



Factors Influencing TVET Readiness Among Students at Public Secondary School: Exploring Interest, Motivation, and Self-Efficacy

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Abstract: Technical and Vocational Education and Training (TVET) serves as an academic field for equipping students with necessary skills, providing them with practical and valuable workforce skills to navigate the challenges of the fourth industrial revolution. TVET adopts a dual teaching approach that encompasses general education, technological knowledge, and industry-specific training, serving as a primal tool in cultivating a workforce competence in the demands of the future. However, a concerning trend emerges as a deficiency in students pursuing TVET as mainstream education could lead to a decline in the skilled workforce for the country. This condition subsequently impacting the human capital development and skilled workforce across economic sectors. Hence, the current study seeks to understand the relationship between interest, motivation, and self-efficacy of secondary school students enrolled in general education programs and their readiness to advance their studies in TVET stream. Employing a quantitative research design, the study utilizes a survey method with a set of questionnaires. Three public secondary schools, are included in the research, comprising a total of 273 students. The sampling method employed is stratified random sampling. The findings of the study reveal that the interest, motivation, and self-efficacy levels of students, as well as their readiness to pursue further studies in TVET are notably high. Furthermore, a positive correlation is identified between interest, motivation, and self-efficacy, underscoring their influence on the preparedness of students to continue their education in TVET.

Keywords: Technical and Vocational Education and Training (TVET), interest, motivation, self-efficacy, readiness

1. Introduction

Technical and Vocational Education and Training (TVET) is an academic field to equip individuals with the knowledge and skills essential for successfully securing and sustaining employment (UNESCO, 2021). TVET stands as an integral component of general education, integrating technology, science, practical skills, attitudes, understanding, and information pertinent to work across diverse economic and social sectors (UNESCO, 2021). TVET is envisioned as a significant professional domain, acting as a robust workforce hub for individuals engaged in directly addressing prevalent issues in occupation and skills attainment (Paryono, 2017).

TVET encompasses an educational and training process with a focus on employment, emphasizing industry practices across various related fields (Hassan et al., 2021). It extends beyond formal education, encompassing secondary education, post-secondary education, work-based learning (WBL), continuous training, and continuous professional development (CPD) programs. Additionally, TVET encompasses community skill development initiatives that contribute to shaping the TVET landscape within a country (UNESCO, 2015). The United Nations Educational, Scientific and Cultural Organization (UNESCO) defines TVET as a distinct aspect of the educational process, distinct from general education. It involves learning in the realms of technology and related sciences, alongside practical skills training, development of attitudes, understanding, and knowledge related to employment in diverse sectors of the economy and societal life (PPPM, 2015). In accordance with the Code of Practice for TVET Program Accreditation (COPTPA), TVET is characterized as an educational and training process with a clear employment orientation, placing significant emphasis on industry practices. Its primary objective is to cultivate a competent workforce in relevant fields to achieve the socio-economic objectives of the country (MQA Circular, 2019).

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However, according to statistics from the Malaysian Department of Statistics (2019), 390,000 or 72.1 percent of the 560,000 graduates with a Malaysian Certificate of Education in 2019 expressed no interest in pursuing higher education; either in general education or TVET and this trend is anticipated to persist until 2021. Drawing on data from the Student Career eProfile system (ePKM), the figures for students graduating from the Malaysian Certificate of Education, without progressing to a higher-level stand at 35.16 percent, totalling 115,939 students. Contrastingly, for the year 2021, the percentage surged to 48.74 percent, representing a total of 180,680 Malaysian Certificate of Education graduates who opted not to pursue advanced studies (Ministry of Education, 2023).

The dearth of students advancing to higher education levels is poised to result in a decline in the skilled workforce within the country, concurrently leading to diminished productivity and service quality across economic sectors (World Bank, 2019). Furthermore, this trend is anticipated to adversely impact the economic competitiveness of the nation. Countries with a lower-skilled labor force are expected to face heightened competition in the global market, potentially experiencing reduced foreign investment and national economic growth (Janta et al., 2015).

Individuals who opt not to pursue higher education may encounter challenges in securing stable employment, contributing to an increased risk of unemployment. This, in turn, can elevate poverty rates and give rise to social issues such as crime and related symptoms (UNESCO, 2017). The lack of students progressing to higher education levels also engenders an educational imbalance, as those from less privileged backgrounds may face barriers to continuing their education. Consequently, this disparity widens the educational gap between wealthier and less affluent groups (World Bank, 2018).

TVET assumes a pivotal role not merely as a conduit for generating local skilled workers but also as the linchpin of national development. In the Eleventh Malaysia Plan, the government has outlined transformative strategies aimed at expediting Malaysia's progress, with a specific focus on cultivating a highly skilled workforce (Economic Planning Unit, 2015). A staggering 60% of the projected 1.5 million new job opportunities will necessitate qualifications aligned with TVET, aligning with the national target of achieving a 35% skilled workforce composition within the national labor force by 2020 (UNESCO, 2015). Regrettably, the actual output of local skilled labor fell short, accounting for only 28% until 2018 (TVET Coordination Division Policy Unit, 2020).

In relation to the aforementioned issues, this study aims to: (a) assess the degree of student interest, motivation, self-efficacy in TVET by evaluating their involvement in TVET-based course, (b) determine the readiness of students to pursue further education in technical and vocational fields, and (c) investigate the relationship between key factors (interest, motivation, and self-efficacy) and the inclination to pursue further studies in TVET among students enrolled in TVET-based course..

1.1 The Relationship Between Interest and Motivation to Learn

Interest, defined as the intrinsic desire to engage in an activity willingly (Noh & Awi, 2022). Contrasts to interest, the presence of motivation instigates a heightened inclination to execute tasks with greater efficiency (Aurora & Effendi, 2019). Within the realm of education, motivation assumes paramount importance not only as the impetus for learning but also as a facilitator influencing learning outcomes (Tokan & Imakulata, 2019). Students who exhibit high levels of motivation tend to actively seek knowledge through various avenues, thereby enhancing their overall learning experience (Noh & Awi, 2022).

As outlined by Noh and Awi (2022), students characterized by low motivation levels exhibit a lack of interest in learning and, notably, fail to establish any specific goals for themselves. Conversely, highly motivated students manifest clear objectives, possess a fervent desire for achievement, maintain a positive attitude, and exude self-confidence, contributing to their tendency to attain goals while averting failure (Noh & Awi, 2022).

According to Yusof and Nawawi (2021), intrinsic motivation encompasses factors such as attitude, skill, interest, fitness, and enjoyment. On the other hand, extrinsic motivation involves elements like popularity, social mobility, praise, encouragement, and reward – factors that influence graduates to opt for TVET colleges as their primary educational path, impacting the quality of their technical skills and employability. Hashim and Latib (2020) posit that interest serves as a catalyst for students' sustained motivation, propelling them to succeed, undergo learning experiences, and eventually transition into the workforce. This intrinsic interest indirectly propels individuals to exert greater effort and self-motivation. Consequently, the meticulous selection of a career aligned with personal aspirations is deemed crucial for ensuring an individual's professional quality and credibility (Hashim & Ab Latib, 2020).

1.2 The Relationship Between Interest and Self-Efficacy

Haron and Ahmad (2018) assert that self-efficacy significantly influences an individual's interest in a particular field and career choice. High self-efficacy intrigues students to diligently tackle tasks, persevere in the face of obstacles, and navigate risky situations, whereas low self-efficacy weakens the student's inclination to exert effort (Haron & Ahmad, 2018). In their study, it was revealed that the importance of self-efficacy for prospective skilled automotive workers is closely tied to the students' interest in the chosen career path (Haron & Ahmad, 2018).

Furthermore, Sharf (2013) posited that an individual's interest in a particular career or field of work is intricately linked to their self-efficacy beliefs. The study conducted by Zakaria et al. (2020) revealed that individuals with high self-efficacy are more inclined to make career choices that align with their strengths. Conversely, those with low self-efficacy struggle to make appropriate career decisions, resulting in limited career interests. Another investigation on the relationship between career interest and student self-efficacy found that heightened career interest correlates with elevated levels of career self-efficacy, establishing a positive connection between the two among students (Yahya & Mahmud, 2022).

1.3 The Relationship Between Motivation and Self-Efficacy

Moving on to the relationship between motivation and self-efficacy, prior studies have consistently identified a significant positive correlation between these two factors (Wahyuni, 2013). Guiffreda et al. (2013) demonstrated in their study that there exists a notable positive relationship between motivational orientation and self-efficacy. In this context, self-efficacy emerges as a contributing factor to learning motivation. Furthermore, organizational commitment and motivation were found to reinforce the connection between teacher self-efficacy and job involvement, as highlighted by Demir (2020). A study by Zainuddin and Kutty (2021) reported a positive correlation between self-efficacy and student motivation, influencing the academic achievement of female students majoring in Science, Technology, Engineering, and Mathematics (STEM). This suggests that a heightened level of efficiency is associated with increased student motivation (Zainuddin & Kutty, 2021).

Additionally, Rahman et al. (2021) study among indigenous students indicated that those with strong self-efficacy tend to persevere and continuously strive to achieve personal goals, while those with weak self-efficacy face challenging situations with various school assignments. Therefore, the level of belief in one's abilities plays a pivotal role in the career decision-making process. Based on this assertion, a hypothesis is formulated, suggesting that self-efficacy has a significant positive relationship with the motivation of indigenous students at public secondary school students (Rahman et al., 2021). Consequently, the study's findings suggest that these students possess robust self-efficacy, motivating them to actively engage in school activities.

This study aimed to assess the levels of interest, motivation, and self-efficacy in relation to the inclination to pursue further education in TVET among high school students. While existing research has explored interest, motivation, and self-efficacy in general education domain, there is a noticeable gap in studies that specifically connect these factors with the readiness to pursue advanced studies in TVET among high school students. The significance of undertaking this study is reported by the growing concern surrounding the declining trend of Malaysian Certificate of Education graduates in pursuing tertiary education, prompting the need for a comprehensive examination of factors influencing students' decisions to continue their education in TVET.).

2. Methodology

This study adopts a quantitative research design, employing a survey method with the administration of a set of questionnaires. The target population for this study comprises second-grade students attending public secondary schools in the Tuaran district of Sabah, Malaysia. The selection of the Tuaran district is deliberate, taking into consideration demographic factors and the significance of the study to the rural population. Consequently, school-related factors such as the rural setting and a student enrolment exceeding 1500 individuals are also considered in the study. While there are 10 national secondary schools in this district, only three schools meet the criteria of having an enrollment of more than 1500 students. The chosen sampling method for this study is stratified random sampling, and based on the calculated sample size, a total of 286 participants were selected. The research instrument utilized in this study is a questionnaire translated the Malay language, comprising five sections labeled A, B, C, D, and E. Section A specifically requests respondents to provide their demographic information, while Sections B to E employ a 5-point Likert scale. Section B, titled 'Interest,' incorporates items adapted from the studies of Hassan and Ab Aziz (2011) and Baker et al. (2015). Section C, labeled 'Motivation,' includes items adapted from Abiddin's study (2020). Section D, focusing on 'Self-Efficacy,' encompasses items translated from the General Self-Efficacy Scale by Schwazer and Jerusalem (1995), and from Ramli's study (2018). Finally, Section E addresses 'Readiness to Continue Studies in TVET,' with items adapted from studies conducted by Baker et al. (2015) and Muhammad, Sepikun, and Jamil (2021).

The scoring method utilized for this research instrument entails the computation of measures of central tendency, specifically the mean, mode, and median. These metrics will be utilized to visually evaluate the distribution tendency, offering insights into the levels of the study variables. The engagement of two experts within the TVET field was aimed at ensuring content and construct validation adhere to established standards. Minor adjustments were implemented to ensure that each item measures its intended concept effectively. These modifications primarily focused on refining sentence structures and checking the items for clarity and coherence within each section of the questionnaire.

Subsequently, a pilot study involving 30 respondents, who shared similar characteristics to the intended study participants, was conducted. The Cronbach's alpha value for the instrument construct in this study is considered high,

thereby ensuring the reliability of the instrument for distribution among the respondents. Table 1 presents the Cronbach’s alpha value for each variable, categorized by section as specified:

Table 1. Cronbach’s alpha result

Construct	Number of item	Cronbach’s alpha
Section B	15	.865
Section C	15	.838
Section D	15	.808
Section E	12	.875

The data collection procedure for this study commenced with securing approval from Malaysian Educational Research Application System (e-Ras) and The Ethics Committee for Research Involving Human Subjects from the Institutional Review Board Universiti Putra Malaysia (UPM). Subsequently, the researcher drafted a letter addressed to the school principal, seeking permission to conduct the study in collaboration with the accompanying endorsement letters from e-Ras and UPM. The distribution of questionnaires was delegated to the participating schools. In conducting this research, the researcher prioritized the privacy and confidentiality of respondent data. Consequently, the questionnaire abstains from soliciting personal information such as the respondent's name, telephone number, and home address. Following data collection, the researcher assumes responsibility for storing the data, which will be utilized for subsequent analysis. A certified supervisor is also entrusted with storing the study data, ensuring restricted access solely for the researchers and supervisors

3. Findings

The findings presented in Table 2 reveal that two items assessing students' interest in TVET subject achieved a very high level. Specifically, item B1 demonstrates a mean score (M) of 4.46, while item B10 follows closely with a mean score of 4.34. Moreover, ten items assessing students' interest in TVET have reached a high level, with notable mean scores for item B6 (M=4.28), item B13 (M=4.15), item B2 (M=4.00), item B14 (M=3.85), item B5 (M=3.84), item B4 (M=3.84), item B7 (M=3.81), item B3 (M=3.63), item B8 (M=3.63), and item B11 (M=3.49).

Table 2. Students' interest in TVET

Item	Statement	Mean Score (M)	Standard Deviation (SD)	Evaluation Level
B1	I thoroughly enjoy attending TVET classes	4.46	.549	Very high
B2	I find great satisfaction in learning subjects related to TVET	4.00	.500	High
B3	I take pleasure in creating related projects, both in class and at home, including tasks like replacing light bulbs or repairing electronic equipment, such as malfunctioning radios	3.63	.761	High
B4	Engaging in practical training and TVET activities provides me with a sense of accomplishment	3.84	.699	High
B5	I am committed to completing all TVET schoolwork	3.84	.751	High
B6	I am not inclined to skip classes that involve hands-on practices, as I recognize their value in enhancing my skills	4.28	.721	High
B7	My enthusiasm in class, particularly when participating in TVET subjects, is consistent	3.81	.648	High
B8	I have a deep affection for everything related to the TVET	3.63	.757	High
B9	Spending ample time on hands-on projects, like constructing mock-ups or designing models, is a frequent and enjoyable activity for me	3.42	.754	Moderate
B10	I actively seek to comprehend TVET lessons	4.34	.586	Very high
B11	I often supplement my understanding by exploring materials from various sources, such as the library and the internet, focusing on technical and vocational fields	3.49	.768	High
B12	The prospect of continuing my studies in fields related to TVET disciplines greatly interests me	3.36	.811	Moderate
B13	Producing manual work that engages my hands is something I find satisfying	4.15	.659	High
B14	I am known for my persistence and readiness to explore new processes to achieve successful inventions	3.85	.683	High

B15	I possess diverse skills in creating designs through different approaches	3.41	.681	Moderate
Overall		3.83	.333	High

The findings presented in Table 3 indicate that one aspect of student motivation in TVET, stands at a remarkably high level—specifically, item C7 (M=4.42). Furthermore, 13 other items related to student motivation in TVET exhibit high levels, with item C13 leading the list (M=4.19), followed by item C1 (M=4.11), item C8 (M=4.04), item C10 (M=3.88), item C5 (M=3.87), item C3 (M=3.82), item C2 (M=3.79), item C15 (M=3.79), item C12 (M=3.75), item C9 (M=3.71), item C6 (M=3.70), item C11 (M=3.65), and item C4 (M=3.58). Conversely, one item that contributes to the gradual motivation of students in TVET is item C14 (M=2.93). In summary, the overall mean score of students' motivation in TVET is notably high, registering at M=3.81

Table 3. Students' motivation in TVET

Item	Statement	Mean Score (M)	Standard Deviation (SD)	Evaluation Level
C1	Studying subjects related to TVET is beneficial for self-improvement.	4.11	.586	High
C2	Engaging in subjects related to TVET enables me to connect with and assist the general public.	3.79	.678	High
C3	I study subjects related to TVET to enhance my technical, vocational, and technological skills.	3.82	.735	High
C4	Learning subjects related to TVET makes me feel comfortable interacting with the public.	3.58	.744	High
C5	Studying subjects related to TVET allows me to understand any product designs and technologies in life.	3.87	.684	High
C6	Engaging in subjects related to TVET enables me to participate more openly in extracurricular activities or projects outside of school.	3.70	.839	High
C7	I study TVET with the aim of achieving good results in examinations.	4.42	.643	Very high
C8	It is necessary for me to study subjects related to TVET as it can make me a knowledgeable individual.	4.04	.747	High
C9	I pursue studies in TVET with the intention of contributing to society.	3.71	.778	High
C10	I pursue studies in TVET to continue for higher education	3.88	.782	High
C11	Studying subjects related to TVET is crucial for me because others will respect me more if I possess skills.	3.65	.822	High
C12	I pursue subjects in TVET to bring joy to my family.	3.75	.808	High
C13	I believe someone is knowledgeable if they have diverse skills.	4.19	.756	High
C14	I take TVET subjects because I am influenced by my peers.	2.93	1.003	Moderate
C15	Compliments and recognition boost my motivation to study subjects related to TVET.	3.79	.810	High
Overall		3.81	.432	High

The findings in Table 4 reveal that the self-efficacy of students in TVET is consistently high, as indicated by the following items in descending order: D10 (M=4.05), D11 (M=4.01), D9 (M=4.01), D8 (M=3.95), D2 (M=3.86), D3 (M=3.72), D13 (M=3.67), D1 (M=3.65), D4 (M=3.65), D12 (M=3.59), and D15 (M=3.50). Four items showcasing self-efficacy in TVET fall into the moderate range, namely D6 (M=3.44), D14 (M=3.44), D7 (M=3.36), and D5 (M=3.15). The overall minimum score for students' self-efficacy in TVET remains high at M=3.67.

Table 4. Students' self-efficacy in TVET

item	Statement	Mean Score (M)	Standard Deviation (SD)	Evaluation Level
1	I am confident in creating a product after studying subjects related to TVET.	3.65	.687	High
2	I am confident in performing tasks or projects that involve the use of sharp tools, such as hammers and saws, under adult supervision.	3.86	.752	High

3	I am confident in undertaking tasks or projects related to TVET.	3.72	.662	High
4	When faced with challenging assignments, I believe I can successfully complete them.	3.65	.822	High
5	I am confident in representing the school in design competitions.	3.15	.951	Moderate
6	I can face difficulties calmly.	3.44	.893	Moderate
7	I am capable of handling unexpected situations.	3.36	.856	Moderate
8	I consistently find solutions to challenging problems when I put in a sincere effort.	3.95	.748	High
9	I can complete challenging practical assignments if I work diligently.	4.01	.699	High
10	I feel a sense of satisfaction when I strive to complete difficult tasks.	4.05	.726	High
11	I am confident in trying something new in my life.	4.01	.720	High
12	I am confident in creating a new product using the tools available in my home.	3.59	.805	High
13	I am confident in giving my full commitment when performing hands-on tasks.	3.67	.688	High
14	I am confident in taking any related subjects in TVET.	3.44	.803	Moderate
15	I am confident in continuing my education in the TVET field in the future	3.50	.728	High
	Overall	3.67	.455	High

The findings in Table 5 indicate that the readiness of students to continue their education in TVET is consistently high. This is evident from the following items, listed in descending order: E10 (M=3.93), E9 (M=3.92), E4 (M=3.91), E6 (M=3.86), E11 (M=3.77), E2 (M=3.74), E5 (M=3.72), E7 (M=3.67), E12 (M=3.58), E8 (M=3.53), and E3 (M=3.51). Meanwhile, one item indicating the readiness to continue education in TVET among students falls within the moderate range, specifically E1 (M=3.34). The overall minimum score for the readiness to continue education in TVET among students remains high, with an average of M=3.71.

Table 4. Students' readiness in pursuing TVET education

Item	Statement	Mean Score (M)	Standard Deviation (SD)	Evaluation Level
E1	I am knowledgeable about TVET.	3.34	.726	Moderate
E2	I am always eager to learn subjects related to TVET.	3.74	.687	High
E3	I am determined to pursue education in a field related to TVET	3.51	.738	High
E4	I am ready to continue my education in fields that can enhance my skills.	3.91	.638	High
E5	Studying subjects related to TVET is crucial for my future career.	3.72	.793	High
E6	Mastering skills in designing products can facilitate my job prospects in the future.	3.86	.699	High
E7	I am studying TVET as one way to further my education.	3.67	.743	High
E8	I am studying TVET because I aspire to continue my education beyond my current location.	3.53	.804	High
E9	I know that if I want to work in the TVET field, I need to acquire various technical skills.	3.92	.753	High
E10	I need to enhance my level of TVET skills because technology in this field is rapidly advancing.	3.93	.737	High
E11	I am willing to seek additional references anywhere, whether through the internet, reading, or observation, to generate ideas for creating a product.	3.77	.788	High

E12	I am ready to expand my knowledge in TVET by continuing my education in this area	3.58	.734	High
Overall		3.71	.469	High

Inferential analysis was conducted to address the following research questions: (a) is there a relationship between interest, motivation, self-efficacy and the readiness to pursue further education in TVET? and (b) to determine the relationship between interest, motivation, self-efficacy, and the readiness to continue education in TVET. The Pearson correlation coefficient was used to assess the strength of the relationship between two variables based on the Strength of Relationship Scale by Cohen, Manion, and Morrison (2017), as indicated in Table 5.

Table 5. Strength of Relationships According to Correlation Coefficient Values

Correlation Coefficient Size (r)	Strength of Correlation
±.81 to 1.00	Very strong
±.51 to .80	Strong
±.31 to .50	Moderate
±.21 to .30	Weak
±.01 to .20	Very weak

3.1 The relationship between interest, motivation, self-efficacy and readiness to continue education in TVET

Table 6 presents the results of the Pearson Correlation test (r) examining the relationship between interest, motivation, self-efficacy, and the readiness to pursue further education in TVET. According to the correlation test results ($r = .468$, $p < 0.01$), a significant linear relationship exists between interest in TVET and the willingness to continue education in TVET, with a significant value of .000. The correlation coefficient, $r = .468$, suggests a moderately positive correlation between these two variables.

Furthermore, a significant linear relationship was identified between motivation and the readiness to continue education in TVET, with a correlation coefficient value of .000. The strong positive correlation is indicated by $r = .663$ between motivation in TVET and the readiness to pursue further education in these fields.

Regarding the relationship between self-efficacy and the readiness to continue education in TVET, a significant linear relationship was observed ($r = .701$, $p < 0.01$). The correlation coefficient, $r = .701$, reports a strong positive correlation between these variables.

Table 6. Pearson Correlation Test for Interest, Motivation, and Self-Efficacy with Readiness to Continue Education in TVET

	<i>Readiness to continue education in TVET</i>		Interpretation of the relationship
	Correlation coefficient (r)	Significance (p)	
Interest	.468**	.000	Moderately positive
Motivation	.663	.000	Strongly positive
Self-efficacy	.701	.000	Strongly positive

** Note. $p < 0.01$

4. Discussion

This study highlights the crucial role of Technical and Vocational Education and Training (TVET) as a mainstream academic program in Malaysia. Addressing factors such as interest, motivation, and self-efficacy is deemed essential to ensure the success of the TVET program. It is noteworthy that Malaysian students possess the necessary factors for the successful implementation of TVET. However, there is room for improvement, particularly in fostering confidence and enhancing the prospects of TVET graduates.

The perception of TVET as a second-class program needs to be dispelled. In many advanced countries, TVET graduates are highly respected due to their contribution to human capital development and readiness for employment. Skilled graduates play a significant role in ensuring the execution of the country's development plans and advancement agendas. Therefore, this study sheds light on the current aspirations of secondary school students in Malaysia who seek to pursue their education in the TVET field.

Overall, the study's findings indicate a high level of interest in TVET among public secondary school students, reflected in an overall mean interest score of $M=3.83$. Students exhibit a keen interest in TVET, particularly when actively participating in TVET-based classes. However, the results, consistent with Azeem et al. (2022), suggest that urban students tend to show higher interest in TVET programs compared to their rural counterparts. It is worth noting that all

three selected schools in the study are in rural areas; thus, the study concludes that geographical location does not significantly contribute to students' decisions regarding their interest in TVET.

The motivation of students in the technical and vocational field, as measured through the subject TVET, is notably high, with an overall minimum score of $M=3.81$. Specifically, Item C7, "I study TVET because I want to achieve good results in exams," demonstrates a significantly high level ($M=4.42$). This is attributed to the satisfaction students experience when achieving good exam results, motivating them to actively engage in TVET studies and encouraging them to pursue further education in the technical and vocational field.

The self-efficacy of students in TVET is also at a high level, with an overall minimum score of $M=3.67$. Additionally, Item D15, "I am confident in continuing my education in the technical and vocational field in the future," also attains a high level, with an overall minimum score of $M=3.50$. These findings align with a study by Zakaria et al. (2020), where the overall minimum self-efficacy score for students in TVET colleges is high, specifically 3.75, indicating that students are highly confident in selecting a suitable career path for their future.

Literature indicates that several factors can influence students' decisions to enroll in TVET programs. Mutungi (2023), for instance, highlighted that some students opt for TVET colleges where their friends are, leading to situations where individuals join a program only to realize later that they are not interested in that profession, prompting a change of course midway through their educational journey. Reasons contributing to a lack of interest in TVET programs may stem from inadequate physical facilities, staff shortages, unplanned trainees' employability skills, a limited range of courses offered, and students' choices for public TVET institutions.

On the other hand, Ayanwale et al. (2023) suggest that perceived family influence and societal impact significantly contribute to attitudes toward TVET. However, the study notes that schools do not provide sufficient support for students in TVET education, hindering their educational progress. The findings of the study offer insights into how policymakers and practitioners in Lesotho's education system can promote TVET as a viable educational and career option by enhancing students' attitudes towards TVET subjects.

It is interesting to note that factors such as career exploration may support students' readiness for the TVET stream. Students may plan their career trajectory by specifically selecting the appropriate TVET program based on their interests and motivations. For instance, Yusran et al. (2021) found that career exploration acts as a partial mediator in the relationship between social support and career self-efficacy in TVET career choices. There is not only a significant relationship between career exploration and career choice, but also direct relationships between social support, career self-efficacy, and career choice. Clearly, TVET programs play a crucial role in channelling and preparing students for their careers. The aforementioned variables signify important contributions to TVET preparation for the workforce environment. Consistent with the study by Mohd Zin et al. (2020), interest in a career field influences the desire and readiness to continue education in the chosen field.

Previous research has highlighted significant factors contributing to the improvement of TVET programs. These well-structured TVET programs will serve as a catalyst for enhanced TVET program execution, ultimately raising the likelihood of generating interest in TVET among students. The development of TVET or career programs should be aligned with longitudinal support for career placement and support services to ensure a successful career journey. Consideration of innovative characteristics, work readiness, and vocational self-concept is crucial when formulating TVET education and career programs (Ahmid et al., 2023). On the other hand, students' career choices vary due to numerous factors influencing their decisions on whether or not to pursue their chosen careers. The findings reveal a high level of self-efficacy, and all five determinants strongly correlate with each other. The five determinants (academic interest, self-efficacy, financial benefits, non-financial benefits, and family expectations) of TVET career choice, especially among diploma-level engineering students, are interrelated (Tamang, 2022). These mentioned variables prompt further exploration for the future direction of the study.

Various factors contribute to students' readiness for TVET at public secondary schools. Omar (2020) emphasizes the role of information delivery methods, such as those employed by teachers, parents, and peers, in shaping students' knowledge, interest, and motivation toward TVET. Azeem (2021) indicates the significance of vocational self-efficacy in influencing students' interest in TVET, while Azeem in (2022) identifies demographic differences, including gender, field of education, and geography, as significant influencers of students' interest in TVET. Finally, Hong et al. (2021) highlights the impact of parents and facilities on students' decision-making processes concerning TVET. These findings collectively report the multifaceted nature of TVET readiness, shaped by a combination of informational, psychological, and environmental factors.

5. Conclusion

In conclusion, this study sheds light on the multifaceted factors influencing TVET readiness among students in public secondary schools, particularly focusing on interest, motivation, and self-efficacy. The findings report a high level of interest, motivation, and self-efficacy among students in the TVET field, reflecting their positive engagement in TVET-based courses. The study emphasizes the pivotal role of positive attitudes towards TVET, effective teaching and learning experience through students' academic performance and supportive learning environments in enhancing TVET readiness.

As policymakers and educators seek to bolster TVET as a compelling educational and career pathway, addressing these factors becomes imperative to foster a conducive environment for students to thrive in the technical and vocational realms

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