

Assessing the Effectiveness of Hospitality Education in Developing Student Competencies for Real-World Front Office Challenges at Uitm Cawangan Pulau Pinang

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ABSTRACT

Despite being formally educated, many hospitality graduates struggle to transition into real-world front office positions. This employability gap is mostly due to a lack of an education framework that efficiently combines technical competencies with behavioral skills. This research focuses on five core components: knowledge, skills, self-concept, personality traits, motivation aligned with McClelland's Competency Model. A quantitative survey was conducted with 191 hospitality students from UiTM Cawangan Pulau Pinang, and data was processed using descriptive statistics, Pearson correlation, and multiple regression with SPSS. Findings revealed that all five components had positive relationships with student competencies, but only knowledge and skills were significant predictors of readiness for front office work. These findings strengthen the applicability of McClelland's model and highlight the need for more comprehensive practical training in the form of structured internships and industry partnerships. Limitations to this study were the singular focus on one institution and a cross-sectional design. More diverse sampling and longitudinal designs are encouraged for future research.

Keywords: Student Competencies, Front Office Training, McClelland's Competency Model, Hospitality Education, Experiential Learning

INTRODUCTION

In the world of hospitality, there is only one chance to make a good first impression, and that's where the front office team plays a vital role. As the building's first and last point of contact, the front desk staff are essential in shaping guests' initial impressions and ensuring that the final moments of their stay leave lasting memories. To make that happen, they need more than a technical education. "Soft skills such as communication, adaptability, emotional intelligence and problem-solving have equal importance" (Ikhsan et al., 2025; Juardi and Sari, 2025; Ikhsan et al., 2025; Jawabreh et al., 2022). The increasing customer procession and the use of digital resources on the organization's operational activities, the need of capable and well-prepared front office professionals is also increasing (Danurdara & Paramitha, 2022).

Despite having received formal education and training, many Malaysian hospitality graduates still find it difficult to adjust to the demands of front office settings (Capua, 2021). This discrepancy is partly caused by an over-reliance on conventional hospitality curricula, which place very little emphasis on behavioural competencies and digital adaptability and a lot of emphasis on operational procedures (Abdulrab & Hezam, 2024; Ko & Lu, 2022). Despite their intended purpose of bridging the gap between academia and industry, many internships lack formal mentorship and do not offer worthwhile opportunities for experiential learning (Trinidad, 2020; Windawaty, 2023). Furthermore, technological readiness, an area that is frequently disregarded in current educational models,

is even more necessary given the quick digital transformation of front office operations (Danurdara & Paramitha, 2022).

Notwithstanding the recognised importance of holistic development, empirical research in Malaysia that quantitatively examines the relationship between student attributes—such as knowledge, skills, motivation, self-concept, and personality traits—and job readiness in hospitality contexts remains scarce (Ng et al., 2023). This gap is further underscored by the limited utilisation of established competency frameworks, such as McClelland's Competency Model, in Malaysian hospitality education. By integrating underlying behavioural traits with observable competencies, this model provides a robust framework for evaluating and enhancing student readiness (Boyatzis & Dhar, 2021; Spencer & Spencer, 1993).

In order to close this gap, this study uses McClelland's Competency Model to assess how five key variables such as knowledge, skills, self-concept, personality traits, and motivation relate to student competencies among UiTM Cawangan Pulau Pinang hospitality students who have received front desk training. The study provides useful insights into how these factors together affect student readiness by employing a quantitative methodology. The results are intended to help educators, curriculum designers, and industry stakeholders better match hospitality education to practical needs, creating graduates who are more capable, self-assured, and prepared for the workforce.

LITERATURE REVIEW

Front Office Training and Industry Expectations

To educate students for real-world challenges, front office training in the hotel industry must strike a balance between theoretical understanding and practical application (Capua, 2021). Although they have been employed for a long time, traditional training techniques like roleplaying and classroom-based instruction frequently fall short of capturing the complexity of guest interactions (Boon et al., 2021). A more successful strategy that emphasizes abilities like communication, problem-solving, and adaptability is competency-based learning (Capua, 2021). Furthermore, students gain practical experience with front office operations through the incorporation of experiential learning, which includes internships and simulation-based training, enhancing their capacity to manage dynamic work situations (Trinidad, 2020).

Front desk employees with both technological know-how and excellent people skills are sought after by employers in the hotel sector. Soft talents that improve customer satisfaction and service performance, like emotional intelligence, cultural sensitivity, and teamwork, are highly prized (Jawabreh et al., 2022). Nonetheless, issues still exist, such as the shortcomings of conventional role-playing techniques and the discrepancy between industrial demands and academic training (Lingadkar & Sankaranarayanan, 2023). Students must become technologically proficient due to the front office activities' rapid digital transition (Danurdara & Paramitha, 2022). Industry-academic collaborations and ongoing competency evaluations are crucial for closing these gaps and guaranteeing that students gain the abilities needed for future preparedness and professional success (Ng et al., 2023).

Student Competencies in the Hospitality Industry

Since front desk positions serve as the initial point of contact for guests, the hospitality sector requires a blend of behavioral and technical skills. While behavioral competencies emphasize communication, flexibility, and customer relationship management, technical competencies include reservation systems, billing, and solving issues (Capua, 2021). Together, these skills improve guest happiness and service effectiveness.

While behavioral competencies necessitate exposure to the sector and experiential learning, technical competencies are obtained through structured training (Peng et al., 2024). However, because theoretical knowledge alone does not equip them for the complexities of front-office operations, many hospitality graduates

lack practical application skills (Trinidad, 2020). Innovative training strategies that close the knowledge gap between hospitality education and industry standards are required to close these skill gaps.

Learning through simulation has become a more successful substitute for conventional training techniques. Research shows that while simulation models improve engagement and learning results, role-playing lacks realism (Boon et al., 2021). Furthermore, internships offer crucial industrial exposure; nonetheless, issues with inadequate practical experience and unfavorable opinions of front-office positions persist (Peng et al., 2024).

To close the knowledge gap between academic training and the demands of the real world of hospitality, a competency-driven curriculum that incorporates simulation-based learning, organized internships, and behavioral skill development is essential. Graduate employability and workforce preparedness might be further improved by fortifying industry-academic partnerships (Trinidad, 2020).

McClelland's Competency Model in Hospitality Education

A well-known paradigm that emphasizes determining and fostering the competences necessary for job success is McClelland's Competency Model (McClelland, 1973; Spencer & Spencer, 1993). Knowledge, skills, self-concept, traits, and motivation are the five main aspects into which the model divides competences (Boyatzis & Dhar, 2021). McClelland's method is especially pertinent to competency-based education since it emphasizes observable behaviors that drive workplace effectiveness, in contrast to traditional intelligence-based evaluation models (Dhar & Dhar, 2020).

By placing a strong emphasis on technical and behavioral competencies, this model helps training programs in hospitality education correspond with industry requirements (Liu & Boyatzis, 2021). It guarantees that students get operational knowledge and essential soft skills like decision-making, communication, and flexibility all of which are crucial in front desk positions (Boyatzis, 2020). Institutions can improve student readiness and employability by incorporating McClelland's approach into front-office training, which will close the gap between academic instruction and practical demands.

Additionally, according to Hatta et al. (2020), McClelland's Competency Model is a useful instrument for assessing student competencies in the hospitality sector. Teachers can more accurately gauge students' preparedness for front-office positions by evaluating them on demonstrated behaviors rather than abstract intellectual metrics (Dhar & Dhar, 2020). This model makes it possible to conduct a systematic evaluation of both technical and soft skills, guaranteeing that graduates in the hospitality industry have the abilities necessary to succeed in demanding, customer-focused settings (Liu & Boyatzis, 2021). Competency-based education is essential to this strategy because it links academic knowledge with real-world business needs, enabling students to acquire critical employability skills in a methodical way (Açıkgöz & Babadoğan, 2021). According to research, in order to close the gaps between professional skills and academic learning, competence in higher education needs to be properly defined and used (Holmes et al., 2021). In the end, integrating McClelland's framework into hospitality education produces a workforce that is well-rounded and prepared to handle the changing needs of the industry.

Hypothesis Development

Knowledge and Student Competencies

Knowledge, which encompasses factual, conceptual, procedural, and metacognitive understanding, is what helps people perform tasks effectively (Utami & Raharjo, 2020). The Iceberg Theory divides knowledge into two types: tacit knowledge, which is personal and based on experience, and explicit knowledge, which is structured and shared. While tacit knowledge drives growth, collaboration, and creativity, explicit knowledge represents the visible tip of the iceberg (Wang & Chin, 2020; Amichot et al., 2023). This relationship underscores the importance of comprehensive educational frameworks integrating theoretical knowledge with practical applications, thereby supporting the hypothesis that knowledge positively influences student competencies (H1).

H1: Knowledge positively influences student competencies.

Skills and Student Competencies

In front-office training, it is crucial to develop both soft and technical abilities. According to the McClelland's, which emphasises the need for constant improvement through education and experience, apparent abilities are simpler to develop than underlying attributes like attitudes (Amichot et al., 2023). At the same time, improving service quality requires soft skills like problem-solving, collaboration, and communication (Ikhsan et al., 2025). As students engage in structured training and gain practical experience, their competencies are expected to improve, supporting the hypothesis that skill acquisition positively enhances student competencies. (H2).

H2: Skill acquisition positively enhances student competencies.

Self-Concept and Student Competencies

For students studying hospitality to build their competencies, self-concept which includes professional identity and self-efficacy is essential. Our perception of ourselves, including our characteristics, values, and skills, shapes our behaviour and helps us make decisions (Yang & Wong, 2020). It includes self-efficacy, self-esteem, and self-image, which influence how one responds to difficulties and engages with others (Yang & Wong, 2020). Resilience, accountability, and emotional intelligence all essential for leadership and teamwork are fostered by a positive self-concept (Pomerance et al., 2020). It increases commitment and motivation by bringing personal beliefs into line with organisational objectives (Ko & Lu, 2022). Self-concept can be strengthened by life events and encouraging surroundings, which can enhance job performance and promote career advancement (Lubis et al., 2022). According to research, there is a strong link between student competences and self-concept, meaning that having a strong self-concept improves a student's capacity to handle difficulties in a front desk environment (H3).

H3: Self-concept positively affects student competencies.

Personality Traits and Student Competencies

Students' interactions with clients and coworkers in the hospitality sector are greatly influenced by personality qualities like openness, dedication, and emotional stability. Effective guest interactions are associated with traits like extraversion and agreeableness, whereas professionalism and attention to detail are facilitated by conscientiousness (Mbagga et al., 2021; Jawabreh et al., 2022). Previous research supports the notion that personality traits influence behavioral competencies, leading to the hypothesis that personality traits have a positive influence on student competencies. (H4).

H4 : Personality traits have a positive influence on student competencies.

Motivation and Student Competencies

In hospitality education, Motivation is the inner drive that propels action and goal pursuit (Hariri, 2021). It can be intrinsic, driven by personal interest or passion, or extrinsic, fueled by external rewards like money or recognition (Pesonen et al., 2024; Bredenkamp et al., 2022). Intrinsic motivation often leads to greater satisfaction and long-term productivity, fostering creativity and commitment (Pesonen et al., 2024). Extrinsic motivation may yield short-term results but lacks long-term engagement unless aligned with personal values (Bredenkamp et al., 2022). Environments promoting competence, autonomy, and connection can enhance motivation and success (Pat-El et al., 2024). Therefore, it is hypothesized that motivation positively influences student competencies.(H5).

H5 : Motivation positively influences student competencies.

Conceptual Framework

The conceptual framework of this study looks at the relationship between the dependent variable, student competencies, and five independent variables: knowledge, skills, motivation, self-concept, and personality traits. The foundation of the framework is McClelland's Competencies Model (1973), which places a strong emphasis on establishing critical competencies for hands-on front desk training in the hospitality industry. While self-concept, personality traits, and motivation are behavioral attributes that affect professional adaptability and service quality, knowledge and skills are technical aspects necessary for operational efficiency. The model shows that in order to improve students' readiness for front-office positions, competency-based education should incorporate both behavioral and technical components.

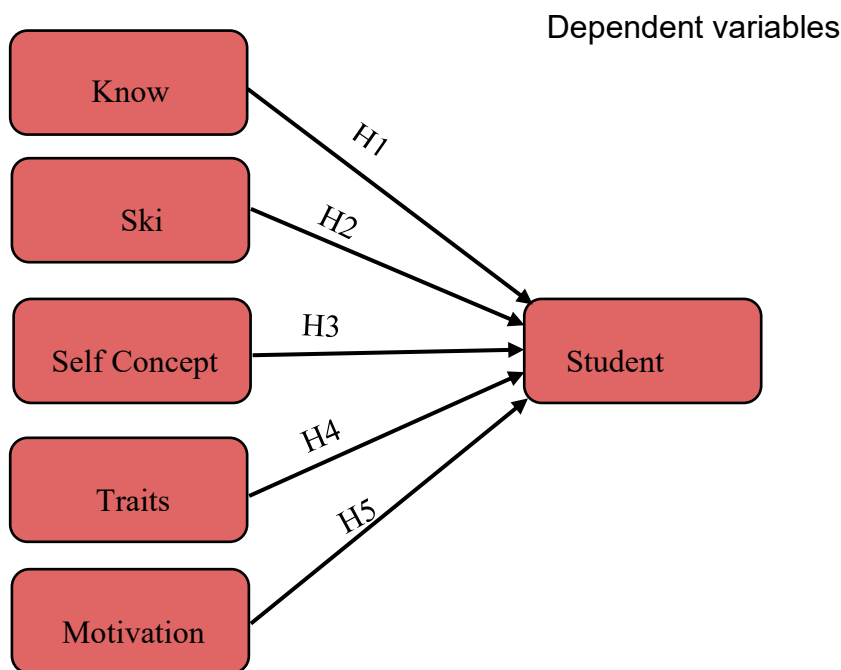


Figure 1: Conceptual Framework

The framework offers an organized method for examining the interactions between several competency characteristics, which serves as the foundation for evaluating the efficacy of training in hospitality education.

RESEARCH METHODOLOGY

This research uses a quantitative approach to explore the relationship between key competency dimensions namely knowledge, skills, self-concept, personality traits, and motivation and the overall competencies of students undergoing front-office training. Guided by McClelland's Competency Model, which emphasizes the value of both technical and behavioral skills in achieving success in the hospitality industry, the study aims to provide data-driven insights into students' competency development and support improvements in hospitality education curricula.

Research Design

This study used a cross-sectional survey to collect data from hospitality students who had undergone front-office training at UiTM Cawangan Pulau Pinang. The main tool used to gather information was a structured questionnaire, which students completed on their own. It included closed-ended questions designed to measure

five key areas of competency. This approach made it easier to gather consistent data from a large number of students, allowing for meaningful analysis and broader conclusions.

Sampling Technique

The study consisted of students enrolled in front-office-related hospitality courses at UiTM Cawangan Pulau Pinang, all of whom had completed formal training in front office operations. A convenience sampling technique was used to target students with relevant hands-on experience. This sampling method was chosen because it allowed the researchers to easily reach students who were available and had relevant experience. According to Krejcie and Morgan (1970), a sample of at least 191 is considered adequate for a population of 368 (Chuah & Cham, 2020). In this study, 198 hospitality students took part, offering a good mix of educational backgrounds and levels of industry experience.

Research Instrument

The questionnaire used in this study was developed based on McClelland's Competency Model (1973), which comprises five competency dimensions: knowledge, skills, self-concept, personality traits, and motivation. Measurement items were adapted from previous hospitality and competency literature and modified to suit the context of front office training among hospitality students.

Prior to the main survey, the instrument underwent expert validation involving three subject matter experts, comprising two hospitality academics and one experienced hotel industry practitioner. The experts evaluated each item in terms of clarity, relevance, wording, and consistency with the research objectives. Their feedback resulted in minor revisions to improve content clarity and contextual suitability.

Subsequently, a pilot study involving 30 hospitality students was conducted to assess the instrument's readability and internal consistency. Reliability analysis using Cronbach's Alpha indicated satisfactory reliability for all constructs, with coefficients exceeding the recommended threshold of 0.70. These procedures confirmed that the questionnaire possessed acceptable content validity and internal consistency before being administered to the main sample.

Data Collection

Data were collected using an online structured questionnaire distributed through Google Forms to hospitality students who had completed Front Office courses at UiTM Cawangan Pulau Pinang. The survey link was shared through official class WhatsApp groups and lecturer communication channels. Before participating, respondents were informed about the purpose of the study, assured that all responses would remain confidential, and notified that participation was voluntary. Electronic informed consent was obtained before respondents proceeded to complete the questionnaire.

Pilot Study

Before the survey is given to the main study sample, a small group of participants has pre-tested it for clarity and comprehensibility. A pilot study involving 30 samples of diploma and degree hotel management students has been carried out at UITM Pulau Pinang. In order to determine sample size, this study followed Roscoe's (1975) recommendations, which state that 30 samples are appropriate for the majority of behavioural studies (Hill Robin, 1998; Chuah & Cham, 2020).

Variables	Cronbach's Alpha	N of Items
Student competencies	0.879	5
Knowledge	0.834	5

Skills	0.938	5
Self-Concept	0.890	5
Traits	0.862	5
Motivation	0.922	5

Table 1: Pilot Test - Reliability Analysis

Data Analysis

After data collection, the survey results will be analyzed using quantitative methods with IBM SPSS Statistics Version 29.0. The preliminary analysis focuses on verifying key data, identifying correlations, and drawing meaningful insights. For the next step, multiple linear regression will be used to explore how knowledge, skills, motivation, self-concept, and traits impact student competencies.

Reliability and Validity

Several procedures were undertaken to ensure the validity and reliability of the research instrument. First, content validity was established through expert review involving two academics specialising in hospitality education and one hotel industry practitioner. Their evaluations ensured that each questionnaire item accurately represented the intended competency dimensions and aligned with the study objectives.

A pilot study involving 30 respondents was then conducted to assess the instrument's clarity and reliability. Cronbach's Alpha coefficients ranged from 0.834 to 0.938 during the pilot study, indicating good internal consistency. In the final data collection, Cronbach's Alpha values ranged from 0.972 to 0.983 across all constructs, demonstrating excellent reliability. These findings indicate that the questionnaire was appropriate for measuring hospitality student competencies within the context of this study.

FINDINGS

Descriptive Statistics of Demographic Profile

Table 2 provides a summary of the demographic characteristics of the 198 respondents. Most of the respondents were between 21 and 23 years old (38.9%), followed by those aged 24 to 26 years (34.3%). More than half of the participants were women (60.6%), while men made up the remaining 39.4%. In terms of education, most respondents had a Bachelor's Degree (57.6%), and some had a Diploma (41.9%). Only a few had a Master's Degree (0.5%). When it came to the Front Office results, most of them got Grade A (62.1%), followed by Grade B (34.3%). Very few got Grade C or D. For industry experience, almost half had worked for 6 months to 1 year (46.0%), while a similar number had less than 6 months of experience (44.9%). Only a small group had more than a year of experience (9.1%).

Table 2 : Demographic Characteristics of Respondents

Characteristic	Category	Frequency (N)	Percentage (%)
Age	18 – 20 years	49	24.7%
	21-23 years	77	38.9%
	24 – 26 years	68	34.3%
	27 years and above	4	2.0%
	Male	78	39.4%

Gender	Female	120	60.6%
Level of Education	Diploma	83	41.9%
	Bachelor's Degree	114	57.6%
	Master's Degree	1	.5%
Front Office Result	A	123	62.1%
	B	68	34.3%
	C	6	3.0%
	D	1	5%
Experience in Industry	Less than 6 months	89	44.9%
	6 months to 1 year	91	46.0%
	1 to 2 years	14	7.1%
	More than 2 years	4	2.0%

Descriptive Statistics of Student Competencies

Table 3 presents descriptive statistics for student competencies, focusing on their ability to problem-solve, think critically, and adapt. *"My cultural awareness has enhanced my effectiveness in professional settings"* received one of the highest average ratings ($M = 4.95$, $SD = 1.146$), suggesting that students value the role of cultural understanding in their professional growth. Similarly, high scores were recorded for improvements in problem-solving and critical thinking skills (both $M = 4.89$), indicating that students feel their experiences have meaningfully strengthened their cognitive abilities. Confidence in adapting to challenges and working in diverse environments also emerged as strong points, with mean scores ranging from 4.89 to 4.97, reflecting a positive self-assessment of readiness and adaptability.

Table 3: Item Statistics for Student Competencies

Item	Mean (M)	Std. Deviation (SD)
My problem-solving skills have improved significantly through my experiences.	4.89	1.324
My critical thinking skills have improved significantly through my experiences.	4.89	1.212
I am confident in my ability to adapt to overcome challenges.	4.89	1.194
I am confident in my ability to adapt to diverse workplace environments.	4.97	1.126
My cultural awareness has enhanced my effectiveness in professional settings.	4.95	1.146

Descriptive Statistics of Knowledge

Table 4 outlines descriptive statistics related to knowledge acquisition and application. Respondents most strongly agreed with *"I am proficient in using techniques learned during my academic training"* ($M = 5.01$, $SD = 1.062$), signifying practical utility of education. Consistently high means for *"I have a strong understanding*

of key concepts related to my field of study" and "I understand the principles relevant to my area of expertise" (both $M = 4.95$) indicate foundational knowledge is solid. Reflection and adaptation of knowledge were similarly rated ($M = 5.04$, $SD = 1.08$), demonstrating metacognitive awareness in facing evolving challenges.

Table 4: Item Statistics for Knowledge

Item	Mean (M)	Std. Deviation (SD)
I have a strong understanding of key concepts related to my field of study.	4.95	1.132
I understand the principles relevant to my area of expertise.	4.95	1.112
I am proficient in using techniques learned during my academic training.	5.01	1.062
I reflect on my knowledge to meet new challenges.	5.04	1.096
I adapt my knowledge to evolving challenges.	5.04	1.061

Descriptive Statistics of Skills

Table 5 highlights student skills, showing high self-perceived abilities in collaboration and adaptability. The highest-rated item, "I can demonstrate strong collaboration skills" ($M = 5.11$, $SD = .989$), indicates confidence in teamwork. Close ratings for "I can effectively solve problems using the skills I have acquired" ($M = 4.99$) and "I am confident in adapting my skills to meet changing workplace requirements" ($M = 5.01$) further emphasize versatile competence. Ratings for both technical ($M = 5.04$, $SD = .986$) and interpersonal skills ($M = 5.05$, $SD = 1.024$) show a balance between hard and soft skills.

Table 5: Item Statistics for Skills

Item	Mean (M)	Std. Deviation (SD)
I can effectively solve problems using the skills I have acquired.	4.99	1.066
I can demonstrate strong collaboration skills.	5.11	.989
I am confident in adapting my skills to meet changing workplace requirements.	5.01	1.053
I possess a balance of technical hard skills necessary for my role.	5.04	.986
I possess a balance of interpersonal soft skills needed for my role.	5.05	1.024

Descriptive Statistics of Self Concept

Table 6 presents descriptive statistics related to self-concept, showing high self-efficacy and values alignment. Strong internal stability is demonstrated by the highest-rated item, "I maintain self-confidence even in

challenging work situations" ($M = 5.14$, $SD = .911$). Both "My values align with the demands of my professional role" ($M = 5.10$) and "I believe in my ability to perform tasks effectively in my field" ($M = 5.07$) were rated highly. Strong identity coherence within a professional setting is indicated by awareness of and congruence with organisational aims ($M = 5.14$ and $M = 5.15$)

Table 6: Item Statistics for Self-Concept

Item	Mean (M)	Std. Deviation (SD)
I believe in my ability to perform tasks effectively in my field.	5.07	.924
My values align with the demands of my professional role.	5.10	.910
I maintain self-confidence even in challenging work situations.	5.14	.911
I can align my identity with organizational goals	5.14	.922
I am self-aware to enhance my professional performance.	5.15	.914

Descriptive Statistics of Traits

Statistics on personality qualities that contribute to success in the job are shown in Table 7. Social adaptation was demonstrated by the high scores for "I maintain an optimistic attitude when managing work responsibilities" ($M = 5.20$, $SD = .876$) and "My interpersonal traits contribute to fostering teamwork" ($M = 5.12$). Students may believe they are emotionally intelligent and growth-oriented based on their high scores on other questions like "I am open to learning new concepts in professional settings" ($M = 5.13$) and "I demonstrate resilience when faced with challenges in the workplace" ($M = 5.11$).

Table 7: Item Statistics for Traits

Item	Mean (M)	Std. Deviation (SD)
I demonstrate resilience when faced with challenges in the workplace.	5.11	.922
I adapt well to new situations in my job role.	5.10	.995
I am open to learning new concepts in professional settings.	5.13	.966
My interpersonal traits contribute to fostering teamwork.	5.12	.899
I maintain an optimistic attitude when managing work responsibilities.	5.20	.876

Descriptive Statistic of Motivation

Table 8 examines extrinsic and intrinsic motivation. "External rewards such as recognition or grades motivate me to perform better" ($M = 5.36$, $SD = .836$), the item with the highest rating, emphasises the significance of acknowledgement. "I have a strong intrinsic drive to learn in my area of expertise" ($M = 5.32$), "I am committed to excelling in professional environments" ($M = 5.35$), and "I remain focused on achieving my long-term career

goals" ($M = 5.35$) are all notable examples of excellent ratings for intrinsic motivation. Overall, this shows a group of students who are very driven by both internal and external factors.

Table 8: Item Statistics for Motivation

Item	Mean (M)	Std. Deviation (SD)
External rewards such as recognition or grades motivate me to perform better.	5.36	.836
I have a strong intrinsic drive to learn in my area of expertise.	5.32	.859
I am committed to excelling in professional environments.	5.35	.815
I remain focused on achieving my long-term career goals.	5.35	.835
I stay engaged in achieving my long-term career goals	5.20	.817

Reliability Coefficient

The results of the reliability test, as shown in Table 9, indicate that all variables in the study have excellent internal consistency. Cronbach's Alpha values for each variable are well above the acceptable threshold of 0.70, which means the items used to measure each construct are consistent and reliable. Specifically, the alpha values are as follows: Student Competencies (0.979), Knowledge (0.983), Skills (0.972), Self-Concept (0.979), Traits (0.972), and Motivation (0.973). These high scores suggest that the questionnaire items for each area are closely related and effectively measure what they are intended to assess.

Table 9: Reliability Test

Variables	Cronbach's Alpha	N of Items
Student competencies	0.979	5
Knowledge	0.983	5
Skills	0.972	5
Self-Concept	0.979	5
Traits	0.972	5
Motivation	0.973	5

Correlation Analysis

Table 10 shows the relationship between the main areas of student development. All the relationships are strong and significant at the 0.01 level ($p < .001$), meaning they are not due to chance. The strongest link is between competencies and knowledge ($r = .911$), showing that students who understand their field will also apply what they learn more effectively. Knowledge is also closely related to self-concept ($r = .909$) and traits ($r = .902$), suggesting that students with more knowledge tend to have more confidence and positive personal qualities. Skills are strongly connected to self-concept ($r = .884$) and traits ($r = .880$), which highlights the importance of

both technical and soft skills. Although the lowest correlation is between skills and motivation ($r = .874$), it still shows a strong link. These results suggest that all the areas are closely connected. Improving one area, like knowledge or skills, can help improve others. This supports the idea that hospitality education should focus on developing students as a whole, not just in one area.

Table 10: Correlation Matrix for Competencies, Knowledge, Skills, Self-Concept, Traits, and Motivation traits

Variables	Competencies	Knowledge	Skills	Self-Concept	Traits	Motivation
Competencies Sig. (2-tailed) N	1198	.911**<.001198	.876**<.001198	.892**<.001198	.885**<.001198	.887**<.001198
Knowledge Sig. (2-tailed) N	.911**<.001198	1198	.901**<.001198	.909**<.001198	.902**<.001198	.896**<.001198
Skills Sig. (2-tailed) N	.876**<.001198	.901**<.001198	1198	.884**<.001198	.880**<.001198	.874**<.001198
Self-Concept Sig. (2-tailed) N	.892**<.001198	.909**<.001198	.884**<.001198	1198	.899**<.001198	.893**<.001198
Traits Sig. (2-tailed) N	.885**<.001198	.902**<.001198	.880**<.001198	.899**<.001198	1198	.882**<.001198
Motivation Sig. (2-tailed) N	.887**<.001198	.896**<.001198	.874**<.001198	.893**<.001198	.882**<.001198	1198

Correlation is significant at the 0.01 level (2-tailed). The table presents Pearson correlation coefficients, significance levels (p-values), and sample sizes (N) for the relationships among the study variables.

Multiple Regression Analysis

Table 11 presents a summary of the regression model used to predict student competencies. The R^2 value of 0.779 means that about 77.9% of the variation in student competencies can be explained by five key factors: Knowledge, Skills, Self-Concept, Traits, and Motivation. The adjusted R^2 value (0.773) shows that the model remains strong even after accounting for the number of variables included. With a standard error of 0.54955, the model demonstrates a fairly accurate prediction of student competency levels. Additionally, the model is statistically significant, as shown by the F-change of 135.413 and a p-value less than .001, indicating that the combination of predictors meaningfully explains the differences in student competencies.

Table 11: Model Summary for Model Student Competencies Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Change Statistics				
						R Square Change	F Change	df1	df2	Sig. F Change
1	.883 ^a	.779	.773		.54955	.779	135.413	5	192	.000

a. Predictors: (Constant), Motivation, Skills, Self Concept, Knowledge, Traits

b. Dependent Variable: Student Competencies

Table 12: ANOVA for Student Competencies

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	204.481	5	40.896	135.413	.000 ^b
	Residual	57.986	192	.302		
	Total	262.467	197			

a. Dependent Variable: Student Competencies

b. Predictors: (Constant), Motivation, Skills, Self Concept, Knowledge, Traits

Table 12 assesses how well the overall regression model fits the data. The results show that the regression sum of squares (204.481) is much higher than the residual sum of squares (57.986), meaning the model captures a large portion of the total variation in student competencies. The mean square value of 40.896 produces an F-statistic of 135.413, with a p-value below .001, confirming that the model as a whole is highly significant. In simple terms, the selected predictors play an important role in explaining differences in student competencies.

Table 13: Coefficients for Student Competencies

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.082	.281		-.292	.771		
	Knowledge	.502	.116	.460	4.349	.000	.103	9.727
	Skills	.383	.135	.322	2.838	.005	.089	11.199
	Self Concept	-.017	.145	-.013	-.117	.907	.094	10.639
	Traits	.268	.175	.205	1.532	.127	.064	15.571
	Motivation	-.136	.086	-.093	-1.593	.113	.335	2.987

a. Dependent Variable: Student Competencies

Table 13 shows how each individual factor contributes to predicting student competencies. The results reveal that knowledge has the strongest positive influence, with a standardized beta value of .460 and a p-value less than .001, meaning it is highly significant. This suggests that students with higher knowledge levels tend to demonstrate greater competency. Skills also have a significant positive effect ($\beta = .322$, $p = .005$), showing that practical abilities are important in developing competencies. However, self-concept, traits, and motivation do not significantly contribute to the model, as their p-values are above .05. In particular, self-concept ($p = .907$), traits ($p = .127$), and motivation ($p = .113$) do not show meaningful effects in this analysis. Overall, the findings highlight that knowledge and skills are the most influential predictors of student competencies in this study.

DISCUSSION

The research's findings based on the developed hypotheses are critically discussed in this section. To determine their importance, the findings are examined in light of earlier research. Every hypothesis is covered in detail, including important references from the literature review and introduction.

H1: Knowledge positively influences student competencies.

This study found that students who have strong knowledge in hospitality, customer service, and front office operations tend to perform better in practical tasks. In other words, the more they understand the concepts taught in class, the more confident and capable they are during hands-on training. This supports earlier findings by

Mbaggta et al. (2021) and Elziny & Emam (2021), who also highlighted the importance of combining theory with competency-based learning to prepare students for the real world. Knowledge acts as a foundation when students understand both the "what" and "why," they're better equipped to apply those skills in actual front-office scenarios (Utami & Raharjo, 2020).

According to McClelland's (1973) Iceberg Model, knowledge is the outwardly visible aspect of competency that can be taught and evaluated directly. Capua (2021) also discovered that when confronted with the demands of an internship in the real world, students frequently lacked fundamental technical expertise, even though they had good academic backgrounds. Without real-world context, academic training alone is inadequate, as students are unable to apply their knowledge in dynamic, high-pressure settings such as hotel front desks (Peng et al., 2024). To ensure that students can complete tasks, solve problems, and make wise judgments in actual work environments, information must be available but also contextualized and reinforced through practice.

H2: Skill acquisition positively enhances student competencies.

In order to succeed in the hospitality industry, students need a mix of hard skills like system use, check-in/check-out procedures, and phone etiquette, as well as soft skills such as teamwork, communication, and adaptability. Both types of skills are critical, especially in customer-facing roles like front desk positions. While skills can be taught, traditional methods such as role-playing are often too simple or unrealistic to truly prepare students for real-life challenges (Hanif et al., 2020; Quah, Roseline, & Aziz, 2021).

In line with the top-layer competences of the Iceberg Model, skills are categorized as observable, learnable, and improvable by Wang & Chin (2020) and Amichot et al. (2023). However, studies reveal that a large number of students still start internships lacking sufficient skill development, especially in communication, multitasking, and visitor engagement.

According to Capua (2021), more than 60% of industry partners cited interns' inadequate technical skills and poor communication. Students who lack strong skills find it difficult to execute consistently, which has an impact on team productivity and visitor pleasure. In order to improve student skills, a systematic approach to skill-building through simulations, on-the-job training, and industry exposure is essential.

H3: Self-concept positively affects student competencies.

The findings reveal students see themselves their self-confidence, self-esteem, and belief in their own abilities has a big influence on their performance. A positive self-concept helps students stay motivated, solve problems more effectively, and manage stress, especially in fast-paced environments like hotel front desks. According to Yang & Wong (2020), and Pomerance et al. (2020), students with higher self-belief are better at making decisions and dealing with pressure during training and internships.

According to Ko & Lu (2022), people who have a positive professional self-image perform better because they match their actions with the objectives of the company. According to Lubis et al. (2022), supportive surroundings, such as encouraging remarks from supervisors and peer support, can mold and improve students' perceptions of themselves.

In real life, students who have a positive self-image are more proactive, assume responsibility for their tasks, and interact with guests and coworkers more skillfully. Conversely, poor self-esteem can result in lesser confidence, a dread of social engagement, and an avoidance of responsibility all of which are harmful in environments that prioritize services.

H4: Personality traits have a positive influence on student competencies.

This study supports the hypothesis personality plays a key role in students behave and perform in the workplace. Traits such as being responsible (conscientiousness), friendly (extraversion), open to new experiences, and

emotionally steady all help students thrive in high-pressure, service-oriented roles. These personal qualities, while not directly taught, can greatly influence how well a student fits into the hospitality industry (Ko & Lu, 2022). For instance, students who are naturally outgoing tend to connect better with guests, while those who are organized are more reliable and efficient (Zhou et al., 2021).

According to Aarti & Kadian (2022) and Medina-Craven et al. (2022), personality factors also affect adaptation, stress tolerance, and leadership potential. These qualities help interns manage stressful situations, multitask well, and serve customers with patience and empathy at the front office. The discussion here shows that while knowledge and skill prepare students "what" and "how" to do things, traits determine "how well" they cope with real-life challenges, especially under pressure.

H5: Motivation positively influences student competencies.

The study findings confirm that students' willingness to learn, adapt, and perform is driven by motivation, which can be either extrinsic (rewards, recognition) or intrinsic (personal drive, passion). Students that are motivated are more likely to strive for greatness, show initiative, and give their all throughout training or internships.

Based on Hariri (2021), motivation is what propels people to accomplish their goals. According to Pesonen et al. (2024), commitment and career longevity in the hotel industry are highly correlated with intrinsic drive. Even in challenging or repetitious jobs like front desk duties, students who are driven by personal enthusiasm are more likely to stick with it.

Furthermore, according to Pat-El et al. (2024), settings that support competence, autonomy, and connection help people stay motivated over time. On the other hand, unmotivated students could see internships as merely fulfilling their coursework requirements, losing the chance to gain new skills. According to Ng et al. (2023), professional purpose is improved by reflective thought, which is frequently motivated. Students are more likely to behave better, grow from their mistakes, and become skilled professionals when they are motivated to reflect on their learning experiences.

CONCLUSION

This study investigated the relationships between five essential components based on McClelland's Competency Model which is knowledge, skills, self-concept, traits, and motivation and students' competence in front office training. The results demonstrated that student competences are most positively impacted by knowledge and skills. This indicates that students who possess practical skills and a thorough understanding of their topic are more equipped for front-office positions. In the regression study, motivation, personality traits, and self-concept did not significantly predict competency levels, despite the fact that they were all positively correlated with skills. Overall, the findings emphasize how crucial it is to advance technical knowledge and abilities through hands-on training, role-playing, and organized internships. Students may benefit from these initiatives by being better prepared for jobs in the hospitality sector.

Limitations Of The Study

This study has several limitations that should be considered when interpreting the findings. First, the respondents were drawn exclusively from UiTM Cawangan Pulau Pinang using convenience sampling. Consequently, the findings may not be generalisable to hospitality students from other higher education institutions or geographical regions. Second, the cross-sectional research design captured students' perceptions at a single point in time and therefore could not examine changes in competency development before, during, or after industrial training. Third, the study relied solely on self-reported questionnaire responses, which may be subject to social desirability bias and may not accurately represent students' actual workplace competencies. Finally, although knowledge and skills emerged as significant predictors of student competencies, the non-significant effects of self-concept, personality traits, and motivation suggest that additional contextual variables or alternative measurement approaches should be explored in future studies.

RECOMMENDATIONS FOR FUTURE RESEARCH

Future studies are encouraged to adopt a longitudinal research design to monitor students' competency development throughout their academic programme, industrial training, and early employment. Such an approach would provide deeper insights into how hospitality competencies evolve over time.

Researchers should also consider recruiting participants from multiple universities and different geographical regions to improve the generalisability of the findings. Furthermore, future studies could complement students' self-reported perceptions with objective performance indicators, including internship supervisors' evaluations, employer assessments, practical competency tests, or workplace performance records. The incorporation of multiple assessment methods would provide a more comprehensive evaluation of students' actual workplace readiness.

Finally, future research should provide more comprehensive documentation regarding questionnaire development, including construct validation procedures and additional psychometric evidence, to further strengthen the methodological rigour of competency assessment in hospitality education.

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REFERENCE

1. Abdulrab, M., & Hezam, N. (2024). Service quality and customer satisfaction in the hospitality sector: A paper review and future research directions. *Library Progress International*, 44(3), 7486–7503.
2. Aarti, & Kadian, R. (2022). Modelling academic performance through personality traits, self-efficacy, and disaffection among university students. *Journal of Applied Research in Higher Education*, 15(5). <https://doi.org/10.1108/jarhe-05-2022-0133>
3. Ahmed, S., et al. (2020). Impact of students' personality traits on social networking sites usage, benefits, and risks. *Global Knowledge, Memory and Communication*. Advance online publication. <https://doi.org/10.1108/gkmc-04-2020-0048>
4. Baert, S., Neyt, B., Siedler, T., Tobback, I., & Verhaest, D. (2021). Student internships and employment opportunities after graduation: A field experiment. *Economics of Education Review*, 83, 102141. <https://doi.org/10.1016/j.econedurev.2021.102141>
5. Bauer, C. A., Job, V., & Hannover, B. (2023). Who gets to see themselves as talented? Biased self-concepts contribute to first-generation students' disadvantage in talent-focused environments. *Journal of Experimental Social Psychology*, 108, 104501. <https://doi.org/10.1016/j.jesp.2023.104501>
6. Bisschoff, Z. S., & Massyn, L. (2024). A conceptual soft skills competency framework for enhancing graduate intern employability. *Higher Education, Skills and Work-Based Learning*. <https://doi.org/10.1108/heswbl-08-2023-0239>
7. Boon, Q. W., Kok, R. A., & Aziz, A. (2021). Integrating a pedagogical model for simulation-based learning in hospitality TVET students: Attitudes and satisfaction. *International Journal of Academic Research in Business and Social Sciences*, 11(6). <https://doi.org/10.6007/ijarbss/v11-i6/10195>
8. Boyatzis, R. E. (2020). David C. McClelland: Biographical statement. In *Encyclopedia of Personality and Individual Differences* (pp. 1–3). Springer. https://doi.org/10.1007/978-3-319-24612-3_1119
9. Boyatzis, R. E., & Dhar, U. (2021). The dynamics of the ideal self: A complexity theory perspective. *Journal of Management Development*, 41(1), 1–9. <https://doi.org/10.1108/JMD-09-2021-0247>
10. Bredenkamp, D., Botma, Y., & Nyoni, C. N. (2022). Higher education students' motivation to transfer learning: A scoping review. *Higher Education, Skills and Work-Based Learning*. <https://doi.org/10.1108/heswbl-03-2022-0057>

11. Capua, L. T. (2021). Employability skills and competencies of hospitality management students: Basis for an enhanced curriculum. *Review of International Geographical Education Online*, 11(10), 471–486.
12. Chen, M., Zhang, C., Liu, D., & Mao, Q. (2021, May 14). Study on talents' ability and quality of building environment and energy engineering major based on iceberg theory. Atlantis Press. <https://doi.org/10.2991/assehr.k.210513.056>
13. Danurdara, A. B., & Paramitha, N. A. (2022). The impact of front office service quality on customer satisfaction: Evidence from the hospitality sector in West Java. *Budapest International Research and Critics Institute Journal (BIRCI-Journal)*, 5(3), 20549–20561. <https://doi.org/10.33258/birci.v5i3.6074>
14. Dhar, U., & Dhar, S. (2020). The dynamics of the ideal self: A component of intentional change theory. *Journal of Management Development*, 39(2), 101–112. <https://doi.org/10.1108/JMD-12-2018-0356>
15. Di Pietro, G. (2022). International internships and skill development: A systematic review. *Review of Education*, 10(2). <https://doi.org/10.1002/rev3.3363>
16. Dodds, R. (2022). Social justice in the hospitality industry – Better pay equals better employees and a better hotel. *Tourism Cases*, 2022. <https://doi.org/10.1079/tourism.2022.0042>
17. Gad El-Rab, M., & El-Nagar, A. (2020). Internships in tourism and hospitality: An analytical study of the impact on students' knowledge and skills. *International Journal of Tourism and Hospitality Management*, 3(2), 1–30. <https://doi.org/10.21608/ijthm.2020.134190>
18. Hanif, S., Ahsan, A., & Wise, G. (2020). Icebergs of expertise-based leadership: The role of expert leaders in public administration. *Sustainability*, 12(11), 4544. <https://doi.org/10.3390/su12114544>
19. Hariri, H. (2021). Motivation and learning strategies: Student motivation affects student learning strategies. *European Journal of Educational Research*, 10(1), 39–49. <https://doi.org/10.12973/eu-er.10.1.39>
20. Hassane, S., & Mohammed, B. (2021). Competency Ice-Berg Model—A quality view to the University of Tlemcen. *Revue Organisation & Travail*, 10(4).
21. Hatta, M., Ramly, M., Hamid, S., & Alam, R. (2020). Impact of competency on performance through work motivation and job satisfaction employees hotels in City Makassar. *IOSR Journal of Business and Management*, 22(6), 23–40. <https://doi.org/10.9790/487X-2206092340>
22. Herry Windawaty. (2023). Study on student's perception about internship program and its impact on their personality, with reference to hotel business program students Podomoro University. *KONTAN: Jurnal Ekonomi, Manajemen Dan Bisnis*, 2(1). <https://doi.org/10.59818/kontan.v2i1.435>
23. Hidayah, R., & Octaviany, V. (2023). Keterampilan mahasiswa trainee departemen front office pada hotel bintang empat di Kota Bandung. *Syntax Literate*, 8(8), 2548–139. <https://doi.org/10.36418/syntax-literate.v6i6>
24. Holmes, A. G. D., Tuin, M. P., & Turner, S. L. (2021). Competence and competency in higher education: Simple terms yet with complex meanings. *Educational Process: International Journal*, 10(3), 39–52. <https://doi.org/10.22521/edupij.2021.103.3>
25. Ikhsan, M., Sari, S. N., & Juardi. (2025). The concierge's role in improving the quality of front office department services at Manhattan Hotel Jakarta. *Hospitality: Journal of Tourism, Recreation and Hospitality Management*, 1(1), 21–32.
26. Jawabreh, O., Masa'deh, R., Fayoumi, T. A., & Bareya, A. (2022). Customer satisfaction towards communication skills of front office staff at the hotel (Case study five-star hotels in Aqaba). *GeoJournal of Tourism and Geosites*, 44(4), 1312–1318.
27. Kapoor, R., Singh, A., & Manchanda, G. (2023). Hospitality internships and green leaders: Analysing the engagement of interns with hotel sustainable development practices. *Worldwide Hospitality and Tourism Themes*, 15(3). <https://doi.org/10.1108/whatt-02-2023-0023>
28. Ko, W.-H., & Lu, M.-Y. (2022). Do professional courses prepare hospitality students for efficient surplus food management? A self-evaluation of professional competence in food waste prevention. *International Journal of Sustainability in Higher Education*. <https://doi.org/10.1108/ijshe-07-2021-0308>
29. Lingadkar, P. R., & Sankaranarayanan, K. G. (2023). Students' expectations and perception towards tourism and hospitality internship program. *Journal of Law and Sustainable Development*, 11(11), e1612–e1612. <https://doi.org/10.55908/sdgs.v11i11.1612>

30. Liu, H., & Boyatzis, R. E. (2021). Focusing on resilience and renewal from stress: The role of emotional and social intelligence competencies. *Frontiers in Psychology*, 12, 685829. <https://doi.org/10.3389/fpsyg.2021.685829>
31. Lubis, L., Abdurrahman, & Fazira, E. (2022). Connection management self-concept and social support with student confidence. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam*, 7(1), 31–38. <https://doi.org/10.31538/ndh.v7i1.1890>
32. Mbagga, S., Malusu, J., & Lyamtane, E. (2021). Implementation of hospitality programme to facilitate skills acquisition among trainees in Arusha region, Tanzania. *International Journal of Innovative Research and Development*, 10(10). <https://doi.org/10.24940/ijird/2021/v10/i10/oct21026>
33. Ng, K. S. P., Rao, Y., Lai, I. K. W., & Zhou, Y. Q. (2023). How internship environmental factors affect students' career intentions in the hotel industry through the reflective thinking processes. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 32, 100421. <https://doi.org/10.1016/j.jhlste.2023.100421>
34. Peng, F., Li, Y., & Xu, W. (2023). Internship and career adaptability: Addressing occupational stigma and identity for hospitality management students. *Tourism Review*. <https://doi.org/10.1108/tr-12-2022-063>
35. Senhadji, H., & Benbouziane, M. (2022). Competency Ice-Berg Model: A quality view to the University of Tlemcen. *Revue Organisation & Travail*, 10(4), 386–399. https://www.researchgate.net/publication/358461654_Competency_Ice-Berg_Model_-_A_quality_view_to_the_university_of_Tlemcen
36. Spencer, L. M., & Spencer, S. M. (1993). *Competence at work: Models for superior performance*. John Wiley & Sons.
37. Trinidad, M. C. Q. (2020). Implementation of the student internship program in the Philippines: The BSc in Hospitality Management Program of host training establishments in the National Capital Region. *African Journal of Hospitality, Tourism and Leisure*, 9(2), 1–16. https://www.ajhtl.com/uploads/7/1/6/3/7163688/article_65_vol_9_2_2020_philippines.pdf
38. Wang, C., & Hsieh, H. (2022). Effect of deep learning approach on career self-efficacy: Using off-campus internships of hospitality college students as an example. *Sustainability*. <https://doi.org/10.3390/su14137594>
39. Zahra, R., & Octaviany, V. (2023). Kualitas hard skill mahasiswa trainee departemen front office pada hotel bintang empat di Kota Bandung. *Syntax Literate: Jurnal Ilmiah Indonesia*. <https://doi.org/10.36418/syntax-literate.v8i8.13444>
40. Zehr, S. M., & Korte, R. (2020). Student internship experiences: Learning about the workplace. *Education + Training*, 62(3), 311–324. <https://doi.org/10.1108/ET-11-2019-0260>