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Critical Analysis Of Productivity And Job Satisfaction Of Prospective Vocational Education Graduates In The Hospitality Industry

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Abstract

This research is motivated by the large number of vocational education graduates who face challenges in meeting the skills demands in the hospitality industry. The purpose of this study is to identify factors that influence the productivity and performance of prospective vocational education graduates in the hospitality industry. The research methods used are quantitative and qualitative. Quantitative data were analyzed using multiple linear regression, while qualitative data were obtained through online interviews. The results showed that transferability skills, self-efficacy, and training have a significant positive effect on graduate performance. Transferability skills such as communication and teamwork are essential for adapting to a dynamic work environment. High self-efficacy encourages graduates to be more confident and motivated in completing tasks. In conclusion, investment in the development of transferability skills, increasing self-efficacy, and providing relevant training are essential to improving the productivity and performance of vocational education graduates in the hospitality industry. This study has practical implications for the development of vocational education curricula that are more relevant to industry needs and more effective human resource management strategies in the hospitality sector.

Keywords: *Transferability skills, self-efficacy, training, hospitality.*

INTRODUCTION

Research on the productivity and performance of vocational education graduates in the hospitality industry shows that many graduates still face challenges in meeting the skills demands required by the industry(Mohammed et al., 2025). Although they have technical knowledge, deficiencies in soft skills such as communication and teamwork often hinder their performance. In addition, the moderate level of graduate performance among employees indicates the need to improve working conditions and promotion opportunities. Therefore, closer collaboration between educational institutions and the hospitality industry

is essential to prepare graduates who are better prepared to face the challenges of the workplace(Al-Romeedy & Alharethi, 2025).

The high level of dissatisfaction experienced by graduates is related to salary and working conditions. Many graduates feel that the rewards they receive are not commensurate with the workload they have to bear, which can reduce motivation and productivity(Duman et al., 2020). In addition, the lack of support from management in career development is also an inhibiting factor, where many employees feel trapped in positions that do not offer development opportunities(Kelly et al., 2025). This shows that although vocational education provides basic skills, external factors such as the work environment and company policies still play an important role in determining the career success of graduates(Al-Hattami & Almaqtari, 2023).

Several studies have shown that graduates from other formal education programs often have higher levels of productivity(Marnewick, 2023). In addition, it has been argued that direct work experience in the industry, even if not through vocational education, can provide more relevant practical skills and increase job satisfaction(Zeng et al., 2022). Other studies have also indicated that graduates with a university education background tend to get better positions and higher salaries, thereby increasing their job satisfaction. Thus, there is a view that vocational education may not always be the best choice to prepare individuals for the ever-changing demands of the hospitality industry(Ana, 2020).

Several pieces of information are not yet fully understood. First, there is insufficient data on how differences in geographic location affect graduate satisfaction and productivity, given that labor market conditions can vary significantly across regions(Asgård, 2021). In addition, the impact of previous work experience before entering vocational education has also not been widely studied, even though such experience can affect performance and job satisfaction. Finally, the relationship between the type of specialization in the hospitality sector and graduate performance has also not been fully explored, making it difficult to determine which programs are most effective in preparing graduates to face industry challenges(Kaushal & Srivastava, 2021).

What is lacking in research on the analysis of the productivity and performance of vocational education graduates in the hospitality industry is a longitudinal study that tracks the career development of graduates over time(Mbambo & du Plessis, 2025). Currently, no research comprehensively evaluates how work experience and ongoing training affect their performance and productivity in the long term. Furthermore, there has been no systematic effort to identify specific factors that can improve graduates' soft skills, which are critical to their success in the industry. Finally, research comparing the outcomes of vocational education graduates with graduates of other formal education programs in the hospitality context is also very limited, hampering a more complete understanding of the effectiveness of various educational pathways.

The novelty of this study lies in the holistic approach used to analyze the relationship between productivity and performance of vocational education graduates in the hospitality industry. This study not only assesses the technical skills acquired during education but also explores the role of soft skills and managerial support in enhancing graduates' work experience. In addition, this study integrates perspectives from various stakeholders, including employers and graduates, to obtain a more comprehensive picture of the challenges and opportunities faced in the field. Thus, the results of this study are expected to provide more relevant practical recommendations for the development of vocational education curricula and human resource management strategies in the hospitality sector.

This study focuses on identifying factors that influence the productivity and performance of vocational education graduates in the hospitality industry. This study will explore the relationship between skills acquired during education, both technical and soft skills including Transferability skills, Self-Efficacy, and Training, with work performance in the field, namely Graduate Performance. By analyzing data from various sources, this study can provide deeper insights and predictions on how to prepare graduates to be better prepared to face challenges in the hospitality industry.

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RESEARCH METHODS

The steps of the research procedure refer to quantitative and qualitative research methods commonly used in studies in the hospitality field. Quantitative research methods are applied to analyze the relationship between variables, such as productivity and graduate performance, using a questionnaire instrument that has been tested for validity and reliability. Qualitative research methods are used for exploration or description based on online interviews, which allow researchers to systematically and structurally dig up data from respondents. In addition, data analysis uses multiple linear regression statistical techniques(Aryasih et al., 2023).

The steps of the research procedure can be explained as follows: (1) Problem Identification: The first step is to formulate and define the problem to be researched, which must be supported by empirical facts and relevant literature reviews. Based on the background that has been described, the independent variables Transferability skills (X1), Self-Eficacy (X2), and Training (X3) can be defined while the dependent variable is Graduate Performance (Y1), as in Figure 1.

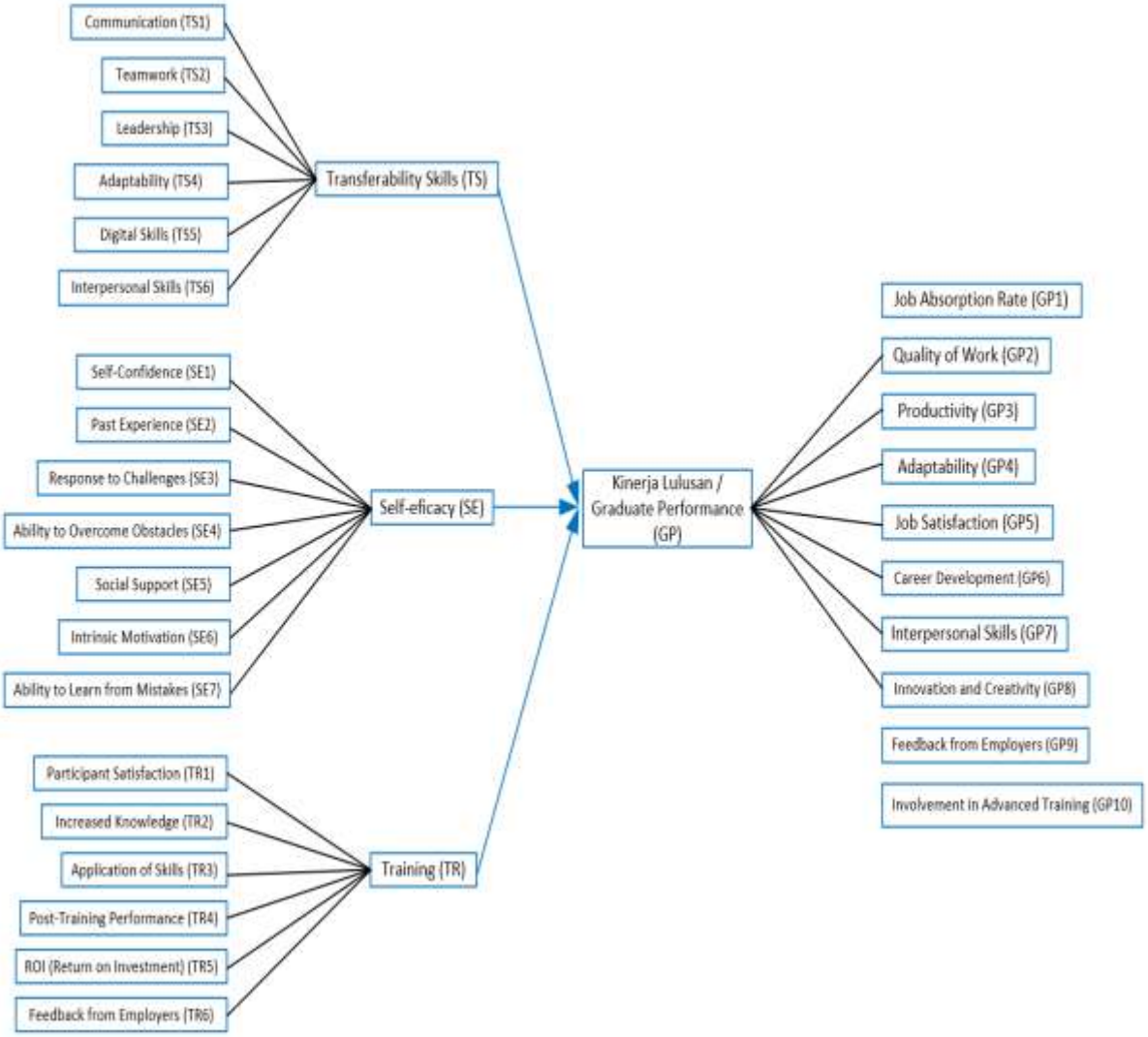

Figure 1. Research variables

Second, Formulating Hypotheses: After the problem is formulated, the researcher formulates relevant hypotheses based on existing theories and previous research to provide initial assumptions to be tested. Based on the variables mentioned, namely transferability skills, self-efficacy, and training, the following are initial hypotheses that can be developed regarding their influence on graduate performance:

H1: There is a significant positive influence between transferability skills and graduate performance.
H2: There is a significant positive influence between self-efficacy and graduate performance.
H3: There is a significant positive influence between training and graduate performance.

Third, Preparation of Research Design: The researcher then prepares a specific and detailed research design, including data collection methods, analysis techniques, and selection of research subjects. The research design that can be used is an exploratory design with a multiple linear regression approach to analyze the relationship between the variables Transferability skills, self-efficacy, and training on graduate performance. Data collection can be done through questionnaires distributed to 250 respondents such as hotel students, graduates, and employees in various hotels, as well as interviews to obtain more in-depth information. By using purposive sampling techniques, researchers can select relevant respondents to ensure that the data obtained is accurate and representative of the population studied. The data obtained from the instrument is then analyzed using the multiple linear regression method to determine the relationship between these variables.

Table 1. Indicator Constructs

No	Constructs	Indicators	Items	Adapted from
1	Transferability Skills	Communication (TS1)	I can communicate well with everyone	(Yeo & O'donoghue, 2023), (Lee & Portillo, 2022), (Wibawa et al., 2024)
			I control myself to talk to others.	
		Teamwork (TS2)	I can work with everyone	
		Leadership (TS3)	I can invite other people to do things that have been planned.	
		Adaptability (TS4)	I can adapt to new environments	
		Digital Skills (TS5)	I can socialize on social media like Instagram, Facebook, etc.	
			I can design brochures.	
		Interpersonal Skills (TS6)	I can negotiate with others	
2	Self Efficacy	Self Confidence (SE1)	I am confident when speaking in front of a crowd	(Duman et al., 2020), (Zeng et al., 2022)

		Past Experience (SE2)	I once made a phenomenal work when I was in school	
		Response to Challenges (SE3)	I like new challenges in the culinary field	
		Ability to Overcome Obstacles (SE4)	I can solve problems in the culinary field	
		Social Support (SE5)	I have friends around me who always support my work.	
		Intrinsic Motivation (SE6)	I can express my abilities	
		Ability to Learn from Mistakes (SE7)	I will not repeat past mistakes	
3	Training	Participant Satisfaction (TR1)	I am satisfied with the Industrial Practice/internship that I have participated in.	(Siebert et al., 2021), (Can et al., 2022)
		Increased Knowledge (TR2)	I feel my knowledge has increased after attending the training.	
		Application of Skills (TR3)	I can apply the skills acquired from the training	
		Post-Training Performance (TR4)	I can demonstrate the skills resulting from training	
		ROI (Return on Investment) (TR5)	I can manage the costs of the training I attended.	
		Feedback from Employers (TR6)	I feel happy to be praised for the training skills I have followed.	
4	Graduate Performance	Job Absorption Rate (GP1)	I can get a job in the culinary field	(Baldera et al., 2025),
		Quality of Work (GP2)	I can maintain the quality of work in the workplace	
		Productivity (GP3)	I can perform optimal productivity	

		Adaptability (GP4)	I can adapt to the new work environment in the culinary field.	
		Job Satisfaction (GP5)	I am satisfied with the culinary field	
		Career Development (GP6)	I can develop my career in the culinary field	
		Interpersonal Skills (GP7)	I can demonstrate skills resulting from my studies.	
		Innovation and Creativity (GP8)	I can innovate and be creative	
		Feedback from Employers (GP9)	I need to get appreciation from my boss for my work success.	
		Involvement in Advanced Training (GP10)	I am actively involved in training to improve the quality of skills	

Table 1 above shows the statement items of the development results of each variable indicator. Transferability skills indicators refer to skills that can be applied in various situations and jobs. The following are several types of transferability skills indicators(Wibawa et al., 2025): (1) Communication; (2) Teamwork; (3) Leadership; (4) Adaptability; (5) Digital Skills; and (6) Interpersonal Skills. These indicators are important in the world of work because they help individuals adapt to different roles and work environments.

Self-efficacy indicators refer to an individual's belief in their ability to complete a task or face a challenge. Here are some indicators that can be used to measure self-efficacy(Zeng et al., 2022): (1) Self-Confidence; (2) Past Experience; (3) Response to Challenges; (4) Ability to Overcome Obstacles; (5) Social Support; (6) Intrinsic Motivation; (7) Ability to Learn from Mistakes.

Training indicators are measures used to evaluate the effectiveness and success of training programs. Here are some indicators that can be used to measure training: (1) Participant Satisfaction; (2) Increased Knowledge; (3) Application of Skills: The ability of participants to apply new skills acquired from training in their daily work; (4) Post-Training Performance: Evaluation of participant performance after training, including productivity and work quality; (5) ROI (Return on Investment): Analysis of the costs and benefits of training programs, including their impact on organizational productivity and efficiency; (6) Feedback from Employers: Superiors' assessment of changes in participant performance and work behavior after attending training.

Graduate performance indicators are measures used to assess how well graduates can meet expectations in the workplace, especially in the context of vocational education. The following are some graduate performance indicators that can be used: (1) Job Absorption Rate; (2) Quality of Work; (3) Productivity; (4) Adaptability; (5) Job Satisfaction; (6) Career Development; (7) Interpersonal Skills; (8) Innovation and Creativity; (9) Feedback from Employers; (10) Involvement in Advanced Training.

Fourth, Research Instrument Development: At this stage, researchers create measurement tools such as questionnaires or interview guidelines, and conduct validity and reliability tests to ensure that the instrument can measure research variables accurately; (5) Data Collection: Data is collected using prepared instruments, with appropriate sampling techniques to ensure data representativeness; (6) Data Analysis: After the data is collected, researchers analyze the data using relevant statistical methods to test hypotheses and draw conclusions from the results of the analysis; (7) Drawing Conclusions and Reports: The final step is to draw conclusions based on the results of the data analysis and write a research report that includes findings, discussions, and recommendations for further research.

RESULTS AND DISCUSSION

Based on the hypothesis that has been determined, based on the analysis it can be explained as follows:

H1: There is a significant positive influence between transferability skills and graduate performance.

The proposed hypothesis, namely "There is a significant positive effect between transferability skills and graduate performance," indicates that the ability of graduates to transfer their skills from one context to another has the potential to improve their performance in the workplace. To support this hypothesis, it is important to identify indicators that can be used to measure transferability skills and how these indicators relate to graduate performance. Transferability skills are skills that can be applied across situations and jobs. Here are some key indicators:
Transferability skills indicators refer to skills that can be applied in various situations and jobs. Here are some types of transferability skills indicators: (1) Communication: The capacity to communicate ideas clearly both in writing and when speaking; (2) Teamwork: Skills in working together with others to achieve common goals; (3) Leadership: The ability to lead and motivate others in a group or team; (4) Adaptability: The ability to adapt to change and new environments quickly; (5) Digital Skills: The ability to use technology and digital tools in everyday work; (6) Interpersonal Skills: The ability to interact with others effectively, including empathy and negotiation. These indicators are important in the workplace because they help individuals adapt to different roles and work environments.

Graduate performance indicators are measures used to assess how well graduates can meet expectations in the workplace, especially in the context of vocational education. The following are some graduate performance indicators that can be used: (1) Job Absorption Rate: The percentage of graduates who successfully get jobs within a certain time after graduation; (2) Quality of Work: An assessment of the quality of work done by graduates, including timeliness, accuracy, and customer satisfaction; (3) Productivity: The amount of output produced by graduates in a certain time period, often measured against industry standards; (4) Adaptability: How quickly and effectively graduates can adapt to new work environments and changes in tasks or technology; (5) Job Satisfaction: The degree to which graduates are satisfied with their jobs, which can include aspects such as work atmosphere, relationships with coworkers, and opportunities for development; (6) Career Development: The frequency of promotions or increased responsibilities received by graduates in their careers after graduation; (7) Interpersonal Skills: Graduates' ability to communicate and collaborate with others in a work environment; (8) Innovation and Creativity: Graduates' ability to generate new ideas or improve existing work processes; (9) Feedback from Employers: Assessments from superiors regarding graduates' performance, including aspects such as initiative, leadership, and problem-solving skills; (10) Involvement in Advanced Training: Graduates' participation in training or professional development programs after graduation to improve their skills.

The Relationship Between Transferability Skills and Graduate Performance

The significant positive influence between transferability skills and graduate performance can be seen from several aspects:

- Improved Communication can facilitate better interactions in the workplace, thereby increasing collaboration and productivity.
- Teamwork skills enable graduates to work more effectively in groups, producing better results.
- Leadership allows graduates to take initiative and influence their colleagues, which can have a positive impact on team projects.
- Adaptability helps graduates adjust to rapid changes in the work environment, increasing their resilience to stress.
- Digital Skills are becoming increasingly important in today's technological era, enabling graduates to remain relevant in the job market.
- Interpersonal skills support good working relationships, which are essential for career advancement.

Thus, the development of transferability skills during vocational education is very important to prepare graduates to be competitive and successful in the world of work. These indicators will help in further research on the relationship between these skills and graduate performance.

H2: There is a significant positive influence between self-efficacy and graduate performance.

Next, self-efficacy indicators refer to an individual's belief in their ability to complete a task or face a challenge. Here are some indicators that can be used to measure self-efficacy: (1) Self-Confidence: The level of individual confidence in their ability to succeed in a particular task; (2) Past Experience: Reflection on previous experiences that indicate success or failure in completing similar tasks; (3) Response to Challenges: How individuals respond to difficult situations, whether they feel capable of overcoming challenges or not; (4) Ability to Overcome Obstacles: Individual confidence in their ability to overcome obstacles that may arise when completing a task; (5) Social Support: Individual perceptions of support from others, such as friends, family, or colleagues, which can influence their beliefs; (6) Intrinsic Motivation: The level of motivation that comes from within the individual to perform a task, regardless of external rewards; (7) Ability to Learn from Mistakes: Belief that failure is part of the learning process and does not reduce their abilities in the future.

H3: There is a significant positive influence between training and graduate performance.

Training indicators are measures used to evaluate the effectiveness and success of training programs. Here are some indicators that can be used to measure training: (1) Participant Satisfaction: Participants' assessment of the material, instructor, and overall training experience, usually measured through a questionnaire after training; (2) Increased Knowledge: Changes in participants' knowledge levels before and after training, often measured by tests or evaluations; (3) Application of Skills: Participants' ability to apply new skills acquired from training in their daily work; (4) Post-Training Performance: Evaluation of participants' performance after training, including productivity and work quality; (5) ROI (Return on Investment): Analysis of the costs and benefits of a training program, including its impact on organizational productivity and efficiency; (6) Feedback from Employers: Superiors' assessment of changes in participants' work performance and behavior after attending training.

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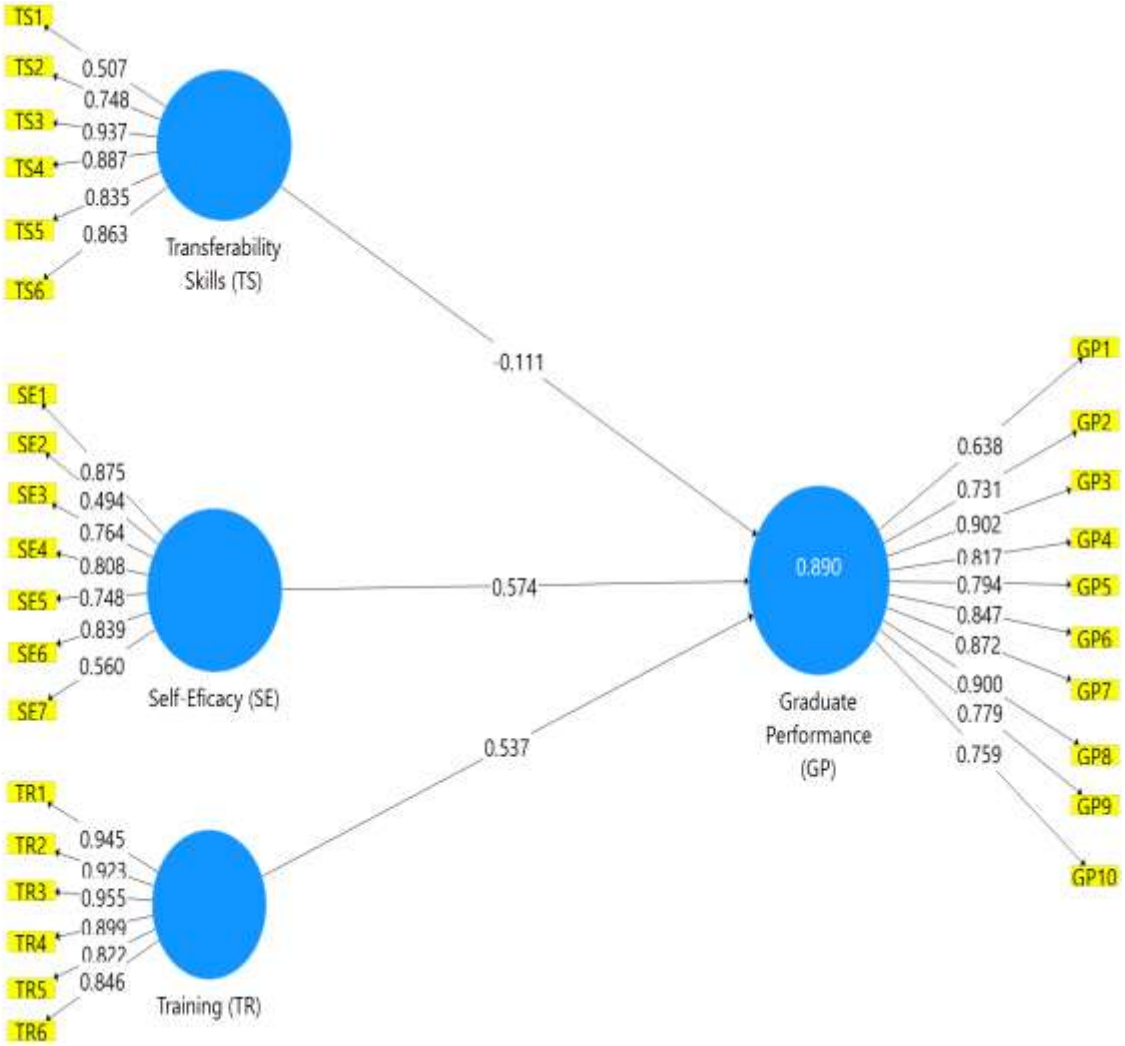

Figure 2. Results of the relationship between variables

An indicator coefficient called Cronbach's alpha is utilized in Smartpls to assess the internal consistency or reliability of an indicator used to characterize a construct or latent variable in partial path analysis. Higher values of the Cronbach's alpha coefficient, which typically runs from 0 to 1, denote greater dependability. To determine if the indicators used to quantify the construct are sufficiently consistent, Cronbach's alpha is employed. When the alpha value is higher, it means that the indicators measure the same construct more consistently. One popular technique in quantitative analysis for assessing a questionnaire's or measurement tool's reliability is Cronbach's alpha(Joseph F. Hair et al., 2019)**.** The Cronbach's Alpha value itself is examined to choose the test. The variable can be used in the research being conducted if the value is greater than 0.7, which indicates that it satisfies the test reliability standards(Garson, 2016). Table 3 below displays each variable's Cronbach's Alpha value for this investigation:

Table 3. Cronbach's Alpha Coefficient

Construction	Cronbach's Alpha

Graduate Performance (GP)	0.939
Self-Efficacy (SE)	0.854
Training (TR)	0.952
Transferability Skills (TS)	0.889

All of the variables given in Table 3 above have values greater than 0.7. As a result, every variable included in this study exhibits a constant degree of consistency across all measurements. Therefore, it is not necessary to eliminate any indications from the research process; all indicators can be included in the study.

The degree to which indicators that quantify a variable are significantly correlated and connected is known as composite dependability(Garson, 2016). To make decisions about Composite Reliability, one must determine if a variable has a Composite Reliability value below 0.7. If so, this suggests that the variable has to be improved because there is little correlation between its indications. In certain situations, it could be required to reevaluate how the variable is used in the study model(Hair et al., 2017).

Table 4. Composite Reliability Coefficient

Construction	Composite Reliability
Graduate Performance (GP)	0.949
Self-Efficacy (SE)	0.891
Training (TR)	0.962
Transferability Skills (TS)	0.916

Every variable utilized in this study satisfies the requirements, as shown by the Composite Reliability value in Table 4 above, which shows values above 0.700. Therefore, it is not necessary to eliminate any indications from the research process; all indicators can be included in the study.

In SMART PLS, the Average Variance Extracted (AVE) statistic quantifies how much of the variance in the indicators used to measure a construct can be accounted for by the construct itself. The latent variable's contribution to the variance of the indicators that measure it is expressed by AVE(JF Hair et al., 2018). When the AVE value is high, it means that the majority of the variance in the latent variables can be explained by the observable variables that measure them. Consequently, the latent variables' validity is regarded as strong. It may be necessary to challenge the construct validity if the AVE value is low, as this suggests that the observation variables may not be effective in representing the hidden variables(Garson, 2016). If the AVE value is more than 0.5, the variable is regarded as not having dependability issues when making decisions based on AVE. As a result, the variable can be used in the research setting.

Table 5. Average Variance Extracted (AVE) Coefficient

Construction	Average Variance Extracted (AVE)
Graduate Performance (GP)	0.652
Self-Efficacy (SE)	0.546
Training (TR)	0.809

Transferability Skills (TS)	0.653

Every variable that is currently in use has an Average Variance Extracted value greater than 0.5, as seen in Table 5 above. As a result, every variable in this study can reflect the latent variables it represents. Therefore, it is not necessary to eliminate any indications from the research process; all indicators can be included in the study.

In partial path analysis, outer loading is the coefficient that quantifies how well the measurement indicator (observation variable) captures the associated latent variable (construct). This characterizes how strongly the indicator and the measured latent variable are related. The regression coefficient between the indicator and the latent variable is used to compute outer loading, and its value falls between 0 and 1. An indication that contributes more to measuring the latent variable has a higher value. If the outer loading value is more than 0.5, it is regarded as good. The research model framework must then be cleared of indications with an outer loading value of less than 0.5(Hair et al., 2017). Table 6 below displays the outer loading value for each indicator used in this investigation:

Table 6. Outer Loading

Indicators	Outer Loading	Information
GP1	0.638	Valid
GP2	0.731	Valid
GP3	0.902	Valid
GP4	0.817	Valid
GP5	0.794	Valid
GP6	0.847	Valid
GP7	0.872	Valid
GP8	0.900	Valid
GP9	0.779	Valid
GP10	0.759	Valid
SE1	0.875	Valid
SE2	0.494	Invalid
SE3	0.764	Valid
SE4	0.808	Valid
SE5	0.748	Valid
SE6	0.839	Valid
SE7	0.560	Valid
TR1	0.945	Valid
TR2	0.923	Valid
TR3	0.955	Valid
TR4	0.899	Valid
TR5	0.822	Valid
TR6	0.846	Valid
TS1	0.507	Valid

TS2	0.748	Valid
TS3	0.937	Valid
TS4	0.887	Valid
TS5	0.835	Valid
TS6	0.863	Valid

Table 6 indicates that each indicator's outer loading value is more than 0.5. Additionally, only one indicator—the SE2 indicator—falls into the category below 0.5. As a result, the study can incorporate all reliable indications and those that are not valid are not included in the further research process.

Table 7. Hypothesis test results

Constructs	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	Hypothesis	Information
Transferability Skills (TS) -> Graduate Performance (GP)	-0.111	2.012	0.045	H1	Accepted
Self-Efficacy (SE) -> Graduate Performance (GP)	0.574	10,018	0.000	H2	Accepted
Training (TR) -> Graduate Performance (GP)	0.537	12.139	0.000	H3	Accepted

Based on Table 7 above, it can be interpreted as follows:

1. The original sample value for the influence of Transferability Skills (TS) on predicting Graduate Performance was -0.111; the T statistic was 2.012 > 1.96, and the P values were 0.045 < 0.05. Thus, H1 is approved since it can be inferred that Transferability Skills (TS) significantly improve Graduate Performance.
2. Self-efficacy (SE) has a 0.574 original sample value, a T statistic of 10.018 > 1.96, and a P value of 0.000 < 0.05 when it comes to predicting graduate performance. Thus, H2 is acceptable since it can be inferred that Self-efficacy (SE) significantly improves Graduate Performance.
3. The original sample result for the effect of training (TR) on predicting graduate performance was 0.537, with a T statistic of 12.139 > 1.96 and P values of 0.000 < 0.05. Thus, H3 is approved since it can be inferred that Training (TR) significantly improves Graduate Performance.

CONCLUSION

This study concludes that investment in the development of transferable skills, improvement, self-efficacy, and the provision of relevant training is essential to improve the productivity and performance of prospective vocational education graduates in the hospitality industry. Technical skills alone are not enough; graduates also need to be equipped with soft skills such as communication, teamwork, and adaptability to succeed in a dynamic work environment. The implications of this study are: (1) the importance of close collaboration between vocational education institutions and the hospitality industry to ensure that the curriculum is relevant and in line with the needs of the labor market(El Hajal & Losekoot, 2024); (2) the need for increased support from company management for graduate career development, including the provision of adequate working conditions and promotion opportunities(Alhamdi & Al-Kahtani, 2025); and (3) the need for further

longitudinal studies to track graduate career development over time and evaluate the effectiveness of various educational pathways in preparing individuals for the evolving demands of the hospitality industry(Farina et al., 2025).

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