Why TVET colleges are not attractive places of higher learning for South African high school learners?

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ABSTRACT

Annually, South African universities experience an overwhelming number of learners who are interested in enrolling with them because they are viewed as more appealing post-secondary school study options compared to technical and vocational education and training (TVET) colleges. Therefore, it is important to understand high school learners’ views of TVET colleges so that the issue of oversubscription at universities can be addressed and ensure TVET colleges are a favourable option for learners. In South Africa, most studies investigating TVET colleges as study options involve samples primarily of students who are already enrolled at TVET colleges. Therefore, the purpose of this study was to investigate high school learners’ views on TVET colleges as a study option after high school. A qualitative study was conducted in which data was collected using a qualitative questionnaire from a sample 42 high school learners from Grades 10, 11 and 12. There were three themes that were constructed from the data, namely the pull factors, the push factors, and expectations of TVET colleges. Several misconceptions and expectations about TVETs were identified. As most studies used TVET students as study samples, the findings in this study have implications for TVET colleges as they provide insights into the perspectives of South African high school learners and how TVET colleges need to market themselves as viable study options.

Introduction

The importance of technical and vocational education and training (TVET) colleges in any educational system has been recognised globally. Since universities and universities of technology are considered the best institutions for further education and training, TVET colleges are usually less desirable than universities. This is evident from the enrolment figures of universities and TVET colleges. TVET enrolments in 2019 were 673,490 compared to university enrolments which were 1,074,912 in the same year (Khuluvhe, et al., 2021). It is therefore common for South African tertiary institutions to face long lines at the beginning of an academic year, especially from students who have just completed their high school certificates and are applying to continue their education (Maclean, 2012; Simelane, 2018). According to Branson et al. (2015), 2.5 million students are anticipated to enrol in TVET Colleges in South Africa by the year 2030. At the conclusion of each academic cycle, the TVET Colleges should have a solid throughput to accomplish this. This points to the need to understand high school learners’ views on attending further education at TVET colleges and what would make the TVET colleges an attractive option for them so that TVET colleges can develop relevant student recruitment strategies to be able to achieve this target. The Minister of Higher Education and Training Minister, Dr Blade Nzimande, has called on the TVET colleges to create pathways to higher education, skills training, and self-employment for the youth by removing barriers to accessing educational programs and workplace training (Sunday World, 2022). Most studies in South Africa, which investigate views on TVET colleges as a study option, have mainly been conducted with samples consisting of students who are already studying at TVET colleges, such as Du Plooy and Du Preez (2022); Ngugi and Muthima (2017), and Tlapana and...
Myeki (2020). Limited studies have been conducted on high school learners’ views of TVET colleges as a study option post-school. Therefore, the purpose of the study was to investigate high school learners’ views on TVET colleges as an option of an institution for post-high school study with the aim of providing insights to TVET colleges on how they can make themselves more attractive as a place of higher learning. This study was guided by the following research question, “What are high school learners’ views on TVET colleges as a study option after high school?”. The section that follows this introduction and background is the literature review which presents the literature that discusses the current topic. This is followed by the methodology section which describes the methodological techniques used to collect the data required for this investigation. To make conclusions in the last portion, the findings are presented and examined in the fourth and fifth sections.

Literature Review

Overview of TVET colleges in South Africa

Education in South Africa is divided into three levels: basic, technical vocation as well as higher education. Basic education is therefore the first twelve years of schooling in South Africa (Grades 1-12); technical vocational education and training are part of technical vocational education and training. As two of the three levels of education, technical vocational education are taught at colleges or as the final three years of basic education (Grade 10 to 12); and higher education is offered by universities and universities and universities of technology (DHET, 2016). Private TVET colleges and public TVET colleges are the two types of TVET colleges in South Africa. The operations of private TVET colleges are self-funded, and they operate for profit. While state subsidies are provided for public TVET colleges.

A total of 50 public funded TVET colleges with 253 campuses are located across South Africa (Khuluvhe et al., 2021). Seventy-six percent of all TVET colleges in South Africa are in five provinces. There are mainly six in Western Cape, seven in Limpopo, eight in the Eastern Cape and Gauteng each and nine in KwaZulu-Natal. Mpumalanga (3), the Free State (4), the North-West (3) and the Northern Cape (2) provinces hold the least number of TVET colleges (Moloi & Dichaba, 2017).

Role of TVET

The TVET Sector addresses global concerns of access, poverty, and inequality. Many students have access to post high school education because to the open-access rules that institutions around the world have put in place (Raby et al., 2022). On completion of their TVET studies, students can easily access entry into universities. Additionally, TVET education affords students the opportunity for social mobility, reduction in poverty and inequality and improve the socio-economic growth of local communities. Furthermore, students need to be ready for the post-COVID19 world (Raby et al., 2022).

According to Omar et al., (2020), learning practical skills is the main aim of TVET colleges. To ensure learners acquire efficient, effective, and sustainable employable skills for construction, design, and repair, it is essential for TVET colleges to provide well-functioning infrastructure and machinery facilities. The TVET sector in African countries provides youth with opportunities for vocational training and education, allowing them to stay off the streets by developing the skills they need. TVET colleges in South Africa equip students with practical skills required for specific jobs so they are prepared for the workplace. Students attending TVET colleges in South Africa acquire practical skills for specific jobs as well as prepare them for the workplace. In South Africa, vocational education is viewed as a tool to boost the economy as well as eradicate poverty within communities. (Muchineripi, 2022; Sebola, 2022). Additionally, universities do not focus on hard skills, but they improve graduates’ employability in a broad range of fields – meaning that a university’s educational role is more comprehensive than that of a TVET college (Sebola, 2022).

Students’ expectations and perceptions

There are several factors that influence and shape students’ perceptions of TVET colleges, including: 1) the ability to understand what TVET colleges have to offer; 2) the marketing and positioning of the colleges specifically; and 3) a general perception of TVET colleges (Tlapana & Myeki, 2020). TVET colleges have been criticised for their high attrition rates and low job placement rates. As a result of their own deficiencies and a poor public image, TVETs seem to have a tarnished reputation. As a result, they are the last resort for students rejected by universities (Azeem et al., 2022; Zulu, 2017).

According to Gaffoor and Van der Bijl (2019), There is a perception in many countries that TVET is inferior to a general academic education obtained through traditional universities. Despite TVET’s potential to address both the skills shortage and unemployment, this perception results in a “negative feedback loop”. It is also believed that TVET improves students’ chances of finding a job in Australia, and they therefore engage in TVET programs. While TVET is regarded as having a high status in Germany, it is viewed as having a low status in America and is dominated by students of low income. TVET programmes have many shortcomings, including low pass rates, poor instructors, low career progression, little investment in resources, and high costs (James, Andrew & Wilson, 2019). Needham and Papier (2019) found that secondary-school students and technical vocational training college students perceive vocational training differently: some students do not know about TVET, while others see it as a secondary option leading to low-paying jobs without career opportunities.

Despite this, TVET college students were positive about TVET, their actual exposure to the programme, and the progression of their career paths. National Certificate Vocational (NC[V]) programmes are positive because students gain a better understanding of the
Theoretical and Conceptual Background

As shown in figure 1, Chapman (1981) incorporates students’ characteristics, including socioeconomic status (SES), significant others, fixed college characteristics, college efforts to communicate with students, and student perceptions of colleges. Student expectations of college life at a specific institution are heavily influenced by these characteristics, which affect the final choice of institution they make. According to Chapman's model, the factors listed above influence and shape students' college decisions. Chapman (1981) states that college choice is influenced by students' characteristics as well as external factors. Moreover, Chapman emphasized that researchers exploring college choice must recognize the complexity of that choice when making decisions about what variables to investigate, control and ignore.

Research and Methodology

This qualitative study adopted a case study approach. The interpretivist paradigm was used to get detailed information on high school learners’ views on TVET colleges as an option of an institution for post-high school study. The purpose of qualitative research is to uncover the intricacies of the situation under study through the exploration of a subject's life experiences, behaviours, and perspectives. (Holloway & Galvin, 2016). A case study method selects a small geographical area or a very limited number of individuals as the study subjects (Yin, 1994). The case study method enabled the researcher to closely examine the data within a specific context – high school learners participating in the Department of Public Works Infrastructure (DPWI) winter schools’ camp. Cresswell and Poth (2018) contend that the interpretivist paradigm is relevant to qualitative research because it focuses on specific topics and relies on the researcher's interpretation of participants' meanings.

A convenient sample of 42 learners participated in the study. The participants came from various disadvantaged high schools that are part of the DPWI winter schools camp, which aims to empower top performing learners in Mathematics and Science. The sample included both girls and boys from Grades 10, 11 and 12. Figure 2 and Figure 3 depict the demographic profile of the participants. There was an equal split between the girls and boys. The research site was conveniently sampled, because of the Community Engagement Project, Asset Mapping: Breaking the Cycle of Poverty (T-BCOP), in which the researchers are involved. Thus, data were collected at the predetermined venue where DPWI was hosting its winter school camp.
A qualitative questionnaire used in this study was used to explore the views and opinions of the learners. The questionnaire asked learners to explain why they would or would not choose to study at a TVET college after successfully completing grade 12 and what they expectations of TVET colleges were. Following Braun and Clarke’s (2006) six-step process, the data were thematically analysed. Thematic data analysis is a highly adaptable method that offers fundamental expertise for doing qualitative research and can yield reliable and insightful results (Braun & Clarke, 2006). As a first step, the first researcher read every copy of the questionnaire responses. To develop codes, she highlighted text and wrote keywords or phrases in 12 of the 42 questionnaire responses. The preliminary codes were selected after the open coding had been completed. After coding these preliminary codes in Atlas.ti, she added new codes when she came across data that did not fit into the existing codes. As a result, she formed themes by grouping similar codes together. Review of the analysis process was conducted by the second researcher. The participants’ responses are given in their unaltered, uncorrected state in order to assure their reliability.

**Ethical considerations**

The University of South Africa granted ethical clearance for the study (2017/02/15/90179617/04/MC). A questions-and-answers session was held, during which the researchers explained the research ethics, the reasons for completing the questionnaires, the participants’ rights, and anonymity. Participants each provided their own consent to participate in the study.

**Findings and Discussions**

**Findings**

Three themes were derived from the analysed data, namely pull factors, push factors, and expectations of TVET colleges.

**Reasons for choosing to study at a TVET college**

Some participants expressed positive views about TVET colleges as a viable option for them to study a post-grade 12. The participants said:

“Because not everyone wants to go to university and you get experience at a TVET.” (Grade 10, male, 16 years)

“Because it’s an available option.” (Grade 11, female, 16 years)

Other positive views related to the fact that the TVET colleges curriculum included practical aspects which provided students with experience, which was viewed as something favoured by employers which meant that it would not be difficult for them to gain employment after studying.

“They develop practical and other skills for a variety of jobs.” (Grade 12, female, no age)

“Because a college focus[es] more on [the] practical side of theories which can help you gain opportunities.” (Grade 12, male, 18 years)
“I have heard somewhere that with the little theory they have practical experience. It’s easier to get a job because you are more experienced.” (Grade 12, female, 18 years).

In summary, the participants in the study hold positive perceptions of TVET colleges due to their practical focus, skill development, and recognition of the diversity in educational choices beyond traditional universities. These findings highlight the appeal of TVET colleges as valuable options for post-secondary education among certain individuals.

**Reasons for not choosing to study at a TVET college**

Some participants held the view that there were limited courses and career options available to those who study at TVET colleges.

“They do not provide a lot of courses that one wants to study.” (Grade 12, female, 17 years)

“They don’t do (offer) the career I like which is construction project management.” (Grade 12, male, 19 years)

“Because at TVET some programmes are narrow while at universities there are a lot of undergraduate and graduate programmes. ... there is a lot of tech, so I like the theory part.” (Grade 12, male 17 years)

Other participants stated that they did not like TVET colleges as a study option because they preferred to study at a university.

“I don’t like being at TVET college. I want to be able to get a bachelor degree and finding work after studying hard.” (Grade 11, female, 17 years)

“I’m not interested in studying at a college. I have not even checked what their faculty deals with. I always want to study at university because a lot of role models attend/study at university.” (Grade 12, female, 17 years)

“Because I want to experience more and study at a university where I can get my honours degree and get a career where I can work abroad.” (Grade 11, male, 16 years)

Other participants felt that the TVET colleges did not provide the same advanced education as universities.

“It is not as advanced as university and has limited career [options].” (Grade 12, gay, 18 years)

“They said at college they don’t teach theories compared to universities.” (Grade 12, female, 19 years)

“It is because I have been told that TVET teach less theory than university.” (Grade 12, male, 18 years).

In summary, the findings highlight that some participants hold negative perceptions of TVET colleges due to concerns about limited course offerings, a preference for university education, and a perception that TVET colleges offer less advanced education with a reduced focus on theory. These viewpoints suggest that there is limited knowledge and understanding of the differences in the roles of the various categories of higher education institutions in the country.

**Theme 2: Expectations of TVET colleges**

Under this theme, there were six sub-themes of key expectations the participants had of TVET colleges. These sub-themes were the need to include theory in the curriculum, marketing, to eliminate unfairness, to provide good facilities, to provide financial assistance, and to link to employment opportunities.

**Sub-theme 1: Include theory in the curriculum**

The participants' feedback indicates that they are open to considering TVET colleges as a viable educational choice if these institutions incorporate a more significant focus on theoretical education alongside practical aspects. This suggests an opportunity for TVET colleges to adapt their programs to better meet the preferences and expectations of potential students.

“Give us the same theory as universities.” (Grade 12, male, 18 years)

“They can teach students more theories.” (Grade 12, female, 19 years)

“Colleges must try to have similar programmes like universities so that a person who wants tech or theory can take advantage.” (Grade 12, male, 17 years)

**Sub-theme 2: Marketing**

The participants' feedback underscores the importance of proactive marketing and engagement strategies for TVET colleges. They recommend that these institutions reach out to high schools, conduct presentations, and increase their visibility to inform potential students and the community about the opportunities available at TVET colleges.

“Do presentations for high school learners, because I have never seen such a thing.” (Grade 12, male, 19 years)

“Try to make sure that they visit high schools and advertise their institution to students.” (Grade 12, female, 17 years)

“Colleges [should] have people everywhere telling (talking) about their courses.” (Grade 12, male, 17 years)
“More appearance and presentations at high schools. Visits to their institutions to [show] what it is like on their campuses.” (Grade 12, female, 17 years)

“I would actually really like them to make their colleges popular.” (Grade 12, female, 18 years).

Sub-theme 3: Eliminate unfairness
The participants’ feedback highlights the significance of promoting an inclusive and non-discriminatory environment within TVET colleges. Addressing concerns related to racism and ensuring equal treatment of all students are crucial steps in making TVET education more attractive and accessible to potential learners.

“[There should be no] racism.” (Grade 12, female, 17 years)

“It should be a place free of racism.” (Grade 12, female, 17 years)

“Reduce the cases of students not receiving NSFAS and strikes because there is no equal treatment.” (Grade 10, male, 16 years)

Sub-theme 4: Provide good facilities
The participants’ feedback emphasises the importance of infrastructure, comfort, safety, and the overall learning environment at TVET colleges. Meeting these expectations can contribute to making TVET education more attractive to potential students.

“They must have good facilities. I need to be able to be comfortable while being there.” (Grade 10, male, 15 years)

“[They must have] better infrastructure.” (Grade 12, female, 17 years)

“If they could be built on more safe environments and not so many clubs around them.” (Grade 12, female, 17 years)

“[It must] have a good studying environment in which students feel comfortable and make learning fun.” (Grade 11, male, 16 years).

Sub-theme 5: Provide financial assistance
In this sub-theme, the participants’ feedback stresses the expectation that TVET colleges should play a role in providing financial assistance and support to students from underprivileged backgrounds, including those from rural areas. This assistance is seen as a critical factor in making education accessible and inclusive.

“I would like them to give bursaries to students that are less fortunate.” (Grade 10, female, 15 years)

“They should sponsor bursaries and student loans so that students can study.” (Grade 12, male, 18 years)

“I would like them to consider helping more people and students financially, especially the ones that cannot afford [it].” (Grade 12, female, no age)

“They should help young people especially from rural areas or [who are] poor financially.” (Grade 11, female, 16 years)

Sub-theme 6: Link to employment opportunities
The participants’ feedback highlights the expectation that TVET colleges should play an active role in connecting graduates with employment opportunities. This emphasis on job placement reflects the participants’ desire for practical outcomes and the importance of a seamless transition from education to the workforce.

“When you study there you gain experience and skills so they should help you find a job after studying.” (Grade 12, female, 17 years)

“I want them to help me find a job after studying because I don’t want to study all those years and stay at home.” (Grade 12, male, 18 years)

“They should help students who have graduated to get a job.” (Grade 12, female, 19 years)

Discussion
Reasons for choosing to study at a TVET college
Some participants in the present study had positive views of TVET colleges. Similarly, the study by Omar et al., (2020) found that their participants’ ability to enter the job market significantly influenced their interest in studying at a TVET college. However, the present study’s finding contrasts with the finding by Sibiya (2021), in which the participants perceived that TVET qualifications in general do not guarantee immediate or direct employment after graduation. While TVETs were considered a via study option by some participants, there were also some participants who held negative perceptions of TVET colleges and preferred university education. This was because TVET colleges are perceived as offering less advanced education. The findings by Tlapana and Myeki (2020) also found that a significant number of students surveyed in their study preferred traditional universities over any other mode of higher education. Therefore, they concluded that traditional universities were preferred over TVET colleges by students. According to Gaffoor and Van der Bijl (2019), when compared to a traditional university, TVET colleges are viewed as being inferior in many countries. This is evident from studies that have emphasised the prejudice directed towards TVET in both developing and developed
countries (Alam & Forhad, 2021; Omar et al., 2020; Rotich et al., 2020). The present study’s participants indicated that TVET colleges has limited course and lead to limited career opportunities. Similarly, the study by Needham and Papier (2011) found that some of their participants viewed TVET education as a second class and provides access in low-paying jobs with no career prospects.

Expectations of TVET colleges

The expectation for TVET colleges to provide theory-based and academic courses that are the same as those available at traditional universities, held by the participants in the present study, indicates their lack of knowledge and understanding of the role of TVET colleges in the higher education sector. This view may also be as a result of glamorising universities and universities of technologies as institutions for “smart” individuals because of the higher entry requirements of these institutions and the “demonisation” of TVET colleges as institutions who do manual labour. This portrayal of the TVET colleges could therefore influences learners away from this category of institution as they would not want to be viewed as being “not smart enough”.

The participants in this study indicated the need for face-to-face interactions with representatives from TVET colleges. This would allow learners to ask questions and get a better understanding of the course offerings provided at TVET as well as the difference in the curriculum of the traditional universities and TVET colleges and the reasons for the differences. This would also provide TVET colleges with an opportunity to address and change the negative perceptions and misconceptions that learners have of TVET colleges. The suggestion from the participants for presentations was not surprising because the participants are from disadvantaged backgrounds with limited access to the internet and career guidance (Makola et al., 2022) where they can get information about TVET college offerings. According to Baloyi (2019), TVET College open day activities, advertisements on radio and television stations as well as college publications such as catalogues and brochures have a significant impact on students’ decisions to enrol at TVET colleges because they give students access to information about academic resources, student support service options, college qualification aspirations, continuous enrolment options, college experiences, and financial aids that are more important in predicting students’ eventual completion of college. The study by Mudzanani’s (2018) which analysed the integrated marketing communication message typology at a TVET college, concluded that the college had the challenge of raising awareness of its news value in the media. This finding by Mudzanani confirms the lack of visibility of TVET colleges which can lead to the misconceptions about TVET colleges as shown by the findings of the present study.

In this study, the participants indicated the importance of promoting an inclusive and non-discriminatory environment within TVET colleges. This finding contradicts Du Plooy and Du Preez (2022) who found that their participants indicated they were satisfied with the aspect of fair and equal treatment at their TVET institution.

The feedback from participants highlights several critical factors such as the importance of infrastructure, comfort, safety, and the overall learning environment that contribute to the effectiveness and quality of Technical and Vocational Education and Training (TVET) colleges. This finding was not surprising because learning centres such as libraries and computer labs are important at a TVET college because they can support students’ writing, mathematics, and comprehension skills (Baloyi, 2019). In the study by Baloyi (2019), it was found that TVET students viewed the quality of libraries and computer laboratories as critical to improving their study skills and retention. According to Du Plooy and Du Preez (2022) and Nundkumar and Subban (2018), TVET colleges have old buildings or architectural limitations that prevented the latest technology from being installed on campuses and in laboratories resulting in outdated workshop equipment and teaching being conducted using old technologies and equipment that students would never encounter in their workplaces. This means that the learners’ expectations of TVET colleges to have good infrastructure would not be met considering the time and cost involved to refurbish infrastructure. Kipkemi et al. (2014) who studied the enrolment rates in polytechnics in Kenya, found that the lack of equipment facilities, boarding facilities, water, and electricity facilities has contributed to the low enrolment in TVET institutions.

The participants in this study expected TVET colleges to provide financial assistance and support to students from underprivileged backgrounds, including those from rural areas. This finding was not surprising because the learners that participate in the DPWI winter camp come from high school in disadvantaged environments and therefore the need for financial assistance to complete higher education is very important to them. According to Baloyi (2019), in low socioeconomic groups, financial stress is a major factor that influences students’ decision to drop out before completing their college education. Therefore, affecting the recruitment and retention of students to enrol and complete their qualifications at TVET colleges. According to the study by Du Plooy and Du Preez (2022), financial aid and fees administration received the lowest satisfaction rating from their respondents which corresponds with the general high frustration levels around the National Student Financial Aid Scheme (NSFAS) in the South African education sector at the time when the study was conducted. This means that the learners’ expectations would not be met considering that these challenges still exist as indicated in the statement by the Minister of Higher Education, Science and Innovation, Dr Blade Nzimande, on the 2022 NSFAS funding (NSFAS, 2022).

The need to secure employment opportunities after the completion of one’s qualification was highlighted as important by the participants in this study. This finding was not surprising considering the current high unemployment rate in South Africa because all the participants come from disadvantaged backgrounds. This finding supports the study by Baloyi (2019) which found that a large number of participants in his study considered the availability of employment opportunities to qualifying students as very important in deciding to study at a particular TVET College.
Conclusions

The purpose of this study was to investigate high school learners’ views on TVET colleges as a study option for tertiary education with the aim of providing insights to TVET colleges on how they can make themselves more attractive as a place of higher learning. The present study used a novel sample of learners currently attending high school as similar studies have been conducted using TVET students. This study’s findings will be beneficial to the Department of Higher Education and carry broader implications that extend beyond TVET colleges, impacting the entire higher education landscape in South Africa.

The study highlights the presence of misconceptions and expectations among high school learners regarding TVETs. This signals the need for a broader effort to improve the public perception of all higher education institutions, including universities and colleges. Institutions should engage in extensive communication and marketing campaigns to clarify their roles and program offerings to the public. This can contribute to more informed choices by prospective students.

It is recommended that institutions use role models to inspire students and influence their career choices. Highlighting successful alumni and their achievements can be a powerful tool to attract students to various types of higher education programs.

Marketing and communication initiatives that involve visits to high schools is a strategy that can be adopted by all higher education institutions. Engaging with high school students and counselors can help institutions reach potential students and provide them with information about educational opportunities and career paths.

While the study specifically mentions the need for TVETs to align their curriculum with community needs, this principle extends to all higher education institutions. It is essential for universities and colleges to ensure that their courses are relevant to the demands of the job market and the needs of the communities they serve.

Adequate budgets, technology, resources, and facilities are essential not only for TVET colleges but also for universities. Ensuring that all higher education institutions have access to these resources can enhance their image and attractiveness to prospective students.

The 2030 enrollment target of 2.5 million students at TVET colleges is a goal that requires cooperation and coordination among all higher education stakeholders. This includes universities, TVETs, and the Department of Higher Education. Collaborative efforts are necessary to accommodate the growing number of students in diverse institutions.

This study was not without limitations – it used a small sample limited to the high school learners participating in the annual DPWI’s winter camp; therefore, the findings cannot be generalised to all high school learners in South Africa. A larger sample could be used in future studies. Additionally, further studies can be conducted on a population sample that is racially and socio-economically diverse to identity differences in learners’ views and help TVETs to develop more targeted interventions based on the findings.

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