signal [13, 17].
R4	4IR preparedness → Digital readiness	Institutional Theory	4IR discourse sets the benchmark against which institutional digital readiness is now assessed [1, 5, 6].
R5	4IR preparedness → Employability expectations	Human Capital (4IR-inflected)	4IR-relevant skills increasingly shape employer evaluation of graduates [5, 10, 22].
R6	4IR preparedness → Institutional reputation	Institutional Theory	Legitimacy is now partly conferred by visible alignment with 4IR expectations [1, 5, 8].
R7	Digital readiness → Institutional reputation	Institutional Theory	Visible markers of digital readiness feed institutional credibility [7, 8, 11].



Table 1. Directional Relationships in the Proposed Conceptual Framework

Path	Relationship (Source → Target)	Theoretical Anchor	Justification and Literature Support
R8	Digital readiness → Employability expectations	Human Capital Theory	Perceptions of digital capability shape beliefs about graduate employability [6, 19, 22].
R9	Institutional reputation → Student perceptions	Institutional Theory	Reputation and prestige shape how students evaluate enrolment desirability [2, 15, 17].
R10	Employability expectations → Student perceptions	Human Capital Theory	Perceived employability is a consistent driver of post-school preference [10, 13, 22].
R11	Student perceptions → Student preference decisions	Integrated scaffolding theoretical	The composite of antecedent and mediating constructs, refracted through digital readiness and 4IR perceptions, manifests as the observable choice between universities and TVET colleges.

Source: Authors own compilation

Three integrating mechanisms produce the framework's analytical force. First, 4IR preparedness operates as a cross-cutting force feeding digital readiness (R4), employability expectations (R5) and institutional reputation (R6); three of the four mediating pathways into student perceptions are therefore conditioned by 4IR perceptions, so that where TVET is perceived to lag the 4IR every mediator tilts further against it. Second, social influence operates through two pathways simultaneously directly on perceptions (R2) and indirectly via the awareness signal (R3) so that perceptions of TVET are doubly mediated by the social environment. Third, the mediating institutional layer is internally interconnected: digital readiness shapes both reputation and employability, each of which then shapes perceptions, so improvements in perceived digital readiness exert compounded rather than additive effects on student preference. Institutional choice is, fundamentally, perceptual. Students do not directly observe infrastructure, lecturer capability or graduate employment outcomes; they observe perceptions of these things, transmitted through social, informational and digital channels. R11 is therefore the binding pathway of the entire framework: every other relationship feeds into perceptions, and perceptions drive choice. The three theoretical anchors converge on this point Human Capital Theory holds that students choose on perceived rather than actual returns; Social Influence Theory holds that perceptions are socially mediated; Institutional Theory holds that legitimacy is conferred by perceptions of relevant audiences. In South Africa, universities benefit from advantages on all three dimensions while TVET colleges face a triple disadvantage on the perceptual register, intensified by 4IR perceptions. The framework yields four testable propositions: (P1) preference is shaped by an interacting system of antecedent, mediating, perceptual and outcome layers rather than by any single determinant; (P2) 4IR preparedness perceptions condition the influence of digital readiness, reputation and employability expectations on student perceptions; (P3) social influence operates through both direct and information-mediating pathways, doubling its effect on perceptions of TVET; and (P4) shifting student preference requires engaging capability and perception simultaneously, because perceptions are the binding pathway through which institutional capacity translates into choice.

7. Implications for Policy and Practice

Single-lever interventions are unlikely to succeed. A coordinated, multi-pronged response is required in which substantive improvements in institutional capacity move together with deliberate work on the perceptual environment in which TVET is evaluated. For policymakers and institutional leaders, this means combining investment in TVET digital infrastructure, lecturer professional development and curriculum modernisation with targeted communication campaigns to reshape public perceptions. The Department of Higher Education and Training, working with employer associations, student support organisations and community structures, has a particular role in reframing TVET as a credible and aspirational 4IR pathway [1, 5], while articulation between TVET and university qualifications requires policy attention so that students are not penalised for choosing the vocational route [2, 3]. At the institutional level, visible markers of digital readiness modern learning management systems, lecturer digital fluency, student-facing digital experiences communicate institutional readiness directly to prospective students, families and employers [11, 20]. For curriculum practice, 4IR-relevant competencies need to be embedded across vocational programmes rather than treated as bolt-on modules, with industry



exposure and work-integrated learning closing the gap between TVET training and employer expectations [10, 22, 23].

8. Conclusion

This paper has examined the persistent preference of South African students for universities over TVET colleges in a labour market that increasingly requires the skills TVET is designed to deliver, and has proposed a conceptual framework to explain this enrolment pattern. Drawing on Human Capital Theory, Social Influence Theory and Institutional Theory and synthesising literature predominantly from the 2021–2025 period, the framework identifies six determinants of preference and positions perceptions of digital readiness and 4IR preparedness as a cross-cutting perceptual layer that conditions every determinant. The four research objectives are addressed: the role of awareness, societal perceptions and employability expectations is analysed in Themes 1, 2 and 5 of Section 5; institutional factors are analysed in Theme 4; the influence of digital readiness perceptions is analysed in Themes 3 and 6; and the integrated framework is presented in Section 6. The substantive conclusion is that university preference cannot be adequately explained by any single determinant. It is the product of layered interactions among economic calculation, social influence, institutional legitimacy and digital perceptions, with 4IR-related perceptions intensifying every layer of disadvantage TVET faces. Repositioning TVET within South Africa's post-school education system is therefore a core component of the country's 4IR response. As a conceptual study, this paper does not generate primary empirical data; its four propositions await testing through quantitative modelling, qualitative inquiry into perception formation and comparative work across provinces and other developing country contexts. The contribution is the conceptual scaffolding on which such empirical work can build.

REFERENCES

- [1] Papier, J. (2021). 21st century competencies in Technical and Vocational Education and Training: Rhetoric and reality in the wake of a pandemic. *Journal of Education (South Africa)*, (84), 67–84. <https://doi.org/10.17159/2520-9868/i84a04>
- [2] Papier, J., & Needham, S. (2022). Higher level vocational education in South Africa: Dilemmas of a differentiated system. In *Palgrave Studies in Adult Education and Lifelong Learning (Vol. Part F3434, pp. 81–101)*. Palgrave Macmillan. https://doi.org/10.1007/978-3-030-84502-5_5
- [3] Majola, E. (2025). National Certificate Vocational graduates and barriers to progression in South African Technical Vocational Education and Training. *Transformation in Higher Education*, 10, Article a579. <https://doi.org/10.4102/the.v10i0.579>
- [4] Muzite, P., & Gasa, V. (2024). Experiences of students with disabilities in Technical Vocational Education and Training colleges. *African Journal of Disability*, 13, Article a1477. <https://doi.org/10.4102/AJOD.V13I0.1477>
- [5] Magadza, I. (2025). Stakeholder perceptions and the impact of the Fourth Industrial Revolution in South African TVET colleges: A qualitative study. *Educational Technology Quarterly*, 2025(4), 374–388.
- [6] Mbambo, G. P., & du Plessis, E. C. (2025). Evaluating Technical Vocational Education and Training college students' digital skills versus throughput rate. *Discover Education*, 4(1), Article 6. <https://doi.org/10.1007/s44217-025-00396-8>
- [7] Schlebusch, C. L., & Manyarela, M. B. (2024). Students' perceptions in the integration of e-learning at a Free State TVET college in South Africa. *International Journal of Learning, Teaching and Educational Research*, 23(11), 487–503. <https://doi.org/10.26803/ijlter.23.11.25>
- [8] Flowers, B., & Tanner, M. (2024). Exploring the digital readiness of underprivileged secondary schools in South Africa. In *IFIP Advances in Information and Communication Technology*. Springer.
- [9] Nyembezi, N. (2017). Examining factors that shape Technical Vocational Education and Training engineering students' understanding of their career choices.
- [10] Potgieter, I. L., Coetzee, M., & Ferreira, N. (2023). University students' digital world of work readiness in relation to their employability competency. *Journal of Learning Development in Higher Education*, 2023(27). <https://doi.org/10.47408/jldhe.vi27.922>
- [11] Chiloane, G. M., De Jager, T., & Mokgosi, P. (2022). TVET engineering lecturers' perceptions on the application of technology tools in teaching and learning in South Africa. *International Journal of Technologies in Learning*, 29(2), 29–44. <https://doi.org/10.18848/2327-0144/CGP/v29i02/29-44>
- [12] Edwards, K., & Quinter, M. (2011). Factors influencing students' career choices among secondary school students in Kisumu Municipality, Kenya. *Journal of Emerging Trends in Educational Research and Policy Studies*, 2(2), 81–87.



- [13] Koech, J., Bitok, J., Rutto, D., Koech, S., Okoth, J. O., Korir, B., & Ngala, H. (2016). Factors influencing career choices among undergraduate students in public universities in Kenya. *International Journal of Contemporary Applied Sciences*, 3(2), 50–63.
- [14] Nyamwange, J. (2016). Influence of students' interest on career choice among first year university students in public and private universities in Kisii County, Kenya. *Journal of Education and Practice*, 7(4), 96–102.
- [15] Obwoye, M. E., & Kibor, S. J. (2016). Factors influencing trainee career choice in TVET institutions in North Rift Kenya. *Social Sciences*, 3(3).
- [16] Hong, C. M., Abidin, N. Z., Ch'ng, C. K., & Roslan, T. R. N. (2022). Measuring the perception of secondary school students in Kedah towards the attractiveness of Technical and Vocational Education and Training: A demographic analysis. *ASM Science Journal*, 17. <https://doi.org/10.32802/ASMSCJ.2022.1261>
- [17] Mutungi, G. K. (2023). Analysis of factors influencing students' decisions in selecting public TVET institutions in Nairobi County, Kenya [Master's thesis, Kenya Methodist University].
- [18] Mutungi, G. K., Kibaara, T., & Mwirichia, S. (2023). Trainees' employability skills and students' decisions in selecting public TVET institutions in Nairobi County, Kenya.
- [19] De Wee, M. F. (2024). Exploring the design and implementation of an entrance readiness assessment and its relationship with performance outcomes among first year TVET college students [Doctoral dissertation, University of the Western Cape].
- [20] Kekana, T., & Mogoboya, M. (2022). Factors that impact on e-learning in a selected South African university: A pedagogical perspective. *Special Education*, 2(43).
- [21] Uandara, N. U. (2023). Understanding TVET instructors' perceptions of digital technology use and support in a vocational training centre in Namibia [Master's thesis, Stellenbosch University].
- [22] Mkhize, S., & Reddy, T. (2025). Work readiness in an emergency digital learning environment: Students' self-perception and employer expectation. *African Journal of Inter/Multidisciplinary Studies*, 7(si1), 1–15.
- [23] Thakalekoala, S. L. (2021). How the TVET students are trained and prepared for job entry in the South African industries [Doctoral dissertation, University of South Africa].
- [24] Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- [25] Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson Education.
- [26] Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1–13. <https://doi.org/10.1177/1609406917733847>