

## **ENHANCING ENROLMENT IN VOCATIONAL AND TECHNICAL INSTITUTIONS: EVIDENCE-BASED STRATEGIES FROM ONDO STATE, NIGERIA, WITH GLOBAL IMPLICATIONS**

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### **Abstract**

The study examines strategies for enhancing enrollment in technical colleges in Ondo State, Nigeria, and draws implications for global vocational education. Four research questions guided the study. A mixed-methods research design was adopted, involving 570 participants, including students, teachers, administrators, parents, and community members. Stratified random and snowball sampling techniques ensured diverse representation. Data collection utilized structured questionnaires, semi-structured interviews, and focus group discussions, analyzed through SPSS for quantitative data and NVivo for thematic analysis of qualitative data. Instrument validity was established through expert review, and reliability was confirmed using Cronbach's Alpha ( $\alpha = 0.87$ ). Findings revealed that societal stigma (83%), financial constraints (65%), and inadequate infrastructure (89%) significantly deterred enrollment. Positive perceptions were most common among teachers (75%) and administrators (80%), while parents (50%) and students (45%) displayed hesitancy due to misconceptions and limited awareness of TVE benefits. Statistical analyses showed a significant association between parental education levels and enrollment likelihood ( $p < 0.01$ ), and stakeholder group differences in TVE perception ( $p < 0.05$ ). Key recommendations include awareness campaigns, scholarships, curriculum modernization, public-private partnerships, and infrastructure upgrades (85%). These interventions align TVE programs with labor market demands, reduce barriers, and improve societal perceptions. The study highlights the urgency of systemic reforms to elevate TVE enrollment in Nigeria and bridge gaps with global benchmarks, underscoring its role in economic development and workforce readiness.

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**Keywords:** Technical and vocational education (TVE), enrollment strategies, societal perceptions, public-private partnerships, workforce readiness

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### **Introduction**

Technical and Vocational Education (TVE) plays a pivotal role in fostering workforce readiness, economic growth, and sustainable development in modern societies. It equips individuals with practical skills tailored to meet the demands of various industries, ensuring their relevance in an increasingly dynamic labor market. Okoye (2013) emphasized that TVE provides a pragmatic approach to education, equipping learners with competencies necessary for gainful employment and societal contribution. Unlike conventional education, which often emphasizes theoretical knowledge, TVE prioritizes the development of hands-on skills in areas such as carpentry, auto-mechanics, electrical/electronic technology, and laboratory sciences. These fields are critical for addressing skill shortages and driving industrialization. Notwithstanding its significance, TVE in Nigeria continues to grapple with systemic challenges, particularly low enrollment rates. Recent reports show that only a fraction of the targeted 20% of junior secondary

school graduates transition to technical colleges, with enrollment figures remaining far below expectations. For instance, the total enrollment in technical colleges during the 2009/2010 academic session was just 74,299 students, representing a mere 9.3% of the projected 800,000, compared to 6,625,943 students in conventional secondary schools (NBTE, 2011). This persistent disparity undermines the potential of TVE to contribute meaningfully to national development. A more recent study by Oviawe et al. (2020) corroborates this, highlighting the widening gap between policy prescriptions and actual outcomes in TVE enrollment across Nigeria.

A key factor contributing to this challenge is societal perception. TVE is often viewed as a pathway for students with low academic achievement or those who fail to secure admission to conventional secondary schools, leading to its stigmatization (Gaunt, 2005; Olatunji, 2019). Parents and educators frequently discourage students from pursuing technical education, perceiving it as inferior to academic tracks. This perception persists despite mounting evidence of TVE's critical role in fostering self-reliance and addressing youth unemployment. For example, the International Labour Organization (ILO) (2021) emphasized the growing demand for vocational skills globally, noting that economies investing in TVE have experienced significant reductions in youth unemployment and poverty levels. The structural and institutional challenges facing TVE in Nigeria also exacerbate low enrollment. Aina (2006) noted that Nigeria has failed to prioritize TVE despite its proven contributions to socio-economic development in other nations. Recent analyses, such as those by Adeyemo et al. (2022), point to poor funding, outdated curricula, inadequate infrastructure, and a lack of collaboration between schools and industries as key barriers to effective implementation. These challenges have left many technical colleges ill-equipped to attract and retain students, further contributing to their underutilization.

Additionally, global shifts in labor market demands underscore the urgency of addressing TVE's declining appeal. With technological advancements reshaping industries, the need for a skilled workforce has become more pronounced. UNESCO (2022) reported that nations investing in robust TVE systems have achieved faster economic recovery and resilience in the face of global disruptions, such as the COVID-19 pandemic. Nigeria, however, risks falling further behind if its technical education sector remains underdeveloped. Given these challenges, there is an urgent need to explore evidence-based strategies to enhance student enrollment in technical colleges. While previous studies (e.g., Okoye, 2013; Aina, 2006) have examined the general challenges facing TVE, there is limited empirical research on innovative, context-specific solutions tailored to address enrollment challenges in specific regions like Ondo State. This study aims to bridge this gap by identifying actionable strategies to improve enrollment, reshape stakeholder perceptions, and align technical education with the needs of local and global markets. By addressing these objectives, this research contributes to the discourse on revitalizing vocational education in Nigeria. It offers a framework for policymakers, educators, and industry stakeholders to collaborate in positioning TVE as a viable pathway for skill acquisition, self-reliance, and national development. Furthermore, the findings from this study hold broader implications for other developing economies facing similar challenges in their vocational education systems.

This study on enhancing student enrollment in technical colleges in Ondo State, Nigeria, is grounded in an integrated theoretical framework that draws on Human Capital Theory, Social Cognitive Theory, and the Theory of Planned Behavior. These theories collectively provide a comprehensive understanding of the individual, societal, and

institutional factors that shape students' decisions regarding technical and vocational education (TVE). They also serve as a foundation for formulating evidence-based strategies aimed at addressing the persistent challenge of low enrollment in technical colleges. Human Capital Theory, as developed by Schultz in 1961 and later advanced by Becker in 1964, posits that investments in education and training increase an individual's productivity, employability, and overall economic value. In the context of TVE, this theory emphasizes the role of technical education in equipping students with marketable skills that enhance their career prospects and contribute to national development. By pursuing technical education, individuals are likely to attain better wages and improved job opportunities, thereby reducing unemployment and fostering economic growth. This theory is particularly relevant to the present study as it frames TVE not merely as an educational option but as a strategic investment in both personal and societal advancement. It informs the investigation into how students perceive the long-term economic benefits of technical education and how these perceptions influence their enrollment decisions. Social Cognitive Theory, introduced by Bandura in 1986, centers on the dynamic interplay between personal factors, environmental influences, and behavior. The theory asserts that individuals' choices are shaped by what they observe in others, their confidence in their abilities (self-efficacy), and the surrounding social environment. In the realm of TVE, this perspective underscores the significance of role models, peer influence, family support, and societal attitudes in shaping students' educational aspirations. Bandura's concept of self-efficacy is particularly important, as students who lack confidence in their ability to succeed in technical fields may avoid such programs, regardless of the potential economic benefits. Given the persistent negative perceptions surrounding TVE in Nigeria, as noted by Gaunt (2005) and Olatunji (2019), this theory provides a valuable framework for examining how the beliefs and actions of parents, teachers, and peers affect students' willingness to enroll in technical colleges. The Theory of Planned Behavior, proposed by Ajzen in 1991, offers further insights into how individuals make decisions by focusing on three core factors: attitudes toward the behavior, subjective norms, and perceived behavioral control. Applied to the context of TVE enrollment, the theory helps explain how students' beliefs about technical education, the social pressures they experience, and their sense of agency in the enrollment process collectively shape their choices. When students view technical education positively, feel that their peers and family support such a path, and believe they have the resources and capabilities to succeed, they are more likely to pursue enrollment. Conversely, unfavorable attitudes, societal stigma, and perceived barriers such as financial constraints or lack of support may discourage enrollment. This theory enables a nuanced understanding of the motivations and deterrents influencing students in Ondo State, especially in a cultural context where academic education is often privileged over vocational training.

Taken together, these three theories offer a multidimensional perspective on the issue of low enrollment in technical colleges. Human Capital Theory emphasizes the tangible economic outcomes of technical education; Social Cognitive Theory explores the psychological and social influences on students' decisions; and the Theory of Planned Behavior sheds light on the attitudinal and normative factors that shape enrollment behavior. Their integration enables a well-rounded approach to uncovering the root causes of under-enrollment and to proposing actionable solutions. Based on these theoretical insights, the study aims to design and recommend targeted interventions such as reshaping societal attitudes toward TVE through awareness campaigns, involving community leaders and parents in advocacy, and implementing policies that enhance students' sense of control

over their educational choices, such as increased access to funding and guidance services. This theoretical framework is relevant to the present study in that it provides a solid conceptual basis for understanding the various factors affecting student enrollment in technical colleges in Ondo State and for developing effective strategies to improve participation in TVE across similar global contexts.

Over the past two decades, vocational and technical education (TVE) has gained renewed global attention as a critical driver for workforce development, economic diversification, and youth empowerment. In many developed and developing countries, considerable emphasis has been placed on strengthening vocational pathways to align education with labor market demands, reduce unemployment, and foster innovation. Recent studies by UNESCO (2022) and the World Bank (2021) have highlighted policy reforms, curriculum modernization, and public-private partnerships as key strategies for revitalizing technical and vocational education and training (TVET). Similarly, research from countries such as Germany, South Korea, and Singapore has demonstrated that well-structured and socially accepted TVE systems significantly contribute to national development. In Nigeria, however, enrollment in technical and vocational institutions remains alarmingly low despite policy frameworks such as the National Policy on Education (2014) advocating for the promotion of TVE. Several national studies (Ayonmike, Okwelle, & Okeke, 2020; Iwuoha & Nwachukwu, 2022) have identified poor societal perception, inadequate funding, and limited career progression opportunities as major barriers. Recent empirical works have also emphasized the role of stakeholder involvement, community engagement, and access to guidance counseling as critical to improving enrollment in TVE programs (Okwelle & Okoye, 2021; Anyaogu, Eze, & Igwe, 2020). Despite these efforts, most existing studies tend to focus broadly on the challenges facing TVE at the national level, often overlooking region-specific dynamics, context-based strategies, and stakeholder-driven solutions. There is a noticeable lack of empirical studies that provide localized, evidence-based strategies tailored to specific states such as Ondo State. Moreover, while the global discourse has increasingly linked TVE reform to the Sustainable Development Goals (SDGs), particularly Goal 4 (Quality Education) and Goal 8 (Decent Work and Economic Growth), few Nigerian studies have examined how localized TVE enrollment strategies could have global policy relevance.

This study, therefore, addresses these gaps by investigating evidence-based strategies to enhance student enrollment in technical and vocational institutions in Ondo State. Unlike previous studies that generalize challenges at the federal level, this research provides an in-depth, state-level analysis that reflects the socio-cultural, economic, and institutional realities specific to the region. It further contributes to the growing body of literature by identifying actionable strategies informed by stakeholder perspectives, community contexts, and global best practices. Through bridging the gap between policy intentions and actual enrollment outcomes, this study also offers globally adaptable insights that may inform similar efforts in other sub-national and developing contexts.

### **Statement of the Problem**

Vocational and technical education (TVE) plays a pivotal role in equipping individuals with practical skills, promoting self-reliance, and addressing youth unemployment. It is widely recognized as a strategic tool for national development, economic diversification, and poverty reduction. In an ideal situation, technical and vocational institutions should attract large numbers of students who are motivated to acquire industry-relevant skills that enhance employability and meet the demands of a rapidly changing global economy. However, the reality in Nigeria, particularly in states like Ondo, presents a contrasting

picture. Despite numerous government policies and interventions aimed at promoting TVE, enrollment in vocational and technical institutions remains significantly low. Factors such as poor societal perception of vocational education, limited awareness of its economic value, inadequate facilities, and weak stakeholder involvement have contributed to the persistent under-enrollment. Studies have also indicated that many students and parents still prioritize conventional academic pathways over technical routes, often due to misinformation or lack of visible career outcomes from TVE graduates. This discrepancy between the ideal and actual enrollment trends reveals a critical gap in the implementation of TVE strategies at the state level. While national policy frameworks exist, there is limited empirical evidence on context-specific approaches that can effectively enhance enrollment in technical colleges. Furthermore, existing literature often generalizes challenges at the national level without providing localized solutions that reflect the socio-economic and cultural realities of individual states such as Ondo. Therefore, this study seeks to investigate evidence-based strategies for enhancing student enrollment in vocational and technical institutions in Ondo State. It aims to identify practical, stakeholder-informed, and context-relevant measures that can bridge the gap between policy aspirations and actual enrollment outcomes. By addressing this issue, the study intends to contribute both to local educational development and to global conversations on sustainable TVE models.

### **Purpose of the Study**

The study examines strategies for enhancing enrollment in technical colleges in Ondo State, Nigeria, and draws implications for global vocational education. Specifically, the study sought to:

1. assess the current state of student enrollment in technical colleges in Ondo State, Nigeria.
2. examine the factors influencing student enrollment in technical colleges in Ondo State, Nigeria.
3. identify evidence-based strategies for improving student enrollment in technical colleges in Ondo State.
4. Investigate the role of stakeholders in student enrollment in technical colleges in Ondo State.

### **Research Questions**

The following research questions guided the study;

1. What is the current state of student enrollment in technical colleges in Ondo State?
2. What are the key factors influencing student enrollment in technical colleges in Ondo State?
3. What strategies can be implemented to enhance student enrollment in technical colleges in Ondo State?
4. What is the role of stakeholders in student enrollment in technical colleges in Ondo State?

### **Hypotheses**

- H<sub>01</sub>:** There is no significant variation in enrollment rates across technical colleges in Ondo State.
- H<sub>02</sub>:** There is a significant relationship between societal perceptions of technical and vocational education and the enrollment rates in technical colleges in Ondo State.
- H<sub>03</sub>:** Proposed strategies will not significantly improve student enrollment in technical colleges in Ondo State.

**Ho4:** Ho4: Stakeholders' positive perceptions and involvement have no significant relationship with enrollment rates in technical colleges in Ondo State.

### **Methods**

This study adopts a mixed-methods research design to explore strategies for improving student enrollment in technical colleges in Ondo State, Nigeria. Through integrating qualitative and quantitative approaches, the research provides a comprehensive understanding of the multifaceted nature of the enrollment challenges. This methodology aligns with the study's objective of developing evidence-based strategies grounded in both numerical data and contextual realities. The research is conducted in Ondo State, a region with a blend of rural and urban communities. Despite the growing demand for skilled labor, technical colleges in the state face significant challenges in attracting students. This setting provides a suitable context for examining regional differences in enrollment trends and societal perceptions of technical education. The population for the study includes students, teachers, administrators, policymakers, parents, and community members who are directly or indirectly involved in technical education. These stakeholders provide diverse perspectives on the factors influencing enrollment decisions. To ensure representation, stratified random sampling is used to select participants across different groups. A total of 300 students from five technical colleges are selected, ensuring diversity in gender, age, and program specialization. Additionally, 50 teachers and 20 administrators with relevant experience in technical and vocational education are included, while 200 parents and community members are identified through snowball sampling to capture a broad spectrum of opinions. Data for the study is collected using a combination of surveys, interviews, and focus group discussions (FGDs). A structured questionnaire serves as the primary tool for quantitative data collection, designed with sections on demographic information, perceptions of technical and vocational education (TVE), factors influencing enrollment, awareness of government policies, and suggestions for improving enrollment. This instrument is pilot-tested with a small group of participants to ensure its reliability and clarity. To gain deeper insights, semi-structured interviews are conducted with school administrators, policymakers, and parents. These interviews explore barriers and motivators to enrollment, institutional challenges, and perceptions of the quality and relevance of technical education programs. Each session lasts between 30 to 45 minutes and is audio-recorded with participant consent. Additionally, FGDs are held with groups of students and parents to encourage discussions on collective attitudes and societal influences on TVE. Each focus group consists of 6 to 8 participants, allowing for an exchange of diverse views. Quantitative data collected through surveys is analyzed using SPSS (Statistical Package for the Social Sciences). Descriptive statistics such as frequency counts, percentages, and measures of central tendency were employed to summarize the data, while inferential tests like chi-square and ANOVA are used to identify significant differences across demographic groups. Qualitative data from interviews and FGDs is analyzed through thematic analysis. Recurring themes and patterns are coded and organized using NVivo software, providing a deeper understanding of the underlying factors influencing enrollment. The study adheres to ethical guidelines throughout the research process. Informed consent is obtained from all participants, and their confidentiality is assured by anonymizing personal information during analysis and reporting. Participants are also informed of their right to withdraw from the study at any time without consequences.

## Results

**Table 1: Factors Influencing Enrollment in Technical Colleges**

| Factors                        | Frequency (n) | Percentage (%) |
|--------------------------------|---------------|----------------|
| Societal perception            | 474           | 83%            |
| Career prospects               | 411           | 72%            |
| Financial barriers             | 372           | 65%            |
| Parental influence             | 388           | 68%            |
| Availability of infrastructure | 320           | 56%            |
| Peer influence                 | 250           | 44%            |
| Awareness of TVE programs      | 190           | 33%            |

The analysis of survey responses identified several key factors influencing enrollment decisions in technical colleges. A dominant issue, reported by 83% of parents and students, is societal perception. Many viewed technical and vocational education (TVE) as a pathway primarily suited for low-performing students, which discourages enrollment. Another significant factor is uncertainty about career prospects, cited by 72% of students. Many respondents expressed limited awareness of industries requiring TVE skills, which undermines confidence in the potential career opportunities available to TVE graduates. Financial barriers also emerged as a critical deterrent, with 65% of respondents highlighting the high costs associated with acquiring materials and tools necessary for practical sessions. This financial burden was identified as a significant obstacle, particularly for students from low-income families. Furthermore, parental influence plays a substantial role, as evidenced by interviews. Approximately 68% of parents indicated that cultural biases and a lack of understanding about the benefits of TVE significantly impact their decisions. Many parents, guided by these biases, are reluctant to enroll their children in technical colleges, further contributing to low enrollment rates.

**Table 2: Perceptions of TVE Among Stakeholder Groups**

| Stakeholder Group | Positive (%) | Perception Negative (%) | Perception Neutral (%) | Perception |
|-------------------|--------------|-------------------------|------------------------|------------|
| Students          | 55%          | 35%                     | 10%                    |            |
| Parents           | 42%          | 50%                     | 8%                     |            |
| Teachers          | 75%          | 15%                     | 10%                    |            |
| Administrators    | 80%          | 10%                     | 10%                    |            |

The qualitative data analysis revealed several recurring themes related to perceptions of technical and vocational education (TVE). One prominent theme was stigmatization, as focus group discussions with students highlighted a widespread belief that TVE is often viewed as a "second choice," primarily for individuals who fail to gain admission into conventional schools. This perception significantly influences students' attitudes toward enrolling in technical colleges. Another key finding was the lack of awareness among parents. More than half of the parents interviewed admitted to having limited knowledge of the benefits and career opportunities associated with TVE. This lack of understanding contributes to hesitancy in encouraging their children to pursue technical education.

Despite these challenges, there were instances of positive perceptions. A minority of parents (15%) acknowledged the success stories of TVE graduates who had either become self-employed or secured stable jobs in various industries. These accounts highlight the potential of TVE to provide viable career paths and economic stability for its graduates.

**Table 3: Institutional Challenges Identified by Teachers and Administrators**

| Challenges                     | Frequency (n) | Percentage (%) |
|--------------------------------|---------------|----------------|
| Inadequate facilities          | 62            | 89%            |
| Limited industry collaboration | 54            | 78%            |
| Teacher shortages              | 45            | 65%            |
| Outdated curriculum            | 40            | 58%            |
| Lack of student incentives     | 35            | 50%            |

Data from teachers and administrators highlighted several institutional barriers impeding student enrollment in technical colleges. A significant proportion of respondents (89%) identified inadequate facilities, such as outdated equipment and insufficient learning materials, as major obstacles to providing quality technical education. Additionally, 78% of administrators pointed to limited collaboration between technical colleges and industries, resulting in curricula that fail to align with current market demands and labor trends. Another critical issue was the shortage of qualified teachers, reported by 65% of respondents, particularly in specialized fields like welding and fabrication. These barriers collectively undermine the capacity of technical colleges to attract and retain students, further exacerbating the enrollment challenges.

**Table 4: Strategies Suggested for Improving Enrollment**

| Strategies                     | Frequency (n) | Percentage (%) |
|--------------------------------|---------------|----------------|
| Awareness campaigns            | 513           | 90%            |
| Scholarships/financial support | 433           | 76%            |
| Curriculum modernization       | 467           | 82%            |
| Public-private partnerships    | 400           | 70%            |
| Infrastructure development     | 484           | 85%            |

The study identified several actionable strategies to boost enrollment in technical colleges. One of the most prominent suggestions, supported by 90% of respondents, was the organization of awareness campaigns. These campaigns would aim to educate parents, students, and communities about the benefits of technical and vocational education (TVE), addressing misconceptions and promoting its value in today's job market. Another key recommendation, highlighted by 76% of respondents, was the provision of scholarships and financial support. Students and parents emphasized that scholarships and government subsidies could significantly reduce the financial burden associated with technical education, making it more accessible to economically disadvantaged families. Curriculum modernization also emerged as a critical strategy, with 82% of teachers and administrators

advocating for the integration of industry-relevant skills and modern technology into the TVE curriculum. Such updates would ensure that students are equipped with the competencies needed to meet the demands of contemporary industries. Additionally, 70% of stakeholders underscored the importance of fostering public-private partnerships. Collaborations with industries could provide opportunities for internships, mentorship programs, and clear employment pathways for TVE graduates, thereby enhancing the appeal and practical value of technical education. Finally, 85% of respondents recommended prioritizing school infrastructure development. Investments in modern tools, workshops, and laboratory facilities were deemed essential for improving the quality of training and ensuring that students receive hands-on, practical experience in their respective fields. These strategies collectively address both the perceived barriers and practical challenges associated with technical education, offering a roadmap for increasing enrollment in technical colleges.

**Table 5: Statistical Tests of Enrollment Factors**

| Statistical Test | Dependent Variable    | Independent Variable     | p-Value | Significance          |
|------------------|-----------------------|--------------------------|---------|-----------------------|
| Chi-Square Test  | Enrollment likelihood | Parental education level | 0.01    | < 0.05<br>Significant |
| ANOVA            | Perception of TVE     | Stakeholder group        | 0.05    | < 0.05<br>Significant |

Quantitative analysis conducted using SPSS revealed critical insights into the factors influencing enrollment in technical and vocational education (TVE) programs. A Chi-Square test demonstrated a significant association ( $p < 0.01$ ) between parental education levels and the likelihood of enrolling their children in TVE programs. The results indicated that parents with higher education levels exhibited greater openness toward TVE as a viable educational pathway. Additionally, a one-way analysis of variance (ANOVA) uncovered significant differences ( $p < 0.05$ ) in perceptions of TVE among the three key stakeholder groups: students, parents, and teachers. Among these groups, teachers displayed the most positive attitudes toward TVE, highlighting their critical role in shaping perceptions and promoting technical education. These findings provide valuable insights into the dynamics influencing enrollment and the need for targeted interventions to address stakeholder-specific attitudes.

**Table 6: Enrollment Rates Comparison with Global Benchmarks**

| Country/Region      | Enrollment Rate in TVE (%) | Supporting Factors                                  |
|---------------------|----------------------------|---|
| Ondo State, Nigeria | 9.3%                       | Low awareness, financial barriers, stigmatization   |
| Germany             | 50%                        | Strong industry partnerships, government incentives |
| South Korea         | 65%                        | Modern curriculum, technological advancements       |
| Finland             | 55%                        | Inclusivity, continuous curriculum updates          |

The study also examined findings in comparison with global trends, revealing notable disparities. Enrollment rates in Ondo State, at just 9.3% of the target population, fall

significantly behind those of countries like Germany and South Korea, where participation in technical and vocational education (TVE) exceeds 50%. This success in these countries can be attributed to robust awareness campaigns and strong partnerships between educational institutions and industries. Furthermore, Nigerian TVE programs were found to be less adaptive to technological advancements. In contrast, developed countries prioritize continuous updates to their curricula to align with emerging technologies, ensuring that their programs remain relevant and effective in preparing students for the modern workforce.

## **Discussion**

The findings of this study offer critical insights into the factors influencing enrollment in technical colleges in Ondo State, Nigeria, while providing actionable strategies to enhance participation. These results align with existing literature on Technical and Vocational Education (TVE) and introduce fresh perspectives to the discourse. The study identifies societal perceptions, career prospects, financial barriers, and parental influence as the key factors affecting enrollment. Among these, societal stigma is the most pronounced, with 83% of participants highlighting the perception of TVE as a "last resort" for low-performing students. This finding echoes the observations of Okoye and Chijioke (2013) and Ogundele (2017), who emphasized the detrimental effects of societal misconceptions on TVE's appeal. Furthermore, the lack of awareness regarding career opportunities in TVE reduces its attractiveness, as noted by 72% of participants and corroborated by Adeola and Ajiboye (2020). Financial barriers, cited by 65% of respondents, further restrict access, consistent with findings by Okolocha and Baba (2016) on the need for financial support to make TVE accessible to economically disadvantaged students.

The perception of TVE varies significantly among stakeholders. While teachers (75%) and administrators (80%) view TVE positively as a means to equip students with practical skills for employability, 50% of parents and a considerable proportion of students hold negative perceptions. These biases, driven by a lack of understanding of TVE's potential, are consistent with Gaunt (2005), who identified parental influence as a critical factor in educational choices. This disparity underscores the need for targeted awareness campaigns to bridge the gap in stakeholder understanding. Institutional challenges also emerged as significant barriers to enrollment. Inadequate facilities were reported by 89% of participants, reflecting the findings of Ibeneme (2007) on the adverse impact of outdated infrastructure on TVE quality. Additionally, 78% of respondents highlighted limited collaboration with industries, resulting in curricula that fail to align with labor market demands. This observation aligns with Aina (2006), who emphasized the importance of industry involvement in enhancing TVE's relevance. Teacher shortages, reported by 65% of participants, further exacerbate the situation, consistent with Alawa's (2019) call for addressing deficits in qualified educators to revitalize TVE.

To address these challenges, the study identifies several strategies to boost enrollment. Awareness campaigns were the most widely recommended solution (90%), emphasizing the need for targeted efforts to reshape societal perceptions of TVE, a view supported by Adeyemi and Fadokun (2019). Scholarships and financial incentives (76%) were also suggested to alleviate the economic burden on students, echoing Onuoha and Egwu's (2018) findings on the role of financial aid in improving access to education. Curriculum modernization (82%) was advocated to align TVE with industry demands and integrate emerging technologies, consistent with recommendations by Adeola and Ajiboye (2020). Public-private partnerships (70%) were seen as vital for providing internships, mentorships, and job placements, mirroring successful models in countries like Germany

and South Korea (Yakubu, 2006). The global relevance of these findings becomes evident when comparing the enrollment rate in Ondo State (9.3%) with developed countries such as Germany (50%) and South Korea (65%), where TVE is highly valued and supported by robust industry partnerships and government policies. Addressing these disparities requires a comprehensive approach involving awareness creation, infrastructure development, and curriculum reform, as noted by Okolocha and Baba (2016). Overall, the results of this study provide a foundation for actionable interventions aimed at transforming TVE in Ondo State, ensuring it becomes a more attractive and viable educational pathway for students.

### **Educational Implications of the Study**

The findings of this study underscore the urgent need for coordinated efforts among policymakers, educators, and industry players to reposition vocational and technical education (TVE) as a credible and attractive educational pathway. Interventions such as targeted awareness campaigns, financial support mechanisms, and strengthened public-private partnerships are essential in addressing the identified barriers to enrollment. The study emphasizes the importance of inclusive stakeholder engagement particularly involving students, parents, educators, and industries—in the planning and implementation of TVE programmes. Such collaborative involvement ensures that curriculum content, skills training, and institutional practices are aligned with contemporary societal needs and labour market demands. The uniqueness of this study lies in its comprehensive and contextualised approach to understanding the multifaceted challenges of TVE enrollment in a developing region. By addressing specific issues in Ondo State and incorporating insights from global best practices, the study contributes meaningfully to the existing literature on vocational education and reinforces its significance in driving national development agendas.

### **Contribution to Knowledge**

This study offers significant contributions to the body of knowledge on vocational and technical education by providing empirical, context-specific strategies for improving student enrollment in technical institutions. Unlike previous studies that have primarily focused on national-level challenges, this research emphasizes the localized dynamics within Ondo State, thereby filling a critical gap in state-level TVE research in Nigeria. The study contributes theoretically by applying and integrating Human Capital Theory, Social Cognitive Theory, and the Theory of Planned Behavior to explain student enrollment behavior in vocational education. This multi-theoretical approach offers a comprehensive framework for understanding the interplay between individual perceptions, social influences, and institutional factors affecting enrollment. Practically, the study provides actionable, evidence-based strategies that policymakers, educational administrators, and stakeholders can adopt to improve enrollment in vocational and technical institutions. These include targeted public awareness campaigns, increased stakeholder engagement, improved career guidance services, and the establishment of community-based support mechanisms. In addition, the study's findings have global implications, particularly for developing countries with similar socio-economic conditions. Through linking local realities with international discourse on sustainable education and workforce development, the research extends the relevance of its recommendations beyond Ondo State and contributes to broader conversations on achieving inclusive and equitable quality education as envisioned in the Sustainable Development Goals.

## Conclusion

This study has demonstrated that multiple factors including societal perceptions, financial barriers, and institutional challenges significantly impact enrollment in technical colleges in Ondo State, Nigeria. The findings highlight the critical need to reposition Technical and Vocational Education (TVE) as a valuable educational pathway, essential for fostering self-reliance, economic development, and national progress. Addressing the identified challenges, such as inadequate infrastructure and limited industry collaboration, requires a multi-stakeholder approach. Furthermore, this study underscores the importance of awareness campaigns, financial support, and curriculum modernization to enhance enrollment rates and align TVE with global benchmarks. By implementing evidence-based strategies, technical education in Ondo State and similar contexts can contribute effectively to human capital development and technological advancement.

## Recommendations

Based on the findings of the study, the following recommendations were made:

1. Develop and execute community-based awareness programs to educate stakeholders, parents, students, and employers on the benefits and career opportunities associated with TVE.
2. Establish government and industry-supported scholarship schemes to alleviate the financial burden on students and incentivize enrollment in technical colleges.
3. Collaborate with industries to update curricula, ensuring alignment with current labor market demands and integrating emerging technologies for practical learning.
4. Foster collaborations between technical colleges and industries to provide internships, mentorship programs, and job placement opportunities for graduates.
5. Invest in modernizing the infrastructure of technical colleges, ensuring access to state-of-the-art tools, laboratories, and conducive learning environments.
6. Address teacher shortages by recruiting qualified professionals and providing continuous professional development programs to enhance instructional quality.
7. Advocate for government policies that prioritize TVE as a central component of national education strategies, including annual stakeholder forums to address skill gaps and evaluate program effectiveness.

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