The Role of Digital Marketing and Government Initiatives in Promoting TVET Enrolment among Malaysian Youth

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ABSTRACT

The Technical and Vocational Education and Training (TVET) sector in Malaysia plays a critical role in equipping the workforce with industry-relevant skills. However, despite government efforts to promote TVET, enrolment remains suboptimal, often hindered by negative public perception. This study investigates the impact of digital marketing strategies—namely, advertising, social media marketing, and government initiatives on Malaysian youth's perception of TVET and their intention to enrol. Using a quantitative approach, data were collected from 377 respondents and analysed through Structural Equation Modelling (SEM). The findings reveal that social media marketing and government initiatives have a significant influence on TVET perception, which in turn strongly predicts enrolment intention. Advertising and TVET awareness also contribute indirectly by influencing perceptions. The study highlights the importance of integrating digital strategies and targeted policy communication to enhance the image and uptake of TVET. Future research should further explore the longitudinal and qualitative dimensions to gain a deeper understanding of the motivational drivers behind youth enrolment decisions.

Keywords: Advertising, Enrolment Intention, Government Initiatives, Social Media Marketing, TVET

INTRODUCTION

Background of the study

In Malaysia's evolving higher education landscape, Technical and Vocational Education and Training (TVET) has emerged as a significantly growing pathway—both as an alternative and a complement to conventional academic routes. TVET programmes in Malaysia are offered at multiple qualification levels, including certificates, diplomas, and even degrees, across institutions supervised by different ministries and agencies (UNESCO-UNEVOC, n.d.; Azahar et al., 2022). However, despite policy support, data on the uptake of TVET courses among university students remains sparse, and the distribution of student enrolment across TVET disciplines within higher education institutions (HEIs) varies considerably.

Recent data indicate that, in 2023, a total of 408,767 students were enrolled across the 1,345 TVET institutions in Malaysia, with 133,594 students graduating in that year (Wan Chang Da, 2025). Of this cohort, 175,780 were newly enrolled students, constituting roughly 44 % of the total secondary school leavers who sat for the SPM (Sijil Pelajaran Malaysia) exam in the preceding year (Wan Chang Da, 2025). In terms of enrolment growth, the proportion of students opting for TVET streams at the secondary-to-tertiary transition has demonstrated upward momentum: from 4.60 % in 2019, rising to 6.11 % in 2020, 6.30 % in 2021, 6.66 % in 2022, and reaching 10.51

% in 2023 (Bernama, 2024). This suggests a growing, though still relatively modest, share of learners choosing vocational or technical pathways in post-secondary education.

At the higher education level, many TVET offerings are hosted by polytechnics, community colleges, vocational colleges, and specialized institutions administered across different ministries (UNESCOUNEVOC, n.d.). The Malaysia Technical University Network (MTUN), for instance, facilitates articulation from vocational programs into degree-level TVET courses in disciplines such as engineering technologies and applied sciences, although with limited capacity and enrolment to date (Penang Institute, 2023). Despite this expansion, granular breakdowns by discipline (e.g., engineering, ICT, hospitality, manufacturing) or by type of HEI (public vs. private) are not readily available in public sources (Wan Chang Da, 2025). The relatively low share of TVET enrolment, compared to academic tracks, and the absence of detailed discipline-level data pose a challenge to assessing how well TVET pathways align with labour market needs, especially for students who pursue TVET within or transition into tertiary institutions.

While previous studies have explored the effectiveness of TVET policy, few have integrated digital marketing perspectives into enrolment intention models, particularly in Malaysian secondary education. Given the rising uptake of TVET, it is essential to examine whether TVET courses attract secondary school students and to identify the factors that influence their enrolment intention in these courses. Without such understanding, policies aimed at harnessing TVET to improve graduate employability may risk misalignment with student preferences and market demands.

LITERATURE REVIEW

Technical and Vocational Education and Training (TVET) has become a global priority for preparing skilled workforces and supporting sustainable economic growth. This section reviews TVET development in developed and developing countries, Malaysia's experience, and the factors influencing students' enrolment intentions, perceptions, and awareness. It also discusses the role of marketing communication, social media, and government intervention in shaping TVET's image. In developed nations such as Germany, Switzerland, and Singapore, TVET is a respected pathway supported by strong industry linkages, dual training systems, and policy integration. The German dual system, for example, combines classroom learning with on-the-job training, ensuring a smooth transition from school to work (Bauer & Gessler, 2016). Switzerland's teacher training and apprenticeship model has enhanced the social status of TVET (Gonon, 2017). Singapore embeds lifelong learning and digital skills in its TVET programs, reducing stigma and aligning with national economic strategies (Varaprasad, 2021). In contrast, many developing countries face persistent challenges. Negative societal perceptions, underfunding, and weak governance hinder the development of TVET (Chipfakacha, 2019; Ayonmike et al., 2015). However, some innovations, such as competency-based training in Pakistan and hybrid learning in Bangladesh, highlight progress (Ahmed et al., 2022; Khan et al., 2017). Overall, TVET is viewed as a "master key" for development, but success depends on political will, infrastructure, and stakeholder collaboration (Kerre, 2017). Malaysia positions TVET as central to national human capital development and industrial competitiveness. Despite government investment and reforms, enrolment among secondary school students remains low due to stigma, fragmented governance, and limited public awareness (Harun et al., 2020; Aziz & Subramaniam, 2023). Studies show that parents' influence, poor facilities, and negative societal perceptions discourage participation (Hong et al., 2023). Career prospects remain a strong pull factor, but institutional credibility and quality also shape student choices (Aziz & Zulkifli, 2020). Policy reforms, such as the establishment of the National TVET Council, aim to improve coordination; however, challenges remain in harmonizing standards and strengthening industry collaboration (Ridzuan & Abd Rahman, 2022).

Enrolment intention is shaped by expectations of employability, societal perceptions, and parental influence (Schuchart & Schimke, 2022). Students are more likely to choose TVET when they believe it offers career stability and aligns with industry demand (Gaffoor & Van der Bijl, 2019). However, deeprooted stigma, cultural biases, and gender stereotypes often portray TVET as a second-class option (Adewolu Ogwo, 2024; Riegle-Crumb & Morton, 2017). Perception of quality also plays a role. TVET is often seen as suitable only for low academic achievers (Selvaratnam, 2016). Institutional reputation, modern facilities, and visible success stories can reshape perceptions. Research indicates that outreach programs, career guidance, and experiential learning opportunities help counter stereotypes (Van Norman, 2023).

Effective communication strategies are crucial in shaping awareness and enrolment. Advertising has been found to have a positive influence on student recruitment in higher education (Atarah & Peprah, 2014). However, traditional campaigns in Malaysia remain sporadic and insufficient to change longstanding stigma. Social media marketing offers more substantial potential, particularly among younger audiences. Platforms such as TikTok, Instagram, and YouTube are effective in promoting the relevance and potential of TVET. Interactivity, entertainment, trendiness, customization, and electronic word-ofmouth (e-WOM) are key drivers influencing students' attitudes and decision-making (Kim & Ko, 2012; Ninan et al., 2020). Studies confirm that social media not only builds awareness but also fosters trust, engagement, and positive perceptions (Manzoor et al., 2020; Faisal & Ekawanto, 2021).

Government Intervention

The Malaysian government has invested heavily in TVET, allocating billions through the Ministry of Education, HRD Corp, and other agencies (Bernama, 2022). Initiatives include the National Dual Training Programme, incentives for employers hiring TVET graduates, and industry partnerships with government-linked companies (The Star, 2023). Despite these efforts, enrolment remains below target, indicating that financial support and structural reforms must be complemented by strategic promotion and public awareness campaigns (Marzuki et al., 2022).
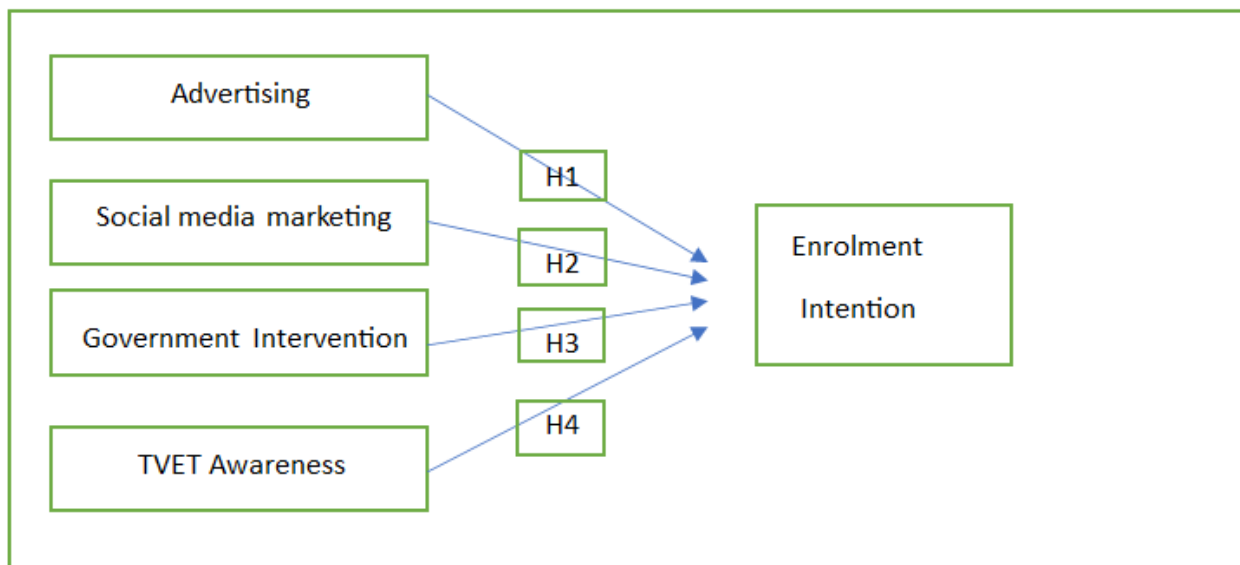
Conceptual Framework

Figure 1. Conceptual Framework

This study extends TPB by positioning digital marketing and policy support as sociobehavioral antecedents of enrolment intention. Advertising plays a critical role in shaping students' educational choices, particularly by raising awareness and influencing perceptions of TVET programs. Effective advertising strategies enable institutions to highlight the benefits, career prospects, and employability pathways associated with TVET, thereby fostering enrolment intentions among secondary school students. Prior research emphasizes that advertising can positively impact students' attitudes by delivering persuasive messages that reduce uncertainty and encourage favourable decision-making (Belch & Belch, 2021). Moreover, repetitive and engaging advertising campaigns can instill familiarity and trust, which are vital in educational decision-making processes (Kotler & Keller, 2016). Thus, advertising is expected to positively influence students' intention to enrol in TVET programs.

Social media marketing has become one of the most influential tools for shaping youths' decisions due to its interactive, engaging, and peer-driven nature. Secondary school students are highly active on platforms such as TikTok, Instagram, and YouTube, where institutions can leverage creative content to showcase TVET opportunities. Social media marketing not only enhances awareness but also fosters a sense of belonging and

trust through peer recommendations and influencer endorsements (Dwivedi et al., 2021). The interactive nature of social media enables potential students to engage with content, ask questions, and participate in discussions, which significantly enhances the perceived value and enrolment intention. Studies confirm that social media marketing has a strong predictive influence on students' academic and career-related decisions, surpassing the impact of traditional advertising (Alalwan et al., 2017). Therefore, social media marketing is hypothesized to positively influence students' enrolment intention in TVET.

Government intervention plays a vital role in ensuring equitable access and encouraging participation in TVET programs. Policies such as subsidies, scholarships, public campaigns, and industry partnerships reduce financial and social barriers, making TVET more attractive to secondary school students. Empirical studies have highlighted that supportive policies significantly influence educational choices by reducing costs and enhancing perceived opportunities (Mustapha et al., 2020). Furthermore, visible government commitment enhances the credibility and legitimacy of TVET as a viable educational pathway, countering negative societal perceptions (UNESCO, 2016). By creating an enabling environment and ensuring the integration of TVET into national development strategies, government intervention is expected to positively impact enrolment intention.

Awareness of TVET programs is a fundamental step toward shaping enrolment decisions, as it provides students with the necessary knowledge of available courses, career prospects, and pathways. Studies have shown that awareness-building through outreach programs, career talks, and media campaigns increases students' likelihood of considering vocational education (Okolie et al., 2020). Without adequate awareness, secondary school children may hold misconceptions or remain uninformed about the benefits of TVET, thereby limiting their enrolment intention. However, when awareness campaigns emphasize the employability outcomes and industry relevance of TVET, students are more likely to view it as a viable alternative to traditional academic routes (Atchoarena & Hollander, 2020). Thus, TVET awareness is hypothesized to positively influence students' intention to enrol.

Hence, based on the above discussion, the hypotheses presented below are developed:

H1 – H4: Advertising, social media marketing, government intervention, and TVET awareness positively influence enrolment intention among secondary school children

METHODOLOGY

The population comprised of secondary school students in Selangor, Malaysia, which records the highest number of secondary school students nationwide. For practicality, the study focused on Form 4 students in Petaling Perdana district (N = 70,639). Using the Raosoft calculator with a 5% margin of error and 95% confidence level, a sample size of 375 respondents was determined. A purposive sampling technique was employed, as this group was most relevant in providing insights into enrolment intentions toward TVET pathways. Data were collected through a researcher-administered, bilingual (English and Malay) questionnaire, distributed face-to-face in three selected public schools. This method was necessary due to school policies restricting mobile phone use, which limited the feasibility of online surveys. The questionnaire consisted of three sections: (i) demographics and background, (ii) independent variables (advertising, social media marketing, government intervention, TVET awareness, and (iii) the dependent variable (enrolment intention). Responses were captured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Measurement items were adapted from established studies and pretested through a pilot study involving 38 respondents (10% of the final sample). Adjustments were made to improve clarity, such as removing parental income range and clarifying advertising items. The instrument demonstrated content validity through expert review and was further refined for reliability. Data were screened and coded using SPSS v26 for frequency and descriptive analysis. Hypotheses testing was conducted using SmartPLS4, applying Partial Least Squares Structural Equation Modelling (PLS-SEM). This method was chosen for its robustness in handling complex models with both reflective and formative constructs, and its suitability for moderate sample sizes. Analyses included measurement model validation (convergent and discriminant validity) and structural model evaluation (path significance, R^2, Q^2, and predictive relevance).

Table 1. Measurement

Variables	Nu. of items	Source
Advertising	13	Arshad & Aslam (2015)
Social media marketing	9	Kakar, Shahzad & Khoso (2023)
Government intervention	4	Uzoka & Nwaizugbo (2021)
TVET awareness	5	Azzari & Pelissari (2020)
Enrolment intention	5	Azzari & Pelissari (2020); Husnain & Toor (2017)

RESULTS AND CONCLUSION

Preliminary findings

All 377 questionnaires were successfully collected with no incomplete or inconsistent responses (Table 2). This was achieved through face-to-face data collection, where each item was clearly explained to the respondents. Participants also reviewed their answers before submission to ensure completeness and accuracy.

Table 2. Response Rate

Description	No. of samples	Percentage
Distributed questionnaire total number	377	100%
Returned questionnaire	377	100%
Unusable returned questionnaire	0	0%
Usable response rate	377	100%

Table 3 below shows a fairly balanced gender distribution, with a slight female majority (198 females, 179 males) among 377 respondents. Most participants are Malay (79.8%), followed by Indian (8.8%), Chinese (8%), and others (3.4%). The largest study fields are Business & Art (21%), STEM A (19.6%), and Computer Science (11.1%). A vast majority (93.4%) reside in urban areas, while only 6.6% are from rural areas. Fathers are mainly employed in the private sector (40.8%), while mothers are primarily in government service (32.1%) or unemployed (27.9%). As shown in Table 3, more than half of the respondents (50.5%) are unaware of TVET education, yet 74.5% expressed interest in it, and only 15.1% reported having family members enrolled in TVET programs.

Table 3. Summary of Demographic Profile

Demographic	Categories	Frequency (N)	Percentage (%)
Gender	Male	179	47.5
	Female	198	52.5
Race	Malay	301	79.8
	Chinese	30	8.0 8.8

	Indian	33	3.4
	Others	13	
Course	STEM A	74	19.6
	STEM B	21	5.6
	STEM C	47	12.5
	STEM Computer Science	13	3.4
	Home Science & Business	38	10.1
	Computer Science	42	11.1
	Landscape Nursery	17	4.5
	Economic & Account	36	9.5
	Business & Art	79	21.0
	Literature	10	2.7
Living area	Urban Rural	352	93.4
		25	6.6
Father's occupation sector	Government	95	25.2 40.8
	Private	154	25.7
	Self-employed	97	8.2
	Unemployed	31	
Mother's occupation sector	Government	121	32.1 26.3 13.8
	Private	99	27.9
	Self-employed	52	
	Unemployed	105	

Table 4. Descriptive of awareness and interest towards TVET education

Demographic	Categories	Frequency (N)	Percentage (%)
Awareness towards TVET education	Yes No	187 190	49.6 50.4
Interest towards TVET education	Yes No	281 96	74.5 25.5

Family members enrol TVET education	Yes No	57 318	15.1 84.9

Measurement Model Assessment

The reliability and validity of the constructs were first assessed and presented in Table 5. Cronbach's

Alpha values for the constructs ranged from 0.735 (Government Intervention) to 0.882 (Enrolment Intention), indicating acceptable internal consistency above the recommended threshold of 0.70 (Hair et al., 2019). Composite reliability (CR) values also exceeded the minimum requirement of 0.70 for most constructs, confirming reliability. However, the Average Variance Extracted (AVE) values for Advertising (0.383) and Social Media Marketing (0.344) fell below the threshold of 0.50, suggesting limited convergent validity for these two constructs (Fornell & Larcker, 1981). Although the AVE values for Advertising and Social Media Marketing fell slightly below the recommended threshold, they were retained due to strong theoretical relevance and satisfactory item reliability. Other constructs, such as Enrolment Intention (0.681), Government Intervention (0.651), and TVET Awareness (0.572), demonstrated adequate convergent validity.

Discriminant validity, as in Table 6, was assessed using correlation values between constructs. The results showed that the correlations among constructs were generally below the critical value of 0.85, supporting discriminant validity (Henseler et al., 2015). This indicates that the constructs measure distinct concepts in the model.

Table 5. Cronbach Alpha

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Advertising	0.774	0.766	0.830	0.383
Enrolment Intention	0.882	0.884	0.914	0.681
Government Intervention	0.735	0.742	0.848	0.651
Social Media Marketing	0.822	0.839	0.858	0.344
TVET Awareness	0.751	0.760	0.842	0.572

Table 6. Discriminant v alidity

	Advertising	Enrolment Intention	Government Intervention	Social Media Marketing	TVET Awareness
Advertising Enrolment Intention	0.379				
Government Intervention	0.137	0.435			

Social Media Marketing	0.495	0.655	0.328		
TVET Awareness	0.350	0.254	0.159	0.337	

Structural Model Assessment

The structural model was evaluated by examining the path coefficients, t-statistics, and p-values. Four hypothesized direct relationships between independent variables and the dependent variable (Enrolment Intention) were tested.
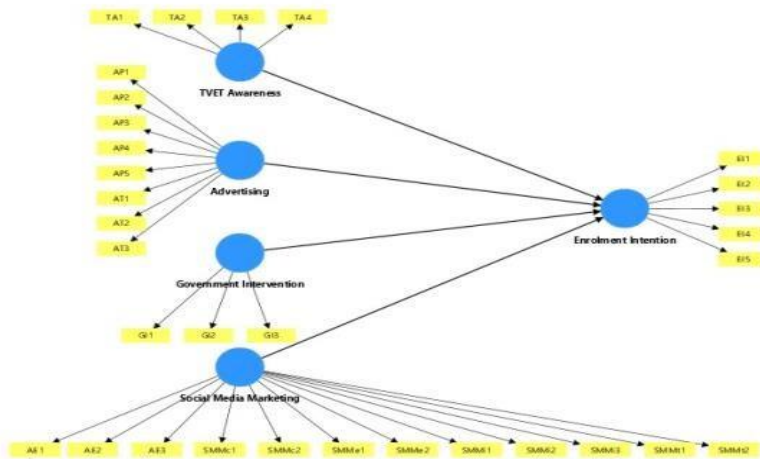

Figure 2. Path Coefficient

Table 7. Path coefficient

	Original sample (O)	**Sample mean (M)**	**Standard deviation (STDEV)**	**T statistics (|O/STDEV|)**	**P values**
Advertising -> Enrolment Intention	0.124	0.131	0.039	3.154	0.002
Government Intervention -> Enrolment Intention	0.217	0.216	0.043	5.031	0.000
Social Media Marketing -> Enrolment Intention	0.471	0.473	0.044	10.749	0.000
TVET Awareness -> Enrolment Intention	0.023	0.029	0.040	0.579	0.563

Advertising → Enrolment Intention: The path coefficient was 0.124 (t = 3.154, p = 0.002), showing a positive and statistically significant effect. This implies that advertising efforts play a modest but meaningful role in influencing students' intention to enrol in TVET programs.

Government Intervention → Enrolment Intention: The relationship was positive and significant (β = 0.217, t = 5.031, p < 0.001). This suggests that policy initiatives, subsidies, and governmental support strongly encourage enrolment intention, aligning with prior studies on the role of governance in educational uptake (Mustapha et al., 2020).

Social Media Marketing → Enrolment Intention: The strongest effect was observed in this relationship (β = 0.471, t = 10.749, p < 0.001). The findings confirm that social media platforms are powerful tools in shaping perceptions and motivating potential students toward TVET enrolment, echoing the growing body of research on digital marketing's impact on education (Dwivedi et al., 2021).

TVET Awareness → Enrolment Intention: The relationship was not significant (β = 0.023, t = 0.579, p = 0.563). This indicates that awareness alone, without targeted engagement or supportive initiatives, may not directly influence enrolment intention. This contrasts with some previous studies that emphasized awareness as a precursor to action (Okolie et al., 2020).

Overall, the results highlight that social media marketing is the most influential predictor of TVET enrolment intention, followed by government intervention and advertising. TVET awareness, however, did not have a significant direct impact. These findings underscore the importance of digital strategies and policy support in promoting TVET programs, while also suggesting that awareness campaigns may need to be more interactive and persuasive to translate into actual enrolment intentions.

DISCUSSION

The path coefficient analysis provides insights into the strength and significance of the relationships between the independent variables and enrolment intention. Among the predictors, social media marketing emerged as the strongest determinant (β = 0.471, p < 0.001). This finding reinforces the growing influence of digital engagement in shaping educational decisions. Social media platforms allow institutions to communicate directly with prospective students, build trust, and create interactive experiences that traditional media cannot match (Dwivedi et al., 2021). The strong effect observed suggests that the governing body of TVET programs should prioritize social media strategies in their recruitment campaigns to target digital-native generations effectively.

Government intervention also demonstrated a significant positive effect (β = 0.217, p < 0.001). This highlights the critical role of policy frameworks, financial incentives, and strategic support in encouraging enrolment. Similar studies emphasize that when governments actively invest in TVET through subsidies, awareness campaigns, and infrastructure, public perception and participation rates improve (Mustapha et al., 2020). Thus, sustainable enrolment growth depends on the continued alignment of national policy with institutional strategies.

The effect of advertising on enrolment intention, while significant (β = 0.124, p = 0.002), was comparatively modest. This suggests that traditional advertising still plays a role, but its impact is weaker relative to social media engagement. This aligns with contemporary findings that traditional advertising is less persuasive for younger audiences, who are more influenced by digital and interactive channels (Alalwan et al., 2017). Institutions may therefore need to integrate advertising into a broader, digitally oriented communication mix.

Interestingly, TVET awareness was not a significant predictor (β = 0.023, p = 0.563). This suggests that mere exposure to or knowledge of TVET does not directly translate into an intention to enrol. Prior studies note that awareness must be complemented by persuasive factors, such as perceived value, employability prospects, and peer influence, to drive actual behavioural intention (Okolie et al., 2020). The finding suggests that while awareness campaigns are necessary, they must be coupled with motivational elements to be effective.

The results demonstrate that the most effective strategies for influencing enrolment intention lie in leveraging social media platforms and ensuring supportive government policies, while advertising and awareness, although important, require more targeted and innovative approaches to produce stronger outcomes.

CONCLUSION AND RECOMMENDATION

Conclusion

This study extends prior TVET and digital marketing research by integrating government initiatives as a structural predictor of enrolment intention—an area underexplored in Malaysian education literature. The findings of this study highlight the significant roles of social media marketing and government intervention in

shaping students' enrolment intentions in TVET programs. Social media marketing emerged as the most influential factor, indicating that digital engagement platforms provide a powerful avenue for institutions to connect with and influence prospective students (Dwivedi et al., 2021). Government support, through policies, subsidies, and awareness initiatives, also plays a pivotal role in enhancing the attractiveness of TVET, aligning with previous evidence on the importance of governance in educational participation (Mustapha et al., 2020). Advertising had a moderate effect, while TVET awareness did not significantly influence enrolment, suggesting that awareness alone is insufficient to drive behavioural intention. Hence, it can be said that the study aligns with the Theory of Planned Behavior, where digital engagement (social media marketing) acts as a salient belief influencing behavioural intention toward TVET enrolment.

The study concludes that effective enrolment strategies must focus on integrating digital platforms and policy support into holistic approaches for promoting TVET. While advertising remains relevant, institutions should innovate in delivering engaging campaigns that go beyond simple awarenessbuilding to highlight the employability value and practical opportunities TVET offers. These insights offer practical implications for policymakers, educational institutions, and marketers seeking to enhance TVET enrolment and, by extension, workforce readiness in emerging economies.

Future Areas of Research

Future research could explore mediating and moderating variables that shape the relationship between social media marketing, government support, and enrolment intention. For example, variables such as perceived employability, trust, or parental influence may provide deeper insights into how and why students decide to pursue TVET. This would enhance the explanatory power of the model and allow institutions to design interventions that resonate more closely with students' motivations and concerns (Okolie et al., 2020). Longitudinal studies could also examine whether these factors sustain their influence over time or shift as labour market conditions evolve.

Another promising area is the integration of emerging technologies such as artificial intelligence (AI) and immersive media in marketing TVET programs. AI-driven personalization and virtual reality experiences could offer new ways to engage potential students by simulating career pathways or handson learning experiences (Dwivedi et al., 2023). Comparative studies across different cultural and economic contexts would also enrich the literature by showing how the effectiveness of these strategies varies globally. Such future research would contribute to the development of innovative, evidence-based practices for sustaining TVET's role in workforce development and lifelong learning. The findings also recommend a unified digital communication strategy involving ministries, polytechnics, and schools to reposition TVET as a career pathway of aspiration.

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