

Psychosocial Attachment As A Driver of Alumni Engagement In TVET Institutions In Malaysia

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Abstract

Introduction/Main Objectives: This study examines the role of alumni psychosocial attachment as a key driver of alumni engagement in Technical and Vocational Education and Training (TVET) institutions in Malaysia, while also evaluating the mediating role of institutional support.

Background Problems: Many higher education institutions, including TVET colleges, seek to foster lasting relationships with their graduates to build support networks and enhance institutional reputation, but often struggle to understand the key drivers that lead to sustained alumni engagement.

Novelty: The research introduces a focused investigation into psychosocial attachment—comprising dimensions of connectedness and gratitude—as a primary driver of alumni engagement within the TVET context, and uniquely tests institutional support as a mediating variable in this relationship.

Research Methods: A quantitative survey-based design was employed, involving 410 alumni from TVET institutions under the Department of Polytechnic and Community College Education (JPPKK). Data were analysed using descriptive statistics, Pearson correlation, and hierarchical multiple regression.

Finding/Results: The level of alumni psychosocial attachment (connectedness and gratitude) is high. A strong and statistically significant positive relationship exists between psychosocial attachment and alumni engagement. Hierarchical regression analysis shows that institutional support does not function as a mediating variable, as its contribution is minimal and statistically insignificant.

Conclusion: Psychosocial attachment is a critical direct determinant of alumni engagement, while institutional support does not play a mediating role. The findings emphasize the need for TVET institutions to strengthen psychosocial bonds with students early in their educational journey to foster lasting post-graduation engagement.

Keywords: Psychosocial Attachment; Alumni Engagement; TVET Institutions; Institutional Support



Introduction

Technical and Vocational Education and Training (TVET) is a crucial pillar for national human capital development, tasked with producing skilled graduates for the labour market. Its success extends beyond curriculum quality to include sustained alumni engagement post-graduation. Alumni are strategic assets, contributing through networking, mentoring, and enhancing institutional reputation. However, engagement within TVET remains underdeveloped and lacks systematic implementation, as highlighted by challenges in cultivating structured alumni cultures (TRACKTION Consortium, 2020).

Engagement is significantly influenced by psychosocial factors, primarily feelings of connectedness and gratitude towards the alma mater (Maulana et al., 2023). Positive learning experiences and lecturer relationships further strengthen this bond (Sium et al., 2023). Concurrently, institutional support—through career services, networking, and digital platforms—acts as a critical enabling mechanism (Gravyty Alumni Trends, 2024). Thus, engagement is driven by a combination of internal alumni attachment and external institutional systems.

Despite its recognised importance, alumni engagement in TVET institutions, particularly under Malaysia's Department of Polytechnic and Community College Education (JPPKK), remains low and inconsistent. Tracer studies indicate a significant gap in post-graduation involvement, attributed to weak emotional attachment, gratitude, and inadequate institutional support systems. This disengagement hinders the development of lifelong learning ecosystems and curriculum alignment with industry needs.

While prior research establishes the link between psychosocial attachment and engagement, and underscores the role of institutional support, a focused investigation within the JPPKK TVET context is needed. This study therefore aims to examine the relationship between alumni psychosocial attachment (connectedness and gratitude) and engagement, with institutional support as a mediating variable. The findings are intended to inform sustainable engagement strategies for TVET institutions.

Research Methods

Research Design

This study adopts a quantitative survey research design. This approach is appropriate for examining relationships between variables, conducting statistical analyses, and testing a mediation model. The survey method also allows for the systematic and objective collection of data from a large sample.

Population and Sample

The population of this study consists of alumni from TVET institutions under the Department of Polytechnic and Community College Education (JPPKK) in the southern zone of Malaysia, namely Johor, Melaka, and Negeri Sembilan. The total alumni population in the southern zone is 24,392 individuals who completed their studies between two and ten years before the study. This group was selected because they have undergone post-graduation experiences and possess the potential to re-engage with their institutions. The sample size was determined using the Krejcie and Morgan (1970) table based on the estimated alumni population. Stratified random sampling was employed, with strata based on fields of study such as technical,

vocational, services, and entrepreneurship. A total of 410 respondents completed the questionnaire fully and were included in the analysis.

Research Instrument

The research instrument was a structured questionnaire adapted from previously validated scales. The components of the instrument are as follows:

1. Alumni Connectedness – Adapted from the alumni connectedness scale (Maulana et al., 2023), covering emotional connection, institutional pride, and social identity.
2. Alumni Gratitude – Measured using a modified version of the Gratitude Questionnaire (GQ-6) tailored to the alumni context (McCullough et al., 2002; Cownie & Gallo, 2021), assessing alumni gratitude towards their educational experiences.
3. Institutional Support – Adapted from Gravyty Alumni Trends (2024) and De Guzman et al. (2024), encompassing communication support, digital platforms, access to career networks, and mentoring opportunities.
4. Alumni Engagement – Based on alumni engagement scales (Weerts et al., 2020; Civera et al., 2023), including both financial and non-financial engagement such as mentoring, industry networking, and institutional programmes.

All items were measured using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree).

Data Collection Procedures

The questionnaire was distributed online through WhatsApp, alumni portals, email, and official institutional social media platforms. The data collection period was conducted over approximately two months.

Data Analysis Methods

Data were analysed using SPSS software. The analyses included:

1. Descriptive analysis – Means and percentages were used to describe respondents' demographic profiles and data distribution.
2. Reliability analysis (Cronbach's Alpha) – To assess the internal consistency of the instrument.
3. Pearson correlation analysis – To identify the relationship between alumni psychosocial attachment and alumni engagement.
4. Hierarchical multiple regression analysis – To test the mediating role of institutional support in the relationship between alumni psychosocial attachment and alumni engagement.

Instrument Validity and Reliability

A pilot study was conducted involving 30 respondents. The findings indicated that the overall Cronbach's Alpha value for the instrument was 0.959. The Cronbach's Alpha values for each construct were 0.901 for alumni connectedness, 0.929 for alumni gratitude, and 0.960 for alumni engagement. These results demonstrate that the questionnaire items possess a very high level of reliability.

Data Analysis Methods

Mean analysis was used to determine the level of each research variable in addressing the first research objective. The interpretation of mean scores in this study was based on the following:

Table 1 Scale adapted from Chua (2012) and Mohammed and Alias (2007)

| No. | Mean Range | Interpretation |
|-----|-------------|----------------|
| 1. | 1.00 – 2.33 | Low |
| 2. | 2.34 – 3.66 | Moderate |
| 3. | 3.67 – 5.00 | High |

Source: Primary Data, 2025

Result

Analysis of Demographic Profile

This section reports the analysis of respondents' demographic characteristics, including gender, age, field of study, and frequency of participation in alumni activities. Table 2 presents the demographic findings obtained from the data analysis.

Table 2 Respondent Demographics

| No. | Item | Category | Percents |
|-----|---|--------------------------------|----------|
| 1. | Gender | Female | 51.7 |
| | | Male | 48.3 |
| 2. | Age | Below 25 years | 57.1 |
| | | 25 – 30 years | 26.6 |
| | | 31 – 35 years | 12.4 |
| | | 36 – 40 years | 5 |
| | | 41 years and above | 3.4 |
| 3. | Field of Study | Engineering | 14.9 |
| | | Information Technology | 3.7 |
| | | Hospitality | 2.2 |
| | | Commerce | 42 |
| | | Others | 37.3 |
| 4. | Frequency of involvement in alumni activities | Never | 66.3 |
| | | Rarely (1 – 2 times) | 28.8 |
| | | Often (3 – 5 times) | 3.4 |
| | | Very often (More than 5 times) | 1.5 |

Source: Primary Data, 2025

Level of Alumni Psychosocial Attachment (Connectedness and Gratitude) in TVET Institutions

Descriptive analysis indicates that the overall level of alumni psychosocial attachment, encompassing connectedness and gratitude, is high. Mean scores for connectedness items ranged from 3.70 to 4.18, while gratitude items recorded higher mean values ranging from 4.29 to 4.63. Consistently high mean scores above 4.00 reflect strong positive perceptions among alumni regarding their emotional and social relationships with TVET institutions.

Within the connectedness dimension, the highest mean scores were reported for items such as *"I feel valued for having been a student at this institution"* (mean = 4.18) and *"I frequently share positive experiences about this institution with others"* (mean = 4.15). These findings indicate that alumni remain connected to the institution and take pride in promoting their positive experiences. The lowest mean score (mean = 3.70) for the item *"I still feel a close relationship with the institution where I studied"* suggests that while a connection persists, the sense of closeness may vary depending on post-graduation experiences.

The gratitude dimension demonstrated very high mean scores across all items. For example, *"I feel that my experience at this institution has added value to my life"* recorded a mean of 4.63, while *"I am grateful for the opportunities provided"* and *"My learning experience has helped me achieve my current success"* recorded means of 4.49 and 4.54, respectively. These results indicate a profound sense of gratitude among alumni, particularly regarding learning experiences, academic support, and the overall value gained during their studies.

Overall, the findings suggest that TVET alumni possess a positive and stable level of psychosocial attachment, with gratitude emerging as the strongest dimension.

Relationship between Alumni Psychosocial Attachment and Alumni Engagement

Pearson correlation analysis was conducted to examine the relationship between alumni psychosocial attachment and alumni engagement using a two-tailed significance test. The strength of the relationship was interpreted based on Cohen (1988).

Table 3 Interpretation of r-Value for Analysis of the Relationship Between Alumni Psychosocial Attachment and Alumni Engagement

| r-Value | Interpretation Relationship |
|-------------|-----------------------------|
| 0.10 – 0.29 | Weak |
| 0.30 – 0.49 | Moderate |
| 0.50 – 0.69 | Medium Strong |
| 0.70 – 0.89 | Strong |
| 0.90 – 1.00 | Very Strong |

Source : Processed Data, 2025

The findings of the second objective analysis are as follows:

Table 4 Interpretation of Correlation Analysis

| Variable | r-Value | Sig tailed) | (2 | Interpretation |
|---|---------|----------------|----|--|
| Alumni psychosocial attachment vs alumni engagement | 0.686 | 0.001 | | Moderately strong positive relationship, significant |

Source : Processed Data, 2025

The results reveal a moderately strong and statistically significant positive relationship between alumni psychosocial attachment and alumni engagement ($r = .686$, $p < .001$). This finding indicates that higher levels of psychosocial attachment among alumni are associated with a greater likelihood of continued involvement in institutional activities and programmes.

Mediating Role of Institutional Support

Hierarchical multiple regression analysis was performed to evaluate the mediating role of institutional support in the relationship between alumni psychosocial attachment and alumni engagement. Model 1 demonstrated that psychosocial attachment had a strong and significant effect on alumni engagement ($\beta = .710$, $p < .001$), explaining 50.4% of the variance ($R^2 = .504$). When institutional support was introduced as a mediator in Model 2, the R^2 value increased marginally to .507; however, this change was not statistically significant ($\Delta R^2 = .003$, $p = .090$). Furthermore, institutional support was not a significant predictor of alumni engagement ($\beta = .083$, $p = .090$). These findings indicate that institutional support does not function as a mediating variable in the relationship between alumni psychosocial attachment and alumni engagement.

Table 5 Results using Hierarchical Multiple Regression

| Model | R^2 | ΔR^2 | Sig. |
|---------|-------|--------------|-------|
| Model 1 | .504 | - | <.001 |
| Model 2 | .507 | .003 | .090 |

Source : Processed Data, 2025

Based on the hierarchical multiple regression analysis, institutional support did not demonstrate a significant effect in predicting alumni engagement when included alongside alumni psychosocial attachment. The inclusion of the mediating variable increased the explained variance in alumni engagement by only 0.3%, which was not statistically significant. Furthermore, the regression coefficient for institutional support was not significant ($p = 0.090$), while alumni psychosocial attachment remained the primary and significant predictor of alumni engagement. Therefore, it can be concluded that institutional support does not function as a mediating variable in the relationship between alumni psychosocial attachment and alumni

engagement. The relationship between alumni psychosocial attachment and alumni engagement remains direct and is not influenced by institutional support.

Discussion

Level of Alumni Psychosocial Attachment

The first objective of this study was to identify the level of alumni psychosocial attachment, which comprises two main dimensions: connectedness and gratitude. Based on the descriptive analysis, the level of alumni psychosocial attachment was found to be high. This finding indicates that the majority of alumni maintain positive social relationships with TVET institutions and perceive that they were valued during their period of study. These results indirectly suggest that TVET institutions have successfully created a conducive learning environment, provided strong interpersonal support, and fostered a campus culture that encourages the development of meaningful social relationships among students, peers, and lecturers.

This finding is consistent with the study by Roslan et al. (2023) on Malaysian vocational college graduates, which reported that alumni who felt appreciated demonstrated higher levels of voluntary engagement in mentoring programmes compared to those who did not. In the context of the present study, psychosocial attachment and gratitude function as essential psychosocial needs that strengthen alumni–institution relationships. When alumni perceive that appreciation is conveyed through personalised communication and recognition of their achievements, their self-esteem and sense of affiliation with the institution are enhanced (Lee & Chen, 2024).

The findings are also aligned with prior studies demonstrating that educational institutions that provide supportive social environments are able to enhance student motivation, identity development, and willingness to maintain long-term relationships with their institutions after graduation. Thus, the high level of psychosocial attachment among TVET alumni reflects a strong relational foundation between institutions and their graduates. Previous research has shown that alumni who feel emotionally connected to their alma mater are more likely to participate in alumni activities and serve as informal ambassadors of the institution (Ma & Frempong, 2022). Hassan et al. (2021) further found that close relationships with lecturers and peers during the study period significantly predict feelings of connectedness among polytechnic alumni. Such connectedness is often sustained through both formal and informal alumni networks (Nor et al., 2020).

In addition, Thomas and Lamm (2020) highlighted that perceived gratitude is a primary driver of supportive behaviours. Gratitude may take various forms, including recognition of career achievements, involvement in institutional decision-making processes, or acknowledgement of alumni past experiences. Abdullah et al. (2023) found that alumni of TVET institutions who perceived that their institutions valued technical and vocational career pathways exhibited higher levels of brand loyalty. Collectively, these findings suggest that strong psychosocial attachment among TVET alumni provides a positive relational foundation between institutions and their graduates, underscoring the importance of prioritising students' social experiences to build effective alumni networks.

Relationship between Alumni Psychosocial Attachment and Alumni Engagement

The second objective of this study was to examine the relationship between alumni psychosocial attachment and alumni engagement. The results of the Pearson correlation analysis revealed a strong and statistically significant positive relationship between these variables ($r = .686$, $p < .001$). This finding confirms that alumni with higher levels of

psychosocial attachment, particularly in terms of connectedness and gratitude, are more likely to remain engaged with their institutions after graduation.

This finding is consistent with Erikson's psychosocial theory, which emphasises that social relationships and recognition play a crucial role in identity formation, psychosocial well-being, and individuals' commitment to their communities (McLeod, 2018). Conceptually, connectedness and gratitude enhance alumni motivation and sense of responsibility to contribute to institutional development, whether through participation in alumni programmes, sharing industry experiences with current students, or serving as mentors to new graduates.

This result is further supported by Weerts et al. (2020), who found that active alumni engagement reflects long-term institutional relationships and contributes to enhanced institutional reputation. Similarly, Baumann and Halpern (2024) reported that alumni's perceived value and satisfaction with alumni association activities significantly influence alumni loyalty. Despite these insights, empirical studies directly linking alumni psychosocial attachment to alumni engagement—particularly within the TVET context—remain limited. Therefore, the findings of this study offer a meaningful and novel contribution to the existing literature.

Moreover, the results highlight the need for TVET institutions to prioritise the creation of supportive social environments and continuous recognition while students are still enrolled. Strategies such as mentoring programmes, campus community engagement, and recognition of student achievements can strengthen psychosocial attachment and foster long-term alumni relationships. Through these efforts, institutions can enhance alumni engagement, strengthen institutional reputation, build robust professional networks, and improve graduate employability through sustained alumni support.

The Mediating Role of Institutional

The results indicate that institutional support does not function as a mediating variable in the relationship between alumni psychosocial attachment and alumni engagement. Although psychosocial attachment exerted a strong and significant effect on alumni engagement, institutional support did not demonstrate a significant effect ($p = .090$) and contributed only a minimal increase in explained variance ($\Delta R^2 = .003$). These findings suggest that alumni engagement is more strongly influenced by alumni's internal attachment to the institution rather than by the forms of institutional support provided.

Alumni remain engaged primarily due to their emotional bonds and personal experiences with the institution, rather than solely because of institutional support mechanisms. Overall, the relationship between alumni psychosocial attachment and alumni engagement is direct and is not influenced by institutional support as a mediating factor.

This result indicates that alumni engagement is largely shaped by internal factors, including emotional relationships, learning experiences, and feelings of appreciation developed during the study period, rather than by formal support structures or alumni programmes offered after graduation. Although prior literature suggests that institutions with dedicated alumni management and sufficient resource allocation are more successful in building personalised and responsive relationships (Smith & Jones, 2023), the findings of this study indicate that alumni who develop strong psychosocial attachment during their studies are more likely to remain engaged after graduation.

The implications of these findings suggest that institutions should focus not only on providing formal support and alumni programmes but, more importantly, on nurturing strong

psychosocial relationships while students are still enrolled. Strategies such as recognising student achievements, offering opportunities for social and campus community involvement, and fostering emotional bonds with students can strengthen internal attachment. Consequently, alumni are more likely to engage actively after graduation, not merely due to institutional benefits or support. These findings also address a notable gap in the literature, as few empirical studies have explicitly examined the comparative influence of alumni psychosocial attachment and institutional support on alumni engagement. Therefore, this study contributes new insights into the factors that drive long-term alumni engagement, particularly within the TVET context.

Conclusion

This study examined the relationship between alumni psychosocial attachment and alumni engagement within Technical and Vocational Education and Training (TVET) institutions in Malaysia, as well as the mediating role of institutional support. The findings indicate that alumni exhibit a high level of psychosocial attachment, particularly in the dimension of gratitude towards their learning experiences. Statistical analysis revealed a significant positive relationship between psychosocial attachment and alumni engagement, with psychosocial attachment emerging as the primary predictor. However, institutional support did not demonstrate a significant mediating effect in this relationship. These findings imply that TVET institutions should prioritise strengthening psychosocial relationships throughout the study period, as emotional bonds and internalised appreciation are more effective in fostering alumni engagement than formal institutional support provided after graduation.

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