

Factors On Deciding TVET For First Choice Educational Journey Among Pre-Secondary School Student

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Abstract: *Less was known about predicting factors concerning students' knowledge, interests, and motivation towards Technical and Vocational Education and Training (TVET). The study aimed to determine the relationships among pre-secondary school students' demographic factors, knowledge possession, interest and motivation related to TVET stream and to identify the relationship between informational methods and knowledge possession, interest and motivation of students towards TVET. A quantitative descriptive study used to determine the factors contributing to student's knowledge, interests, and motivation, which play a critical role in 64 pre-secondary school students' choice of TVET. A questionnaire was utilized to determine the participants' perceptions of choosing the TVET field. Descriptive and inferential statistics, including one-way ANOVA analysis, were used to analyze the data. Findings revealed that information delivery methods such as receiving information from teachers, parents, peers, internet platforms with motivation have a significant relationship for students to choose TVET. Thus, the promotion and strategy on empowering TVET is salient and developing a positive image on TVET will encourage myriad stakeholders on the importance of TVET for the nation. It is a high time to rebrand the image of vocational education as an element to train skilled human capital development.*

Keywords: *Knowledge, Interests, Technical and Vocational Education and Training (TVET), Motivation*

1. INTRODUCTION

UNESCO, ILO (2002) delineates Technical and Vocational Education and Training (TVET) as important aspects of the educational process, which emphasizes on the study of technologies and related sciences; acquisition of practical skills, and attitudes; and understanding and knowledge related to occupations in various sectors of economic and social life, along with general education (Dania, Bakar, & Mohamed 2014). Billet (2011), Azeem and Omar (2019) also elucidates TVET as formal, non-formal and informal learning which provides young people with the required knowledge and skills in the world of work. Along with the latest influx of Information and Communication Technology (ICT), significant developments and demands are taking place at a rapid intensity across the globe across every area of human lives. Hence, the Malaysian government's policies are to prioritize the education sector, in particular, by creating qualified workers and practitioners who would contribute to the development of other industries. These policies also contribute

to achieving the desired status of a developed country and transforming the Malaysian education structure, uniquely in technical and vocational education (TVET) sector along the way. Needless to mention, TVET plays a significant role in that transition towards a developed nation within the first 20 years of the 21st century (Yaakob et al., 2020).

TVET sector's importance to national development was recognized globally. Malgen and Hopkins (1998) suggest that some proven scientific data indicates that TVET will potentially help boost economic growth by increasing the skills of the employees. As a consequence of growing requirements for the workforce, nations, for example, the United States, the European Union, the African Union, and the Middle East have redesigned or are in the process of reshaping their education and training programs to assure a sufficient supply of highly skilled professionals (Boutin et al., 2009). For instance, Australia's extensive government strategy for improving TVET from 2004 to 2010 as advocated by UNESCO-ILO has accurately identified numerous global efforts to redefine TVET.

In recent years there has been a resurgence of vocational training programs around the world. For example, in 2017, the World Bank approved a \$60 million credit loan for a Technical and Vocational Education and Training (TVET) program in Nepal to increase the supply of skilled employees in the labour market (World Bank Group, 2017). Last year, the World Bank also sponsored an event for education experts from Sub-Saharan Africa who were able to learn about developing governance structures to promote the growth and sustainability of vocational training programs (World Bank, 2018). Countries are attempting to capture labour market gains by increasing the quantity and quality of labour through vocational programs. It is particularly important in developing countries with young, unskilled populations. Even developed countries like Spain and Portugal have also established TVET programs after seeing its success in Germany, which has well-established TVET programs (Spees, 2018).

The role of quality TVET, among others, is vital for Malaysia upstanding to join the ranks of developed countries (Cheong & Lee, 2016). The commitment of the Malaysian government to support the growth of TVET sectors was also evident in the launch of the National TVET Campaign, where the Malaysian Minister of Education emphasized that 60% of the jobs generated under the 11th Malaysia Plan were anticipated to need technical and vocational skills to increase the human resource base (Aziz, 2019). It would render TVET the most significant pathway to growing the human resource level in Malaysia. The Malaysian Education Blueprint 2015-2025 (Higher Education) was designed by Malaysia's Ministry of Higher Education to prepare Malaysian youth to harness fresh perspectives under the 11th Malaysia Plan. Within the blueprint, one of the main goals of TVET is to equalize it with conventional academic pathways. Young adults continue to consider TVET's value in their tertiary education program (Ministry of Higher Education, 2017). Around the same time, the government aims to promote further school leavers to participate in and vocational skills training from 10 % to 20% at present (Dania, Bakar, & Mohamed, 2014).

Yet, TVET in Malaysia is one of the paradoxes. Five thousand TVET and science positions are waiting to be filled, but given the fact that the employability of TVET graduates is higher than that of graduates of tertiary institutions (Times, 2019). A Khazanah Research Institute (KRI, 2018) study also estimated that the existing potential of TVET institutes remains inadequate to fulfil the economic growth needs. Institutes were anticipated to raise 1.2 million against the requirement for 1.6 million TVET students from the national economy. It creates a gap of 400,000 graduates in supply-demand before 2020. The number of students in Malaysia who opted for TVET continues to increase over the years. Meanwhile, the number

of certificates issued has fallen substantially (Cheong & Lee, 2016). At this stage, the 10th Malaysia Plan's target of achieving 50 per cent highly qualified workforce by 2020 and the ETP expectation of 1.3 million TVET graduates failed to achieve, significantly hampering the nation's goals to become a high-income economy (Dania et al., 2014) and triggering strong youth employment scarcity (World Bank, 2014).

Malaysia is facing many challenges to the TVET system, according to the Ministry of Higher Education's Department of Polytechnic Education, such as, TVET is considered a less prestigious choice of study than the academic stream, which contributes to limited enrolment in training programs and impedes further growth of TVET activities in collaboration with industry. It might jeopardize funding and ensure a scarcity of skilled labour. Besides, the expertise of the students is not adequately remunerated even after successful graduation from the TVET program. It is also largely associated with the image and social recognition of TVET(UNEVOC, 2019).

Following numerous attempts by the Ministry of Education to enhance and persuade the public about the benefits and weaknesses of Malaysia's current technical education and vocational training program, the majority of students and parents still accept the academic stream rather than the vocational stream (Nursiah et al., 2020). Under these circumstances, Malaysian students' interest in TVET is still decreasing. In contrast, neighbouring Singapore, which has historically much in common with Malaysia, has done exceptionally well both with tertiary education and TVET.

Several researchers (see Azeem & Omar, 2019; Cheong & Lee, 2016; Dania, Bakar, & Mohamed 2014) have also contributed to investigate factors influencing the students' participation towards TVET and contributed some outstanding findings with critical viewpoints. The researchers established the factors responsible for TVET students' low enrolment include the lack of job education, stigma towards TVET graduates, reluctant government attitude towards TVET, lack of student motivation, inadequacies of facilities/infrastructure resources, and inadequate career counselling. Amid these heated debates over students' enrolment and motivation towards Malaysian TVET education, this paper attempts to investigate the relationship between informational methods and knowledge possession, interest and motivation of students about TVET field.

The rest of this paper is structured as follows: the literature on factors influencing students' enrolment in TVET institutions is reviewed, the methodology, findings, discussion and at the end the conclusion along with some recommendations will be demonstrated.

2. LITERATURE REVIEW

The literature on TVET education is abundant, and many studies have attempted to analyze students' motivation to TVET choice in a variety of country contexts. Variety of instruments, methodologies and techniques were employed by several scholars to determine the influencing factors to study in particular fields of study. There have, however, been very few researches on the interaction among informational methods and knowledge possession, interest and motivation of students towards the TVET field. One of the primary focus of TVET students is to involve in learning methods focusing on job-oriented activities and tasks. TVET students are more likely to be visual learners, where they prefer to learn with images, diagrams, flowcharts and demonstrations to understand better the learning content (Mohamad et al., 2012). Consequently, technical and vocational education (TVE) is used as a broad

concept applying to all dimensions of the educational cycle that involve, in addition to general education, the learning of technology, complementary sciences and the development of skill sets, knowing attitudes and information leading to employment in specific economic and social sectors (UNESCO-ILO, 2002).

Status of Technical and Vocational Education and Training (TVET) across the Globe

Almost all high schools located in the United States provide introductory courses such as technical training, computing orientation, and word processing to train the students for the job market. Nearly 75 per cent of college students in the US today receive one or more advanced labour market preparedness courses/programs such as technological and networking, quality control, business and marketing, agriculture, manufacture and vocational education, and early childhood education. Today, the country's population has less than 20 per cent of unskilled workers (Lynch, 2019).

In China, for example, there is already a robust network of government-supported vocational institutions and numerous forms of training programs. The vocational education and skills assessment system of the nation is essential to the different delivering models. The technical schools, vocational schools and technical secondary schools are the major training institutions providers and are funded by Employment Training Centres (Idris & Mbudai, 2017). Moreover, China also has an extensive range of pre-employment, on-the-job training, and work support programs (i.e. retraining) in these training institutions. The government also introduced a program called Youth Preparation Training (Yan, 2010).

Hong Kong takes up a vast geographical region, and economic expansion was partially dependent on the development of its people's skills and competencies. The Vocational Training Council (VTC) is the leading supplier of skills in Hong Kong. The VTC is a tripartite entity serving companies, 'workers' and academic concerns. The emphasis is on pre-employment preparation, and research initiatives contribute to focusing on professional skills growth, with 70 per cent of the time focused on practical activities and the remaining 30 per cent on theories (Martinez-Fernandez & Powell, 2017).

City and Guild's survey in nine countries (Australia, Canada, Denmark, Germany, Hungary, India, Malaysia, South Africa and the United Kingdom) revealed that, excluding Hungary, citizens in those countries depicted the picture of vocational education as being relatively not pleasing (Batterham & Levesley, 2011). Conversely, most employers have a good view of vocational qualifications in terms of ability to perform and sufficient wages (Batterham & Levesley, 2011).

In Nigeria, students can advance to vocational schools based on their preceding three years' grades in junior secondary school. It also allows the high school graduates to devote another three more years of training. The main objective of this initiative is to offer skills to the individuals ensuring the graduates would be self-reliant as well as gain employment with the public or private sector (Afeti, 2017).

Factors motivating students towards TVET

Several factors might determine the selection of a student to undertake a vocational training program. The representation of vocational training is one of the reasons that play a significant role in the choices of the students to participate in such program. Parents, as well as school administrators, may often influence an individual's decision in choosing vocational training through their personal beliefs (Agodini et al., 2014). Ismail (2013) and Omar, Self, Cole,

Rashid, and Puad (2018) suggested that several factors such as intrinsic, extrinsic and altruistic motivations influence student teachers in Malaysia to choose to teach TVET as their career.

Unfortunately, according to Hoxter (2002), some have a biased perception of technical education as an alternative educational opportunity for low-income students and school dropouts. They wish to join the workplace directly. However, TVET is also deemed ideal for high-risk youth despite not providing a challenging curriculum (Beltram, 2007) relative to the traditional university course that most talented students have opted to pursue. Such negative attitudes influence the decision of the students whether or not to seek vocational education which would shape the development of human resource policy of a nation.

“Japanese-dual system” was introduced In Japan after 2003 to make up for the historical defects of Japanese vocational education and technological education (Terada, 2012), and ever since, the market value of vocational education in high school or higher education facilities has been a subject of debate. Despite these initiatives, parents and students generally put greater focus on university education compared with TVET. As a consequence, students with lower grades and from relatively weak socio-economic backgrounds also deemed TVET a second choice after university (Kumiko, 2016). However, owing to the recent trend of required employment skills for the job, the circumstances have shifted. TVET has increased prominence, and enrolments in these programs have now risen following a time of steady decline.

Moreover, Tadele and Terefe (2018), who studied the influence of career self-efficacy beliefs on career exploration behaviours among TVET college students in three Wollega Zones Town in Ethiopia, reported that career self-efficacy a conviction among TVET college students positively affects career exploration behaviours. They further address that these selected TVET Colleges do not provide counselling facilities, while proper guidance and counselling services are required early. Meanwhile, Okello (2013) explained that the factors are influencing Uganda's attitude to TVET are generally favourable, although 30% of participants are pessimistic due to their socio-economic perspective.

TVET 's fundamental aim is to improve practical skills in learners, and gaining appropriate construction, design and repair skills requires well-functioning infrastructural and machinery facilities to ensure efficient, effective and sustainable employable skills for learners. In contrast, a lack of such facilities would impact students enrolment in vocational institutions. For example, infrastructure inadequacy continued to affect the full TVET capacity in South Africa (Powell & Mcgrath, 2013), Malaysia (Powell & Mcgrath, 2013), Nigeria (Ogbuanya, 2014), Bangladesh (Alam & Forhad, 2020), Chile (Rojas et al., 2019) and Kenya (Reuben et al., 2020). Moreover, insufficient educational facilities, teaching and learning services, lack of curriculum alignment in making it receptive to needs of the business and lack of industrial linkage lead to low enrolment (Rojas et al., 2019; Nursiah et al., 2020).

Many studies also managed to prove that students' interest, parental influence and peer influence have a significant impact on students' decision regarding TVET, for example, Hamid et al., (2016) and Buang et al. (2016) in the case of Malaysia; Ayub (2017) in the case of Pakistan; and Reuben et al., (2020) in the case of Kenya. Student interest in participating in the TVET program is important as it will encourage them to seriously follow the plan and ultimately contribute to a highly skilled Malaysian workforce. Besides, family influence in the form of moral support, advice, financial assistance and the like is also important as

families, especially parents, have an enormous impact on the future of their children. Besides parents, peers also influence a student's behaviour in everyday life as they are only second to parents in being close to students (Nursiah et al., 2020).

Most previous studies centred on factors affecting participation in the university rather than vocational education (Luke & Heyns, 2019; Hayter & Parker, 2019). Earlier studies, for example, indicated that high score achieving students are more likely to follow an undergraduate institution (Alexander & Cook, 1982; Garet & Delany, 1988). It shows that low-level graduates are more inclined to seek vocational training. Another research has shown that students from racial and ethnic minority communities, students from underprivileged backgrounds, and students with behavioural issues are all more likely to seek vocational training (Ogbuanya, 2014). Several pieces of research explicitly examining the factors which drive participation in vocational education supports these findings (Campbell & Rolls, 2017).

Furthermore, Nursiah et al. (2020) claimed that enrolment in Malaysia's technical and vocational education programmes has remained low since the implementation of technical and vocational education system. Similarly, in Nigeria, Akanbi (2017) announced that there was less than three per cent of overall enrolment in technical and vocational education programs as of 2016. He further claimed that this figure, around 50 per cent of enrolment in technical and vocational education, is targeted in comparison with countries. According to Banik & Kumar (2017), the reasons for this scenario are; a. several of the technical education occupations and trades are considered undignified, b. the average South East Asian parent does not want their children to live decently as a full-time worker, plumber, brick/blockboard, carpenter and auto-engineer, and c. these job positions in Southeast Asian social setting are considered powerless (Ayonmike, 2014).

Regarding women student's participation in TVET, various scholars such as Amoor and Umar (2015) and Reyes (2018) established significant findings. Some major factors responsible for women's low participation in technical and vocational education have been a low societal perception of TVET, last choice of schooling; low smart quotient, low academic performance, and job insecurity. Ayub (2017) also added, in the past, neither conventional nor western education has enabled or provided equal opportunities for women to enter Pakistan's vocational and technical education. According to Ndahi (2013), the TVET professionals were known to be a mechanical or electronic machines fixer, (turning screws, nuts, and bolts) during the early stage of technological education in Pakistan. A female was not imaginable as a technician at the time, and therefore only boys attended this training institution for professional technical industrial education. (Ayub, 2017).

According to the International Rescue Committee (IRC, 2015), the findings of the interviews taken from students on the evaluation of significant factors leading to the lower female participation in the TVET, in particular, training in a traditionally male industry, reported the lack of knowledge about the strengths of TVET, inadequate financial support, financial interest and doubts about future employment viewpoints. In the same manner, (Alam & Forhad, 2020) argued that some of the factors influencing female involvement in TVET in Bangladesh include; low perception of society; weak entry-level; poor attitude towards society; lack of recognition; sexism towards TVE graduates and elitism. Previous literatures are noteworthy that of (see Ayonmike, 2014; Evans, 1995; Evans & King, 1991; Evans & Walter, 1993; Jyoti, 2012; Khan, 1993 citing in Shirley, 2014; Kember, 1981; UNESCO, 1999; Wapula, 2009) claimed various factors impacting the participation of women in

general education and technical vocational training, in particular, have been identified by different international academics and organizations.

Yaakob and other (2020) identified the factors of household (economic position, household size and parental education), biological composition (genetic deficit), psychological disposition (mental environment, interests, and attitudes), policy-related (lack of goals and adequate gender equality monitoring) and school-related (school location, peer influence, facilities, role models, gender-biased curriculum materials) have impacted, particularly in developed and undeveloped countries, on TVET participation, learning and achievement.

The findings of Ayub (2017) research is that parental influence is statistically significant and has an impact on students' decision towards TVET. Bukantaitė, Laužackas, and Sabaliauskas (2006) investigated from their research that 77.9 per cent of fourth-level students responded that their desire to "study anywhere" influenced the choice of the speciality. This figure can be explained by the fact that these students have failed to enter universities or colleges and have chosen vocational schools so as not to waste a year. The key reason is bad research results and an awareness that learning at a high school would be too difficult. The students, therefore, choose a vocational school which believes it will be easier to study there than at a secondary or main school. Many classic studies also show that TVET's educational decisions are influenced by several variables, such as preferences (Vroom, 1964), form of motivation (Clark & Trow, 1966), students' attitudes towards universities (Long, 1977), parental involvement (Shoffner & Klemer, 1973; Werts, 1973) and effects of comparison community (Edleson & Crowe, 1960).

Moreover, Kitui Mango (2015) identifies that the desire for employment largely influenced youth polytechnics' choice of job opportunities despite the lack of infrastructure, inadequacy and lack of qualified teachers compromising the quality of training offered to trainees. This study demonstrated enhancing quality education and preparation by providing financial aid to vulnerable graduates, developing facilities and provision of adequate and qualified teachers.

Moreover, the findings from Farid Safarmamad (2019) show that TVET students are predominantly male (70%), rural (60%), economically deprived (60%) and enrolled in grade 9 (68%). The relationship between gender and program enrolment was good, suggesting that both male and female students had traditional program choices. Parenting (53%), including practical experience, sibling, job-finding and friends, were the most important factors in influencing students' preferences for TVET decisions. His research has also shown that the National Career Guidance and Vocational Education Development Centre under the Ministry of Labor and Employment and Migration must open its district branches to raise awareness of the different programs offered in TVET education systems and make the career decision - making the process more accessible for students.

Research by Meshack Chuma (2014) on influences on gender disparity in TVET enrolment in Kenya shows that several factors affecting the enrolment of students in TVET courses, such as their preferences and attitudes towards classes, related jobs and their requirements for high school subjects, the subjects teachers, parents, career consultants, family members and friends, TVET policies and the framework developers.

In another study by Hadi et al., (2015) showed that in gender role perception, there was no significant difference between males and females. Each demonstrated a conventional approach to the role of gender. Besides, there was a significant difference in vocational

choice between males and females, where Females displayed considerable interest in service/clerical vocations compared and males were highly interested in practical/manual vocation. The educational background of parents was also found to be influential in the role of trainees, in the role of gender, but not in their choice of vocation.

Most of the previous researches also found that the attitude of parents to technical and vocational education is significantly influenced by students' choice. Mills and Lavender (2011). Arregle, Hitt, Mari and Al-sad (2017) and Madhavan, Venugopalan and Sisodia (2019) also anticipate that the educational, professional and income levels of parents have significant implications for the preference of students for TVET. Most study findings indicated that the student approach to TVET is affected by guardians. The majority of respondents' parents have a lower level of economic, educational and occupational background in society.

From the literatures reviewed above, the factors predominantly affect students' participation in TVET program include: cultural factors (these factors reflect the cultural and cross-cultural, social norms and traditions by which subservient status of the family is maintained); attitudinal factors (The differences in employment skills and capabilities impelled by socialization in homes and families, exacerbated by education, career guidance, workplace experiences, family pressure and lack of feminine role models can be seen in these); and situational factors (these factors include women's positions in the household, lack of adequate care of family members, financial situation and settlement place); institutional factors (this can arise from the way TVET institutions organized their program some of which are lack of female teachers, lack of child care facilities, lack of medical department, lack of particular TVET institution for female, inflexible selection and entry requirements). Against these backdrops, this present study seeks to identify the factors affecting the participation of Malaysian pre-secondary school students choosing TVET programs.

3. RESEARCH OBJECTIVES

Two research objectives were formulated to guide the systematic process of research agenda:

1. To determine the relationships among students' demographic factors, knowledge possession, interest and motivation of students relating to TVET stream
2. To identify the relationship between informational methods and knowledge possession, interest and motivation of students pertaining to TVET field

4. METHODOLOGY

The research was carried using a quantitative method by adopting a descriptive survey. A total of 64 respondents were involved out of 115 primary school students aged 12 years old who just completed their Primary School Achievement Test. This group of students was chosen due to their involvement in the Green Sustainability program organized by the Faculty of Educational Studies, Universiti Putra Malaysia and Sekolah Kebangsaan Seri Suria Kuala Lumpur. There were three planned activities designated for the program. One of the activities was the green technology application in TVET. Three structured segments were developed: (a) survival skills in food preparation, (b) urban farming using recycled materials, and (c) product modelling. Each segment was taught by experienced postgraduate students who are experts in the aforementioned field. The students were requested to give to their best option according to the 5-likert point scale to determine their level of agreement. The questions were developed according to the intended measured variables (knowledge, interest, motivation, and information delivery methods) to ascertain the formulated research objectives. As part of

the class activities for Program Evaluation in TVET (TVE5006), the researcher had requested the class lecturer to validate the questions before distributing to the respondents. The questionnaire form consists of two sections. Section A was developed to obtain the demographic profiles (gender, race, guardian's occupation, and family income) and section B was about the studied variables (knowledge, interest, motivation, and information delivery methods). The quantitative data was collected right after the program completion under the supervision of researchers. The researchers were assisting the students in understanding some terminology or words being used in the questionnaire that was not familiar to them. The respondent may skip or omit to answer while answering the questions. The survey was expected to be completed within 15 minutes.

5. FINDINGS

As mentioned, data collection was completed right after the completion of the program. A total number of 64 students responded to the survey, and it was considered as exercise responses rate due to the strict control measurement undertaken by the researchers. The information delivery method was listed in five options (teacher, parents, peers, internet that includes Google search, Facebook, Instagram, Twitter, and others). Details of the findings are shown below (Table 1).

Table 1. Demographic profile for descriptive analysis

Profile	Frequency	Percentage
Gender		
Male	32	50.0
Female	32	50.0
Race		
Malay	60	93.8
Chinese	Nil	Nil
Indian	1	1.6
Others	2	3.1
No response	1	1.6
Family Occupation		
Government Servant	24	37.5
Private employee	18	28.1
Self-employed	20	31.3
Pensioner	2	3.1
Others	Nil	Nil
Family Income in Malaysian Ringgit		
1000 and below	21	32.8
1001 to 3000	31	48.4
3001 and above	11	17.2
Missing data	1	1.6

I Know About TVET From (Information Delivery Methods):		
Teacher	48	75.0
Parents	2	3.1
Peers,	7	10.9
Internet Platform (Google search, Facebook, Instagram , Twitter)	3	4.7
Others	1	1.6
Missing data	3	4.7

Table 1 presents the socio-demographic figures for the study. There were 32 participants in each gender group out of 64 samples, and 60 participants among them were Malay. 24 (37.5%) participants' family occupation was government service, while 20 (31.3%) and 18 (28.1%) participants' family occupation respectively was a self-employed and private employee. Those whose families earned 1000 Ringgit (USD 240) or below 3000 Ringgit (USD 718) per month made up 48.4% of the respondents, and most of the participants first came to know about TVET from their teacher (75%).

A set of five questions in section B consisting of the studied variables (knowledge, interest, and motivation) were asked in the questionnaire. On the knowledge, interests and motivation section, the researcher utilizes a 5-Likert type scale consisting (5= Strongly disagree, 4= Disagree, 3= Less Agree, 2=Agree, and 1=Strongly Agree). Each question was formulated according to the studied variables. In the table 2. the overall mean score and standard deviation of Knowledge ($M=3.72$, $SD=0.95$), Interest ($M=3.84$, $SD=1.10$), and Motivation ($M=4.23$, $SD=1.17$) suggest the participants' disagreement with the statements.

Table 2. Descriptive analysis of students' knowledge, interest, motivation, and information delivery methods

	Mean	S.D.
Knowledge		
I know TVET before I joined this program	4.17	1.04
This program increases my knowledge in TVET program	3.28	.87
Overall Mean	3.72	0.95
Interests		
I am interested in learning TVET related course	3.84	1.10
Motivation		
I enjoy the program and hope to participate in the future	4.23	1.17

Independent Sample T-Test Analysis

Based on table 3, the result shows that there was no significant difference between male students' knowledge ($M=3.45$, $SD=0.82$) and female students' knowledge ($M=3.12$, $SD=0.89$); $t(62) = 1.52$, $p = 0.12$. These results also decode that students' knowledge based on gender is not affected in choosing TVET.

Table 3: Independent Sample T-test on students' knowledge based on gender

Gender	N	Mean	Std. Deviation	T	Df	Sig
Male	32	3.453	.826	1.521	62	.122
Female	32	3.125	.898			

Note. $p < 0.05$

Moreover, table 4 shows that there was no significant difference for male student interest ($M=3.78, SD=1.21$) and female students' interest ($M=3.90, SD=0.99$); $t(62) = -0.45, p = 0.65$. T-test results show that students' gender in interest toward choosing a TVET field is not affected.

Table 4: Independent Sample T-test on students' interest based on gender

Gender	N	Mean	Std. Deviation	T	Df	Sig
Male	32	3.781	1.211	-.452	62	.654
Female	32	3.906	.995			

Note. $p < 0.05$

In addition, there was no significant difference between a male student ($M=4.28, SD=0.94$) and female student ($M=4.18, SD=1.40$) in motivation; $t(62) = 0.31, p = 0.75$. The results indicate that students' motivation based on gender is not affected to choose a TVET field (Table 5).

Table 5: Independent Sample T-test on students' motivation based on gender

Gender	N	Mean	Std. Deviation	T	df	Sig
Male	32	4.281	.924	.316	62	.753
Female	32	4.187	1.401			

Note. $p < 0.05$

ANOVA analysis

Table 6 below was a result of an ANOVA test to compare informational methods with students' knowledge and found no significant difference between informational method with students' knowledge at the $p > .05$ level for three condition $F(8, 55) = 0.237, p = 0.982$

Table 6: ANOVA analysis between informational delivery methods with student's knowledge

	Sum of Square	df	Mean Square	F	Sig.
Between group	2.180	8	.273	0.237	0.982
Within Group	63.257	55	1.150		
Total	65.438	63			

Note. $p < 0.05$

Table 7 shows the result of ANOVA test, which was conducted to compare informational methods with students' interest in TVET. The results also indicate that there was no

significant difference between informational method with students' Interest at the $p > .05$ level for three condition $F(4, 59) = 0.665, p = 0.619$

Table 7: ANOVA Analysis between Informational Methods with Student's Interest

	Sum of Square	df	Mean Square	F	Sig.
Between group	2.824	4	0.706	0.665	0.619
Within Group	62.613	59	1.061		
Total	65.438	63			

Note. $p < 0.05$

A one-way analysis of variance was also conducted to compare informational delivery methods with students' motivation in choosing TVET. From the ANOVA test in table 8 below shows that there was a significant difference between informational method with students' motivation at the $p < .05$ level for three condition $F(5, 58) = 3.139, p = 0.014$.

Table 8: ANOVA Analysis between informational delivery methods with motivation

	Sum of Square	df	Mean Square	F	Sig.
Between group	13.938	5	0.706	3.139	0.014
Within Group	51.500	58	1.061		
Total	65.438	63			

Note. $p < 0.05$

6. DISCUSSION

This research attempts to identify the relationship between informational methods and knowledge possession, interest and motivation of students concerning to TVET. From the findings, it was found that TVET students in Malaysia are mostly influenced by students' self-perception, their parental influences, and their intention to participate in the job market quickly.

The findings from the descriptive analysis of this study (table 2), concerning students' knowledge, interest, motivation, and information delivery method, indicated participants' relatively less optimism to TVET. These results are also aligned with the findings of Hassan et al., (2019); Cheong & Lee, (2016) and Ibrahim et al., (2012), where they remarked on TVET perceptions in Malaysia that stay pessimistic. Many other researchers who stress prejudice toward TVET in both developing and developed countries (Alam & Forhad, 2020; Reuben et al., 2020; Remington, 2018; Agrawal and Agrawal, 2017; Kumiko, 2016; Chankseliani et al., 2016; Aryeetey et al., 2011; Yan, 2010).

Another important finding of study is (table 8) there was a significant difference between informational method with students' motivation to TVET in Malaysia. It also suggests that teachers' guidance plays an important role in raising the motivation of students to pursue TVET education. Many studies portrayed by Boonk et al. (2018); Ismail (2013); Yulianti, Denessen, and Droop (2018) found that students' motivation is significant linked with teacher's instructional practices. Moreover, the research of Jalil, Kassim, and Madar (2019)

also inlines with this study (Table 7), claiming that the participation of the students in TVET subjects rises if the students are aware of their learning style.

Hence, the important factors to be emphasized within the TVET framework include improvising the formation of positive self - concept, participation in extracurricular activities and enhance industrial attachment in related industries. Some improvements to Malaysia's TVET system may be required. The development of technical and vocational education at all levels will explicitly be taken into account to allow a country to achieve its national technological, cultural, political and social life objectives. Based on the findings produced by this study, the policy failed to implement the two first alternatives because the program included more general subjects, which are taken over the trade and practical subjects in Malaysian TVET institutions.

However, it is worth mentioning that in Malaysia, TVET education has its specific challenges which decide the sustainability and future direction of implementation. Therefore, the present and potential problems ought to be carefully approached such that no funds from taxes can go into a failure. Moreover, TVET 's direction is certainly not straightforward and smooth, with the rapid pace of technological advancement that happens globally. With appropriate planning and tactics, though, any potential impediments may be reduced.

Consequently, further research should investigate the motivation of parents to impact their children on TVET programmes. Motivation will determine to what extent individuals can benefit from their training and change their pedagogical beliefs and practice (Peterson, Schreiber, & Moss, 2011) Using qualitative study in the future research may bring some new insights to TVET research. Moreover, the researcher conducted the study at a small scale in one STPM level school. Nationwide conduct of the research may yield more reliable results and a broader range of variables motivating students to want to enter a technical college. A nationwide analysis will provide results that involve more racial categories of students offering more in-depth impressions about why students want to participate in technical college program opportunities.

7. CONCLUSION AND RECOMMENDATIONS

In conclusion, motivation plays a significant role in students' choice of TVET. Besides, students get their input and knowledge in TVET from the informational method such as teachers, parents, friends and social media. From the findings, it is evident that most of the students know about TVET from teachers and fellow friends. The Malaysian government should dedicatedly promote TVET in all media for raising awareness among the parents and the students. A considerable number of recommendations are being proposed at this point. First, to maximize students ' interest in technical and vocational education and training, and societal perception related to TVET requires upgrading. Consequently, impressive developments in the world of work should be continuously integrated into the TVET curriculum to achieve further skills acquisition and efficient job performance. Secondly, incorporate social knowledge and professional learning into the school-based curriculum, through seminars and internships. Finally, it is proposed that the mind-set of entrepreneurship must focus on their course choice in a career counselling program for TVET students.

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