

Self-Efficacy Levels Among TVET Graduates in Career Decision-Making Ability

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Abstract

Self-efficacy is an important aspect of career development for students. Every individual has unique traits and characteristics. To achieve personal growth and success in a career field, self-efficacy is a crucial factor. This study was conducted to identify the level of self-efficacy among TVET graduates through their career decision-making ability, identify factors influencing TVET graduates' career decisions, and determine the differences in career decision-making ability among TVET graduates based on their educational institutions. Six (6) institutions were randomly selected using a stratified approach, involving a total of 222 TVET alumni. A survey and quantitative research methods were used to collect data through a questionnaire. Descriptive statistics, including mean scores, standard deviations, and frequencies, were employed to determine the level of TVET graduates' career decision-making ability. To measure the differences in career self-efficacy among TVET graduates based on institutions, one-way ANOVA was used. The study's results show a high mean score for self-efficacy in career decision-making ability ($m=4.314$), as well as for influencing factors in psychological ($m=4.346$), social ($m=4.322$), and economic ($m=4.260$) aspects. The results of the one-way ANOVA analysis indicate that there are no significant differences among institutions in terms of factors influencing TVET graduates' career decisions ($\text{sig}=0.675$, $p>0.05$). These findings suggest that the level of self-efficacy among TVET graduates is crucial in helping them make career decisions.

Keywords: Career; Self-efficacy; TVET.

1.0 Introduction

Career is defined as a job undertaken for earning a livelihood or pursuit. It also represents an individual's journey in a particular field of life. According to Normah Zakaria et al. (2020), career selection is an important aspect of a student's life planning. Talents, interests, personality, and academic achievements are key factors in a student's career choice. Khuzaimah, as cited in Fam Mei Mei et al. (2021), states that an individual may experience work-related stress, boredom, and frequent job changes if they choose a career that is not suitable for them. Students with high levels of capability and self-confidence are more likely to make appropriate career choices for the future (Normah Zakaria et al., 2020). This is supported by Zainuddin (2021), who found that students with high self-confidence perform tasks better than those with lower confidence. Decision-making skills are crucial in career selection. Zakaria (2020) highlights that having a consistent career aspiration is essential to avoid being trapped in an unwanted career.

Technical and Vocational Education and Training (TVET) is a type of education and training that emphasizes industrial practices. This training produces a workforce skilled in psychomotor abilities that meet industry demands. According to (Mutohari et.al, 2021) the core objective of vocational education is to develop students' work competencies through learning. The competencies that need to be taught to students focus on cognitive, affective, and psychomotor aspects. Vocational education can be considered successful if all three of these competencies are effectively attained. This study was conducted among TVET students from Community Colleges, Polytechnics, ADTEC (Advance Technology Training Centre), ILP (Institut Latihan Perindustrian), IKBN (Institut Kemahiran Belia Negara), and IKM (Institut Kemahiran Negara). The study has the following three objectives:

- i. To identify the level of career decision-making ability among TVET graduates.
- ii. To identify the factors influencing TVET graduates' career decisions.
- iii. To determine the differences in career decision-making ability among TVET graduates based on their educational institutions.

Several researchers suggest that self-efficacy is a key factor in demonstrating the impact of self-awareness on career success (Garanina et al., 2019; Koch & Orlov, 2020). The ability to control one's behaviours, emotions, and motivation reflects self-efficacy. For TVET graduates, this ability is crucial as it enables them to be prepared for jobs related to the skills, they acquired during their studies at TVET institutions. This capability helps them apply their skills in the real job market and provides a continuous supply of skilled workers to industries requiring TVET graduates.

The aspect of choosing the right career is very important because a career is a work experience that influences one's lifestyle and personal well-being. According to (Aliffia Reza Marcheline et al. 2020), this finding aligns with the existence of an inferiority complex or the difficulty workers face in performing their jobs when they are not sufficiently trained. Career decision-making is a critical planning phase in a student's life. An ideal career helps students consistently identify suitable job roles, preventing them from getting stuck in an undesirable career. A career is something important and closely related to the development of a person's life. (Nurul Farhana Yahya, Mohd Izwan Mahmud, 2021)

Various factors influence the level of self-efficacy for TVET graduates in making career decisions. These factors impact their ability to choose a career. A career is something that needs to be planned and cannot be left to develop on its own. This is important to ensure that an individual's future career aligns with their interests, personality, and academic achievements. (Zaidi Othman et al. 2020). Factors such as attitudes towards job selection, lack of self-confidence, low ethical and moral values, technological skills, soft skills, and adaptability in the workplace contribute to unemployment despite job opportunities. Nurul Hidayah et al. (2022)

Therefore, this study emphasizes several key factors contributing to the self-efficacy of graduates, focusing particularly on psychological, social, and economic factors. The study was conducted among TVET graduates from six institutions: Community Colleges, Polytechnics, ADTEC (Advance Technology Training Centre), ILP (Institusi Latihan Perindustrian), IKBN (Institusi Kemahiran Belia Negara), and IKM (Institusi Kemahiran Negara).

According to Amutha Arumugam et al. (2021), students often focus on choosing a career based on influence of others expertise rather than through self-assessment. It is widely recognized that these factors significantly impact decisions regarding career and course selection. Academics and career counsellors could assist students in refining their interests by exploring the links between their academic subjects, passions and relevant career opportunities. Argue that educators and policy makers should rethink employability strategies, beyond simply teaching student skills that lead to employment (Khatleen & K. Ann Renniger, 2022).

The problems related to career selection involve both career interests and individual personalities. In today's rapidly evolving socio-economic landscape, career-related concerns are increasingly important in the fields of psychology and pedagogy, as professional development empowers individuals to recognize and fulfill their abilities, potential, and needs (Kotova, S., Hasanova, I., Sadovnikova, N., Komarov, E., & Wenbin, L. (2021). According to Khampirat B (2020) parent with a lower level of education may have limited understanding of child development at various stages of a child's life, which could contribute to the poor speech and listening skills observed in their interactions with their children. The family environment and parents play a key role in influencing students' career decisions. Educators can begin by focusing on students' interests in the subject and guide them in exploring how they can channel that interest into different career paths (Khatleen & K. Ann Renniger, 2022).

2.0 Methodology

Google Forms was used as the platform for administering the questionnaire to respondents. This online data collection method facilitated data entry and saved time for the researchers. The study was conducted quantitatively with respondents selected using a stratified random sampling method. The questionnaire had an alpha value of 0.882, based on Ahmad Rosli's (2016) study and validated by three counselling experts. According to Nurul Hidayah et al. (2022), this reliability value indicates that the data is free from errors and yields consistent results.

The respondents were TVET graduates from the years 2020 and 2021 from Melaka and Negeri Sembilan (Malaysia), consisting of 222 individuals from institutions including Community Colleges, Polytechnics, ADTEC (Advance Technology Training Centre), ILP (Institusi Latihan Perindustrian), IKBN

(Institusi Kemahiran Belia Negara), and IKM (Institusi Kemahiran Negara) In line with Hidayah et al. (2022), a good study involves a large sample size.

The instrument consists of Section A, which includes respondent demographics and items related to their attitudes and behaviours, focusing on self-efficacy, influencing factors, and career planning methods. Section B covers the factors determining career decisions of respondents from psychological, social, and economic perspectives. Data were analysed using the Statistical Package for Social Sciences (SPSS) version 23.0 to obtain mean scores and perform one-way ANOVA tests. According to Yunisra Yusof et al. (2021), the minimum recommended sample size for one-way ANOVA analysis using the G-Power application is 200 respondents and that is consistent with the sample size for this study.

3.0 Results and Discussion

The study was conducted to obtain mean scores to identify the level of career decision-making ability among TVET graduates. The mean scores were used to determine the factors influencing respondents' career decisions from psychological, social, and economic perspectives, as well as to analyse the significance of the one-way ANOVA test.

i. Identifying the Level of Career Decision-Making Ability Among TVET Graduates

From the descriptive analysis, the overall mean score for the level of career decision-making ability among TVET graduates is high, at $\mu=4.314$. This finding is supported by Yunisra et al. (2021), who noted that Community College TVET graduates have high confidence in making accurate career decisions in the future. Additionally, past research by Zakaria et al. (2020) showed that vocational college students also have high self-efficacy and are more confident in their career choices. According to Nurul Hidayah et al. (2022), TVET graduates who successfully manage their careers exhibit high self-confidence. This indicates that the self-efficacy of graduates significantly influences their consideration in making good career decisions.

Table 1: Mean Score for Career Decision-Making Ability Among TVET Graduates

Item	Overall Mean Score (μ)	Interpretation
Career Decision	4.314	high

ii. Identifying Factors Influencing TVET Graduates' Career Decisions

From the mean scores obtained in Table 2, the factors influencing TVET graduates in making career decisions include psychological, social, and economic aspects. The mean scores for all three factors indicate a high interpretation.

Table 2: Factors Influencing TVET Graduates' Career Decisions

Factor	n	Mean	Standard Deviation	Interpretation
Psychological	222	4.3461	0.551	high
Social	222	4.3218	0.570	high
Economic	222	4.2602	0.567	high

In terms of psychological factors, respondents were assessed based on their strengths, abilities, self-capacity, and interest in the career decision-making process. This is supported by Noor Athirah et al. (2021), who state that interest is a dominant factor affecting fourth-form science students in both urban and rural areas when choosing their careers. Faizal et al. (2024) also show that electrical engineering students agree that interest is a key factor in readiness for career formation. Faqhrullah (2023) notes that the ability to work independently is a skill that helps students secure employment. This indicates that personal abilities, self-capacity, and interest are crucial for TVET graduates in making career decisions.

Regarding social factors, respondents were evaluated based on clear career guidance, career experience during industrial training, and career counselling from advisors. This is also supported by Faizal et al. (2024), who state that industrial training and experience play a significant role in students' readiness to face the job market and influence their career formation readiness. The role during industrial training is an important factor in preparing students for the job market, thus aiding them in career decision-making.

Economic factors influencing career decisions include the current economic situation, prospects of a career, and careers offering substantial returns. This finding is supported by Khan et.al. (2021), which shows that financial considerations are a critical factor in career selection. Starting in 2016, the uncertain global economic situation has posed significant challenges for graduates in finding employment, with unemployment rising from 3.1% in 2015 to 3.4% in 2016 (Kalaiselvi, 2018). This indicates that the current economic situation impacts TVET graduates' career decisions.

iii. Identifying Differences in Career Decision-Making Ability Among TVET Graduates Based on Educational Institutions

Through the one-way ANOVA test, the significance value shown in Table 3 is 0.675. This value represents the level of career decision-making ability among TVET graduates based on their educational institutions. Respondents were from three groups of institutions: Community Colleges, Polytechnics, and other institutions such as ADTEC, ILP, IKBN, and IKM. The significance value obtained is greater than the significance level of $p > 0.05$, indicating no significant difference between the educational institutions among TVET graduates.

However, self-efficacy is crucial in helping TVET graduates make career decisions to ensure that their choices have an impact on their future. This is supported by Normah et al. (2020), who state that to produce confident technical graduates, students need to have high self-efficacy.

Table 3: Differences in Career Decision-Making Ability Among TVET Graduates Based on Educational Institutions

Level	Educational Institution	Df Value	Significance Level
Career Decision	Between Groups	2	0.675
	Within Groups	242	
	Total	244	

4.0 Conclusion

Overall, the findings of the study can be summarized as follows:

- i. The mean scores obtained for assessing the career decision-making ability among TVET graduates are high. This indicates that high self-efficacy greatly aids TVET graduates in influencing their career choices. Consistent with Nordin and Omar (2024), students who are ready to pursue employment after graduation are those with strong self-confidence. Therefore, TVET institutions should emphasize human development programs to enhance students' self-efficacy. This is to ensure that graduates can plan and make well-informed career decisions.
- ii. The mean scores for identifying factors influencing TVET graduates' career decisions are all high. These factors include psychological, social, and economic aspects. For psychological factors, aspects such as strengths, abilities, self-capacity, and deep interest in the chosen career are evaluated among TVET graduates in making career decisions. Social factors include obtaining career guidance from counsellors and career experience during industrial training, which are key determinants in making career decisions. Current economic conditions and future career prospects also have a significant influence on career decision-making. All three factors are crucial in aiding graduates' readiness and facilitating their job search. Quality TVET graduates need to excel not only in skills but also in personal development.
- iii. According to the one-way ANOVA test, there are no significant differences between educational institutions among TVET graduates in terms of career decision-making. These institutions include Community Colleges, Polytechnics, and other TVET centres such as ADTEC, ILP, IKBN, and IKM. Self-efficacy is crucial in preparing students to start their careers, regardless of the institution they attend. Emphasis should be placed on building self-confidence and student interest. Career experience in industrial training centres also significantly contributes to achieving students' career goals more successfully.

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Author Contributions

R. N. Abu Bakar: Result, Discussion and Writing; Conceptualization, Abstract, Introduction, Discussion, Conclusion, Methodology; **N. Aris:** Editing; **N. Mohamad:** Result, Discussion and Writing-Reviewing.

Conflicts of Interest

The manuscript has not been published elsewhere and is not under consideration by other journals. All authors have approved the review, agree with its Submission, and declare no conflict of interest in the manuscript.

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