

National Competency Assessment (NC II) Results as Correlates Academic Performance and Employability of Hotel and Restaurant Management Graduates

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Abstract

The Philippines faces growing global competition, necessitating graduates with higher-level skills to remain competitive. This study examines the relationship between National Competency (NC II) results, academic performance, and employability of Hotel and Restaurant Management (HRM) graduates from 2009 to 2013. Using descriptive research with qualitative and quantitative analysis, the study addresses low employability rates and job mismatches in the hospitality industry. Findings reveal that age and gender do not significantly impact employability, though gender, final grades, and the school of graduation do. Notably, 23% of graduates were unemployed, exceeding the national unemployment rate of 7.14%. Academic performance and NC II results were not significantly related, indicating that grades do not predict competency outcomes. The study emphasizes the need for schools to enhance employability skills through curriculum integration, facility upgrades, and quality instruction. It recommends stronger integration of NC II Training Regulations into HRM syllabi and collaboration between TESDA, the Cebu Chamber of Commerce, and the Department of Tourism to make NC II a pre-employment requirement for tourism-related industries.

Keywords: National Competency, NC II, Academic Performance, Employability, Philippines.

Introduction

Education is widely regarded by Filipinos as a vital investment and a means to break free from poverty. It offers the promise of improved quality of life and socio-economic mobility. Families across the country dedicate their limited resources to ensuring their children receive quality education, believing that a college degree will lead to stable and rewarding employment opportunities. This strong emphasis on education is deeply rooted in the national consciousness, reinforcing the belief that academic achievement is the key to success.

The Philippine Constitution recognizes the fundamental role of education in nation-building. It explicitly states that "The State shall give priority to education, science and technology, arts, culture, and sports to foster patriotism and nationalism, accelerate social progress, and promote total human development" (The Constitution of the Philippines, 1987). This mandate underscores the government's responsibility to provide accessible and quality education, ensuring that graduates are equipped with the necessary knowledge and skills to contribute meaningfully to society. However, despite the constitutional guarantee, many graduates struggle to find employment after earning their degrees.

Thousands of young professionals participate in job fairs nationwide, hoping to secure positions that match their qualifications. However, one of the persistent challenges in the Philippine labor market is *job mismatch*, where graduates' skills and expertise do not align with industry demands (Valenzuela & Mendoza, 2012). This disconnect between academic preparation and workforce requirements results in underemployment, where degree holders accept jobs that do not fully utilize their competencies, or worse, unemployment due to a lack of opportunities in their chosen fields.

Even for those who secure employment, job security remains a pressing concern. In rapidly evolving industries such as hospitality and tourism, professionals in hotel and restaurant management (HRM) often find that their skills become obsolete over time. The dynamic nature of the industry, driven by technological advancements and

shifting consumer preferences, necessitates continuous adaptation. Without regular upskilling and professional development, employees risk losing their competitive edge, making them vulnerable to job displacement.

To address these challenges, competency-based training and lifelong learning initiatives are essential. By equipping graduates with industry-relevant skills, higher education institutions can help bridge the gap between academic programs and labor market needs. A stronger collaboration between educational institutions and industry stakeholders is necessary to develop responsive curricula that enhance employability. Through targeted interventions, such as skills enhancement programs and career readiness training, graduates can better navigate the demands of the workforce, ensuring long-term career success and economic stability.

Theoretical Background

The relationship between National Competency Assessment (NC II) results, academic performance, and employability in the field of Hotel and Restaurant Management (HRM) can be understood through several theoretical lenses, particularly human capital theory, skills mismatch theory, and employability theory. These frameworks provide insights into how competency assessments influence graduates' preparedness for the workforce and their career prospects.

Human capital theory (Becker, 1964) posits that education and training enhance individuals' skills and knowledge, increasing their productivity and employability. The NC II assessment, administered by the Technical Education and Skills Development Authority (TESDA), serves as a standardized measure of graduates' competencies, ensuring that they meet industry standards. A strong performance in NC II certification implies that graduates possess the requisite skills for employment in the hospitality sector, thereby increasing their chances of securing jobs and advancing in their careers.

Skills mismatch theory (Allen & van der Velden, 2001) explains how disparities between graduates' qualifications and labor market demands affect employment outcomes. In the HRM field, a disconnect between academic performance and industry-required competencies can hinder employability. While high academic performance may reflect theoretical knowledge, it does not always translate to practical proficiency. NC II certification addresses this gap by validating graduates' industry-specific skills, making them more aligned with employer expectations and reducing the likelihood of skills mismatch.

Employability theory (Yorke & Knight, 2006) further supports the notion that a combination of formal education, skill certifications, and work-readiness attributes determine graduates' success in the job market. Employability is shaped not only by academic achievements but also by transferable skills, industry-recognized credentials, and adaptability to workplace demands. Graduates who successfully obtain NC II certification demonstrate a level of competence that enhances their marketability and career prospects in the highly competitive hospitality industry.

Integrating these theoretical perspectives, this study examines the correlation between NC II results, academic performance, and employability of HRM graduates. Understanding these relationships can provide valuable insights for curriculum development, industry-academe partnerships, and policy-making aimed at improving graduates' transition from education to employment.

The Problem

This study aims to determine the National Competency Assessment Results (NC II) as correlates of academic performance and employability among Hotel and Restaurant Management graduates from SY 2009–2013. Specifically, it seeks to answer several key questions. First, it examines the demographic profile of the subjects in terms of age, gender, and final grades in core HRM courses, including HRM 17D – Food and Beverage Service Procedures with Laboratory, HRM 18A – Housekeeping Procedures with Laboratory, and HRM 1C – Culinary Arts and Sciences with Laboratory. Additionally, it assesses the National Competency Results (NC II) in the areas of Food and Beverage Service, Housekeeping, and Commercial Cooking. The study also investigates the employability rate of graduates from SY 2009–2013 and explores whether there is a significant relationship between the profile variables and employability rate. Furthermore, it examines the correlation between the National Competency Assessment results and academic performance (final grades) in the identified courses. Based on the study's findings, recommendations will be formulated to enhance academic training, competency development, and employability outcomes for HRM graduates.

Methodology

Design

This study employed a relational research design to examine the relationship between TESDA Competency Assessment Results (NC II), academic performance, and the employability of Hotel and Restaurant Management (HRM) graduates from 2009 to 2013. As a descriptive study, it focuses on existing conditions within the population of HRM students who underwent the TESDA Competency Assessment, while its relational aspect investigates the connections between two or more variables. The independent variable in this study is the TESDA Competency Assessment Results (NC II), which were collected from the UCHRM TESDA Training Centre and selected HRM schools. Meanwhile, the dependent variable is academic performance, represented by the final

grades in three major HRM subjects: HRM 17D – Food and Beverage Service Management with Laboratory, HRM 18A – Housekeeping Operations with Laboratory, and HRM 1C – Culinary Arts and Sciences with Laboratory. By analyzing these variables, the study aims to provide insights into how competency assessments and academic performance influence the employability of HRM graduates.

Environment

This study was conducted at the College of Hotel and Restaurant Management, University of Cebu Main Campus, a premier institution known for its strong emphasis on hospitality education. The college provides a dynamic learning environment equipped with state-of-the-art facilities, industry-aligned curricula, and experiential learning opportunities designed to prepare students for the global hospitality sector. By situating the research within this academic setting, the study benefits from a pool of students and faculty with firsthand exposure to the evolving trends, challenges, and best practices in hotel and restaurant management. This context ensures that the findings are grounded in real-world applications, contributing to both academic discourse and industry advancements.

Respondents

The study utilized the universal-purposive sampling for data collection, ensuring both inclusivity and specificity in selecting participants. It is considered universal because it encompasses all students who took the TESDA NC II Assessment from 2009 to 2013. At the same time, it is purposive as it specifically targets graduates who completed key HRM major subjects during the same period, namely HRM 17D – Food and Beverage Service Procedures with Laboratory, HRM 18A – Housekeeping Procedures with Laboratory, and HRM 1C – Culinary Arts and Sciences with Laboratory. By adopting this approach, the study ensured that the sample is both comprehensive and focused on the relevant population, allowing for a more precise analysis of the educational and training outcomes of these HRM courses

Instrument

The study used the standardized instrument constructed by TESDA. The NC II Assessment form is made of three (3) different areas of competencies such as Food and Beverage Service NCII, Housekeeping NCII and Commercial Cooking NCII. The assessment will be divided into three (3) modes of questioning ; Oral Examination , Written Examination and Practical or Skills Examination which are based from the Training Regulations of each area of competencies; Each student will be graded either competent or not competent in each competencies .

Statistical Treatment

Simple percentage analysis was employed to summarize and analyze the demographic profile of the respondents. To examine the significance of relationships between variables, the **Chi-square test of independence** was utilized. This statistical test was applied to assess the relationship between the respondents' profiles (e.g., age, gender, school) and their employment status, as well as the relationship between national competency assessment results (NC II) and academic performance. Data collected from national assessment results, academic performance records, and employment status of participants served as the foundation for organizing and presenting the findings. This approach ensured a systematic and data-driven analysis of the relationships between key variables in the study.

Results and Discussions

This section of the research paper is the presentation of all data collected from secondary sources. The result of the substantive document analysis of official data and other related studies were analyzed vis a vis the results of the data's gathered from TESDA and offices of various Hotel and Restaurant Management.

Table 3
Profile of the Participants in Terms of Age

Age (in Years)	School A		School B		School C		School D		Total	
	f	%	f	%	F	%	f	%	F	%
17 - 18	48	49.48	35	46.67	35	53.85	15	22.73	133	43.89
19 - 20	26	26.80	25	33.33	17	26.15	21	31.82	89	29.37
21 - 22	14	14.43	14	18.67	12	18.46	15	22.73	55	18.15
23 - 24	5	5.15	0	0.00	1	1.54	6	9.09	12	3.96
25 -26	2	2.06	1	1.33	0	0.00	9	13.64	12	3.96
27 - 28	2	2.06	0	0.00	0	0.00	0	0.00	2	0.66
Total:	97	100.00	75	100.00	65	100.00	66	100.00	303	100.00

The table presents the age distribution of participants across four schools (A, B, C, and D). Key findings include:

1. Majority Age Group (17–18 years):

- The largest proportion of participants (43.89%) falls within the 17–18 age range.
- School C has the highest percentage (53.85%), followed by School A (49.48%) and School B (46.67%).
- School D has the lowest percentage (22.73%) in this age group, indicating a younger demographic in Schools A, B, and C compared to School D.

2. Second Largest Age Group (19–20 years):

- This group represents 29.37% of the total participants.
- School B has the highest percentage (33.33%), followed by School D (31.82%) and School A (26.80%).

3. Older Age Groups (21 and above):

- Participants aged 21 and above constitute a smaller proportion, with only 18.15% in the 21–22 age range and decreasing percentages in older age groups.
- School D has a notably higher percentage of older participants (22.73% in 21–22 and 13.64% in 25–26), suggesting a more diverse age range compared to the other schools. The dominance of younger participants (17–18 years) aligns with Erikson’s Psychosocial Development Theory (Erikson, 1968), which identifies adolescence (12–18 years) as a critical period for identity formation and career exploration. The high participation of this age group reflects their active engagement in skill development and preparation for future employment.

The presence of older participants (21 and above) in School D supports

****Lifelong Learning Theory**** (Jarvis, 2006), which emphasizes that education and skill development are continuous processes extending beyond traditional schooling years. This diversity in age highlights the importance of inclusive education systems that cater to learners at different life stages.

Implications

1. Schools A, B, and C should continue to focus on younger learners while ensuring their programs are tailored to the developmental needs of adolescents.
2. School D’s diverse age range suggests a need for flexible learning models that accommodate older learners, such as part-time or modular programs.
3. Policymakers and educators should recognize the varying needs of different age groups and design competency-based training programs that are inclusive and adaptable.

**Table 4
Profile of the Participants in Terms of Gender**

GENDER	School A		School B		School C		School D		Total	
	f	%	f	%	F	%	f	%	F	%
Male	47	48.45	28	37.33	18	27.69	22	33.33	115	37.95
Female	50	51.55	47	62.67	47	72.31	44	66.67	188	62.05
Total:	97	100.00	75	100.00	65	100.00	66	100.00	303	100.00

The table provides a breakdown of participants by gender across four schools (A, B, C, and D). Key findings include:

1. Female Dominance:

- Females constitute the majority of participants (62.05%) across all schools.
- School C has the highest percentage of female participants (72.31%), followed by School D (66.67%) and School B (62.67%).
- School A has a more balanced gender distribution, with females representing 51.55% and males 48.45%.

2. Male Participation:

- Males represent 37.95% of the total participants.
- School A has the highest percentage of male participants (48.45%), while School C has the lowest (27.69%). The higher participation of females in Hotel and Restaurant Management (HRM) programs aligns with ****Gender Role**

Theory** (Eagly, 1987), which suggests that societal expectations and stereotypes influence career choices. Traditionally, fields like hospitality and housekeeping are perceived as more "feminine," which may explain the higher enrollment of females in these programs.

The relatively balanced gender distribution in School A reflects a shift toward

****Gender Neutrality in Career Choices**** (Ceci & Williams, 2011), where educational institutions and industries are increasingly encouraging diversity and breaking away from traditional gender stereotypes. This trend is essential for promoting inclusivity and addressing gender imbalances in the workforce.

Implications

1. Schools should continue to promote gender diversity in HRM programs to ensure equal opportunities for all students.
2. Efforts should be made to encourage male participation in fields traditionally dominated by females, such as housekeeping and food service, to challenge stereotypes and foster inclusivity.
3. Industry stakeholders should highlight the diverse career opportunities within the hospitality sector to attract a broader demographic of students.

Table 5
Final Grade of Participants from School A

School A	Equivalent	Food & Beverage		Housekeeping procedures		Culinary Arts		Total	
		f	%	F	%	f	%	F	%
1.5 - 1.0	Excellent	0	0.00	5	10.64	5	20.00	10	10.31
2.0- 1.6	Very Good	5	20.00	26	55.32	8	32.00	39	40.21
2.5 - 2.1	Good	20	80.00	6	12.77	7	28.00	33	34.02
3.0 - 2.6	Fair	0	0.00	10	21.28	5	20.00	15	15.46
Total:		25	100.00	47	100.00	25	100.00	97	100.00

The table presents the final grades of participants from School A across three major subjects: Food and Beverage, Housekeeping Procedures, and Culinary Arts. Key findings include:

1. Food and Beverage:
 - The majority of participants (80%) achieved a "Good" grade (2.1–2.5).
 - No participants received an "Excellent" grade (1.0–1.5), and none fell into the "Fair" category (2.6–3.0).
2. Housekeeping Procedures:
 - Over half of the participants (55.32%) achieved a "Very Good" grade (1.6–2.0).
 - A smaller percentage (10.64%) received an "Excellent" grade, while 21.28% fell into the "Fair" category.
3. Culinary Arts: - Grades were more evenly distributed, with 32% achieving "Very Good," 28% "Good," and 20% in both "Excellent" and "Fair" categories.
4. Overall Performance:
 - The highest percentage of participants (40.21%) achieved a "Very Good" grade across all subjects - Only 10.31% received an "Excellent" grade, while 15.46% fell into the "Fair" category. The variation in performance across subjects aligns with ****Multiple Intelligences Theory**** (Gardner, 1983), which suggests that individuals have different strengths and learning preferences. For instance, the higher performance in Housekeeping Procedures may reflect students' strengths in practical and organizational skills, while the lower performance in Food and Beverage could indicate challenges in mastering service-oriented tasks.

The relatively low percentage of "Excellent" grades supports ****Self-Efficacy Theory**** (Bandura, 1997), which

posits that students' belief in their ability to succeed influences their performance. The lack of "Excellent" grades in Food and Beverage may reflect lower confidence or engagement in this subject area.

Implications

1. Educators should identify and address specific challenges in subjects like Food and Beverage, where performance is relatively lower.
2. Tailored teaching strategies, such as hands-on training and mentorship, could help improve performance in weaker areas.
3. Encouraging self-efficacy through positive reinforcement and goal-setting may enhance overall academic outcomes.

Table 6
Final Grade of Participants from School B

School B	Equivalent	Food & Beverage		Housekeeping procedures		Culinary Arts		Total	
		f	%	F	%	f	%	F	%
1.5 - 1.0	Excellent	3	11.54	2	7.69	0	0.00	5	6.67
2.0- 1.6	Very Good	11	42.31	11	42.31	8	34.78	30	40.00
2.5 - 2.1	Good	9	34.62	10	38.46	9	39.13	28	37.33
3.0 - 2.6	Fair	3	11.54	3	11.54	6	26.09	12	16.00
Total:		26	100.00	26	100.00	23	100.00	75	100.00

The table presents the final grades of participants from School B across three major subjects: Food and Beverage, Housekeeping Procedures, and Culinary Arts. Key findings include:

1. Food and Beverage:

- The majority of participants (42.31%) achieved a "Very Good" grade (1.6–2.0).
- A smaller percentage (11.54%) received an "Excellent" grade (1.0–1.5), while 11.54% fell into the "Fair" category (2.6–3.0).

2. Housekeeping Procedures:

- Similar to Food and Beverage, 42.31% of participants achieved a "Very Good" grade. - Only 7.69% received an "Excellent" grade, while 11.54% fell into the "Fair" category.

3. Culinary Arts

- Grades were more evenly distributed, with 34.78% achieving "Very Good," 39.13% "Good," and 26.09% in the "Fair" category. No participants received an "Excellent" grade in this subject.

4. Overall Performance:

The highest percentage of participants (40.00%) achieved a "Very Good" grade across all subjects only 6.67% received an "Excellent" grade, while 16.00% fell into the "Fair" category. The relatively low percentage of "Excellent" grades across subjects aligns with **Goal-Setting Theory** (Locke & Latham, 2002), which suggests that specific and challenging goals can enhance performance. The lack of "Excellent" grades, particularly in Culinary Arts, may indicate a need for more rigorous or motivating academic targets.

The consistent performance in "Very Good" and "Good" categories supports **Expectancy-Value Theory** (Eccles & Wigfield, 2002), which posits that students' motivation and performance are influenced by their expectations of success and the value they place on the task. The balanced performance in Housekeeping and Food and Beverage may reflect students' confidence and interest in these areas.

Table 7
Final Grade of Participants from School C

School C	Equivalent	Food & Beverage		Housekeeping procedures		Culinary Arts		Total	
		f	%	F	%	f	%	F	%

1.5 - 1.0	Excellent	0	0.00	0	0.00	1	4.76	1	1.54
2.0- 1.6	Very Good	7	41.18	6	22.22	8	38.10	21	32.31
2.5 - 2.1	Good	6	35.29	17	62.96	10	47.62	33	50.77
3.0 - 2.6	Fair	4	23.53	4	14.81	2	9.52	10	15.38
Total:		17	100.00	27	100.00	21	100.00	65	100.00

The table presents the final grades of participants from School C across three major subjects: Food and Beverage, Housekeeping Procedures, and Culinary Arts. Key findings include:

- Food and Beverage
 - The majority of participants (41.18%) achieved a "Very Good" grade (1.6–2.0).
 - A significant percentage (23.53%) fell into the "Fair" category (2.6–3.0), while no participants received an "Excellent" grade (1.0–1.5).
- Housekeeping Procedures:
 - Most participants (62.96%) achieved a "Good" grade (2.1–2.5).
 - Only 22.22% received a "Very Good" grade, and none achieved an "Excellent" grade.
- Culinary Arts:
 - Grades were more evenly distributed, with 38.10% achieving "Very Good," 47.62% "Good," and 9.52% in the "Fair" category.
 - Only one participant (4.76%) received an "Excellent" grade.
- Overall Performance
 - The highest percentage of participants (50.77%) achieved a "Good" grade across all subjects.
 - Only 1.54% received an "Excellent" grade, while 15.38% fell into the "Fair" category.

The predominance of "Good" grades, particularly in Housekeeping Procedures, aligns with ****Self-Determination Theory**** (Deci & Ryan, 1985), which emphasizes the role of intrinsic motivation in academic performance. The high percentage of "Good" grades may reflect students' engagement and interest in practical, hands-on subjects like housekeeping. The lack of "Excellent" grades and the presence of "Fair" grades in Food and Beverage support ****Attribution Theory**** (Weiner, 1985), which suggests that students' perceptions of their abilities and effort influence their performance. The lower performance in Food and Beverage may indicate challenges in this subject, such as difficulty in mastering service-oriented tasks or lower confidence.

Implications

- Educators should focus on enhancing intrinsic motivation by making subjects like Food and Beverage more engaging and relevant to students' career goals.
- Providing additional support and resources for students struggling in specific areas, such as Food and Beverage, could help reduce the percentage of "Fair" grades.
- Recognizing and rewarding high achievers, even in small numbers, could encourage more students to strive for "Excellent" grades.

Table 8
Final Grade of Participants from School D –Non Formal Education

School D	Equivalent	Food & Beverage		Housekeeping procedures		Culinary Arts		Total	
Final Grade		f	%	F	%	f	%	F	%
1.5 - 1.0	Excellent	0	0.00	0	0.00	0	0.00	0	0.00
2.0- 1.6	Very Good	0	0.00	3	12.00	3	16.67	6	9.09
2.5 - 2.1	Good	15	65.22	10	40.00	10	55.56	35	53.03
3.0 - 2.6	Fair	8	34.78	12	48.00	5	27.78	25	37.88
Total:		23	100.00	25	100.00	18	100.00	66	100.00

The table presents the final grades of participants from School D (non-formal education) across three major subjects: Food and Beverage, Housekeeping Procedures, and Culinary Arts. Key findings include:

1. Food and Beverage:

- The majority of participants (65.22%) achieved a "Good" grade (2.1–2.5).
- A significant percentage (34.78%) fell into the "Fair" category (2.6–3.0), while no participants received a "Very Good" or "Excellent" grade.

2. Housekeeping Procedures

- Most participants (40.00%) achieved a "Good" grade, while 48.00% fell into the "Fair" category.
- Only 12.00% received a "Very Good" grade, and none achieved an "Excellent" grade.

3. Culinary Arts:

- The majority of participants (55.56%) achieved a "Good" grade, while 27.78% fell into the "Fair" category.
- Only 16.67% received a "Very Good" grade, and none achieved an "Excellent" grade.

4. Overall Performance:

- The highest percentage of participants (53.03%) achieved a "Good" grade across all subjects.
- A significant percentage (37.88%) fell into the "Fair" category, while only 9.09% achieved a "Very Good" grade.
- No participants received an "Excellent" grade in any subject.

The predominance of "Good" and "Fair" grades, with no "Excellent" grades, aligns with **Andragogy Theory** (Knowles, 1980), which focuses on adult learning principles. Non-formal education often caters to adult learners who may face challenges such as balancing education with work or family responsibilities, which can impact their academic performance. The lack of "Excellent" grades and the high percentage of "Fair" grades support **Barriers to Learning Theory** (Cross, 1981), which identifies factors such as limited time, resources, and support as obstacles to achieving higher academic outcomes. These barriers are often more pronounced in non-formal education settings.

Table 9
National Competency Results (NC II)

AREA OF COMPETENCY	School A		School B		School C		School D		Total	
	f	%	f	%	F	%	f	%	F	%
FB	25	25.77	26	34.67	17	26.15	23	34.85	91	30.03
HK	47	48.45	26	34.67	27	41.54	25	37.88	125	41.25
CC	25	25.77	23	30.67	21	32.31	18	27.27	87	28.71
Total:	97	100.00	75	100.00	65	100.00	66	100.00	303	100.00

The table presents the results of National Competency II (NC II) assessments for four schools (A, B, C, D) across three areas of competency: Food and Beverage (FB), Housekeeping (HK), and Cookery/Culinary (CC). The findings reveal the following trends: Housekeeping (HK) had the highest competency result across all schools, with 41.25% of the total participants excelling in this area. Schools A, C, and D showed stronger performances in HK compared to other competencies, indicating a potential emphasis or strength in this training area. Food and Beverage (FB) followed as the second most prominent area, accounting for 30.03% of the total competency results. School B and School D demonstrated higher percentages (34.67% and 34.85%, respectively), suggesting a stronger focus or proficiency in this domain. Cookery/Culinary (CC) accounted for 28.71% of the total results, with Schools C and B showing higher percentages compared to Schools A and D. This indicates a balanced yet slightly lesser focus on this area across the schools. Housekeeping Emphasis: Walker (2017) highlights that housekeeping remains a crucial operational function in hospitality due to its direct impact on guest satisfaction and hotel reputation. Food and Beverage Proficiency: Barrows, Powers, and Reynolds (2012) emphasize the growing demand for food and beverage skills as a key driver of customer satisfaction in the service sector. Balanced Curriculum Development: According to Tesone (2008), hospitality education programs must balance technical and soft skills development to ensure comprehensive industry readiness among graduates.

Table 10
Status of Employment of Participants from School A

School A	Food & Beverage		Housekeeping procedures		Culinary Arts		Total	
EMPLOYABILITY	f	%	f	%	f	%	F	%
Employed	8	32.00	11	23.40	3	12.00	22	22.68
Underemployed	8	32.00	13	27.66	12	48.00	33	34.02
Unemployed	9	36.00	23	48.94	10	40.00	42	43.30
Total:	25	100.00	47	100.00	25	100.00	97	100.00

The data in Table 10 provides a breakdown of the employment status of participants from School A across three fields: Food & Beverage, Housekeeping Procedures, and Culinary Arts. Here's an interpretation of the results:

1. Employed
 - In Food & Beverage, 32% of participants are employed.
 - In Housekeeping Procedures, 23.4% are employed.
 - In Culinary Arts, only 12% are employed.
 - Overall, 22.68% of participants from School A are employed.
2. Underemployed:
 - In Food & Beverage, 32% are underemployed.
 - In Housekeeping Procedures, 27.66% are underemployed.
 - In Culinary Arts, 48% are underemployed.
 - Overall, 34.02% of participants are underemployed.
3. Unemployed
 - In Food & Beverage, 36% are unemployed.
 - In Housekeeping Procedures, 48.94% are unemployed.
 - In Culinary Arts, 40% are unemployed.
 - Overall, 43.30% of participants are unemployed.

Key Observations:

Culinary Arts has the lowest employment rate (12%) and the highest underemployment rate (48%). Housekeeping Procedures** has the highest unemployment rate (48.94%). Food & Beverage** has a relatively balanced distribution across employment statuses, but still has a significant unemployment rate (36%). The data suggests that participants from School A face significant challenges in securing stable employment, particularly in Culinary Arts and Housekeeping Procedures. Underemployment is also a major issue, indicating that many participants are working in roles that do not fully utilize their skills or provide adequate hours. The data underscores the need for improved alignment between vocational training programs and labor market demands. Addressing underemployment and unemployment requires targeted interventions, such as enhancing job placement services, updating curricula to match industry needs, and fostering partnerships with employers.

Table 11
Status of Employment of Participants from School B

School B	Food & Beverage		Housekeeping procedures		Culinary Arts		Total	
	f	%	f	%	f	%	F	%
Employed	11	42.31	10	38.46	3	13.04	24	32.00
Underemployed	7	26.92	11	42.31	11	47.83	29	38.67
Unemployed	8	30.77	5	19.23	9	39.13	22	29.33
Total:	26	100.00	26	100.00	23	100.00	75	100.00

The data in Table 11 highlights the employment status of participants from School B across three fields: Food & Beverage, Housekeeping Procedures, and Culinary Arts. Overall, 32.00% of participants are employed, 38.67% are underemployed, and 29.33% are unemployed. The Food & Beverage sector shows the highest employment rate at 42.31%, but it also has significant underemployment (26.92%) and unemployment (30.77%). Housekeeping Procedures has a moderate employment rate of 38.46%, but underemployment is notably high at 42.31%. Culinary Arts stands out with the lowest employment rate (13.04%) and the highest underemployment rate (47.83%), alongside a substantial unemployment rate of 39.13%. These results suggest that participants from School B face challenges in securing stable and meaningful employment, particularly in Culinary Arts, where underemployment and unemployment are most pronounced.

The findings align with existing literature on vocational education and labor market outcomes. Feldman (1996) emphasizes that underemployment is a persistent issue in vocational training, as graduates often end up in jobs that do not fully utilize their skills, which is evident in the high underemployment rates across all fields. Psacharopoulos (1997) further supports this by noting that vocational education does not always guarantee employment, especially in oversaturated or low-demand fields, as seen in the high unemployment rates in Culinary Arts and Food & Beverage. Additionally, Riley et al. (2002) highlight that while the Food & Beverage sector provides employment opportunities, job stability and quality remain inconsistent, reflecting the mixed outcomes observed in this field. These insights underscore the need for vocational programs to better align with labor market demands, improve job placement services, and foster stronger industry partnerships to address underemployment and unemployment challenges.

Table 12
Status of Employment of Participants from School C

School C	Food & Beverage		Housekeeping procedures		Culinary Arts		Total	
	f	%	f	%	f	%	F	%
Employed	5	29.41	3	11.11	5	23.81	13	20.00
Underemployed	7	41.18	13	48.15	9	42.86	29	44.62
Unemployed	5	29.41	11	40.74	7	33.33	23	35.38
Total:	17	100.00	27	100.00	21	100.00	65	100.00

The data in Table 12 outlines the employment status of participants from School C across three fields: Food & Beverage, Housekeeping Procedures, and Culinary Arts. Overall, only 20.00% of participants are employed, while 44.62% are underemployed, and 35.38% are unemployed. In the Food & Beverage sector, 29.41% of participants are employed, but underemployment is higher at 41.18%, and unemployment stands at 29.41%. Housekeeping Procedures shows the lowest employment rate at 11.11%, with underemployment being the highest at 48.15% and unemployment at 40.74%. Culinary Arts has a moderate employment rate of 23.81%, but underemployment (42.86%) and unemployment (33.33%) remain significant. These results indicate that participants from School C face considerable challenges in securing stable employment, with underemployment being the most prevalent issue across all fields, particularly in Housekeeping Procedures.

The findings are consistent with existing research on vocational education and labor market outcomes. Feldman (1996) argues that underemployment is a widespread issue in vocational training, as graduates often work in jobs that do not fully utilize their skills or provide adequate hours, which aligns with the high underemployment rates observed in all three fields. Psacharopoulos (1997) further supports this by noting that vocational education does not always lead to employment, especially in fields with low demand or oversupply, as reflected in the high unemployment rates in Housekeeping Procedures (40.74%) and Culinary Arts (33.33%). Additionally, Riley et al. (2002) highlight that sectors like Food & Beverage, while providing employment opportunities, often struggle with job stability and quality, which is evident in the 29.41% unemployment rate in this field. These insights emphasize the need for vocational programs to better align with labor market demands, improve career guidance, and strengthen partnerships with industries to address the persistent issues of underemployment and unemployment.

Table 13
Status of Employment of Participants from School D- Non Formal Education

School D	Food & Beverage		Housekeeping procedures		Culinary Arts		Total	
	f	%	f	%	f	%	F	%
Employed	3	13.04	2	8.00	3	16.67	8	12.12
Underemployed	9	39.13	8	32.00	6	33.33	23	34.85
Unemployed	11	47.83	15	60.00	9	50.00	35	53.03
Total:	23	100.00	25	100.00	18	100.00	66	100.00

The data in Table 13 presents the employment status of participants from School D, which offers non-formal education, across three fields: Food & Beverage, Housekeeping Procedures, and Culinary Arts. Overall, only 12.12% of participants are employed, while 34.85% are underemployed, and a significant 53.03% are unemployed. In the Food & Beverage sector, 13.04% of participants are employed, but underemployment is higher at 39.13%, and unemployment is the highest at 47.83%. Housekeeping Procedures shows the lowest employment rate at 8.00%, with underemployment at 32.00% and unemployment reaching 60.00%. Culinary Arts has a slightly higher employment rate at 16.67%, but underemployment (33.33%) and unemployment (50.00%) remain substantial. These results highlight the challenges faced by participants in non-formal education programs, with unemployment being the most pressing issue, particularly in Housekeeping Procedures and Food & Beverage.

The findings align with existing literature on non-formal education and labor market outcomes. Psacharopoulos (1997) notes that non-formal education programs often struggle to provide participants with the skills and qualifications needed to secure stable employment, which is reflected in the high unemployment rates across all fields. Feldman (1996) emphasizes that underemployment is a common issue in such programs, as graduates frequently work in jobs that do not fully utilize their skills or provide adequate hours, consistent with the underemployment rates observed in Food & Beverage (39.13%) and Culinary Arts (33.33%). Additionally, Riley et al. (2002) highlight that sectors like Food & Beverage and Housekeeping, while offering entry-level opportunities, often lack job stability and career progression, contributing to the high unemployment and underemployment rates seen in this data. These insights underscore the need for non-formal education programs to strengthen their alignment with labor market demands, enhance skill development, and improve job placement support to address the persistent challenges of unemployment and underemployment.

Table 14
Test of the Significance of the Relationship between the Profiles and Employability of the Participants

Variables	df	Computed Value	Critical Value	p-value	Decision on Ho	Interpretation
Age versus Employability	10	6.279	18.307	0.791	Failed to Reject Ho	Not Significant

Gender versus Employability	2	6.028	5.991	0.049	Reject Ho	Significant C = 0.14 (Negligible)
Final Grade versus Employability	6	12.804	12.592	0.046	Reject Ho	Significant C = 0.20 (Negligible)
Area of Competency versus Employability	4	5.745	9.488	0.219	Failed to Reject Ho	Not Significant
School Graduated from versus Employability	6	13.280	12.592	0.039	Reject Ho	Significant C = 0.20 (Negligible)

The data in Table 14 examines the significance of the relationship between various profiles (age, gender, final grade, area of competency, and school graduated from) and the employability of participants. The results show that **gender**, **final grade**, and **school graduated from** have statistically significant relationships with employability, as the null hypothesis (H_0) was rejected for these variables (p-values of 0.049, 0.046, and 0.039, respectively). However, the strength of these relationships is negligible, as indicated by the contingency coefficients ($C = 0.14$ for gender, $C = 0.20$ for final grade, and $C = 0.20$ for school graduated from). On the other hand, **age** and **area of competency** do not show a significant relationship with employability, as the null hypothesis was not rejected (p-values of 0.791 and 0.219, respectively). This suggests that while gender, final grade, and school graduated from may influence employability to some extent, their impact is minimal. Age and area of competency, however, appear to have no meaningful effect on employability outcomes.

These findings are supported by existing literature. For instance, Psacharopoulos (1997) highlights that educational attainment (reflected in final grades) and institutional reputation (school graduated from) can influence employability, though the effect size is often small, which aligns with the negligible contingency coefficients observed in this study. Similarly, Riley et al. (2002) note that gender can play a role in employment outcomes, particularly in fields with gender-based stereotypes, but the impact may not be substantial. On the other hand, Feldman (1996) argues that age and specific areas of competency are less likely to significantly affect employability in vocational settings, as employers often prioritize skills and experience over these factors.

These insights suggest that while certain demographic and academic factors may influence employability, their overall impact is limited, emphasizing the need for a more holistic approach to improving employment outcomes, such as enhancing skill development and strengthening industry partnerships.

-Table 15
Relationship between the National Competency Assessments and Academic Performance of the Participants

Variables	df	Computed	Critical	p-value	Decision on H_0	Interpretation
Type of Competency versus Grade (School A)	2	13.818	5.991	0.001	Reject H_0	Significant $C=0.21$ (negligible)
Type of Competency versus Grade (School B)	2	1.960	5.991	0.375	Failed to Reject H_0	Not Significant
Type of Competency versus Grade (School C)	2	2.799	5.991	0.247	Failed to Reject H_0	Not Significant
Type of Competency versus Grade (School D)	2	1.963	5.991	0.375	Failed to Reject H_0	Not Significant

Type of Competency versus Grade (All Schools)	4	9.181	9.488	0.057	Failed to Reject Ho	Not Significant
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The data in Table 15 examines the relationship between national competency assessments and academic performance (grades) across four schools (A, B, C, and D) and collectively for all schools. For **School A**, the relationship between the type of competency and grades is statistically significant (p -value = 0.001), as the null hypothesis (H_0) was rejected. However, the strength of this relationship is negligible, as indicated by the contingency coefficient ($C = 0.21$). For **Schools B, C, and D**, no significant relationship was found between competency type and grades, as the null hypothesis was not rejected (p -values of 0.375, 0.247, and 0.375, respectively). When analyzing all schools collectively, the relationship remains insignificant (p -value = 0.057), with the null hypothesis failing to be rejected. These results suggest that while there may be a slight association between competency type and academic performance in School A, this relationship is not strong or consistent across other schools or overall.

These findings align with existing literature on the relationship between competency assessments and academic performance. Psacharopoulos (1997) argues that while competency assessments are designed to measure practical skills, their correlation with academic performance is often weak or inconsistent, as academic grades may focus more on theoretical knowledge rather than applied skills. This is reflected in the negligible and inconsistent relationships observed in the data. Similarly, Riley et al. (2002) note that the impact of competency assessments on academic outcomes can vary significantly across institutions, depending on factors such as curriculum design and teaching methods, which may explain why School A shows a significant relationship while the other schools do not. Feldman (1996) further emphasizes that competency assessments and academic performance measure different dimensions of learning, which can lead to weak or non-significant correlations, as seen in the results for Schools B, C, D, and the combined analysis. These insights highlight the need for a more integrated approach to education that bridges the gap between theoretical knowledge and practical skills to ensure that both competency assessments and academic performance are aligned.

Summary of Findings

Based on the data gathered, several key findings emerged. Regarding the demographic profile of the subjects, the majority were between the ages of 17 and 18, with females constituting a larger portion of the sample. Most students achieved final grades ranging from 2.0 to 2.6, classified as "very good." Additionally, the majority of students were found to belong to the Housekeeping Service NC II category.

The employability status of graduates varied across schools. In School A, 43.30% of the graduates were unemployed, while in School B, 38.67% were underemployed. Similarly, in School C, 44.62% were underemployed, and in School D, 53.03% were unemployed. These findings indicate a significant presence of underemployment and unemployment among graduates.

Analyzing the relationship between demographic profile and employability, it was found that age and area of competency had no significant influence on employability. However, gender, final grades, and the school from which the students graduated showed significant correlations with employability outcomes.

Examining the relationship between national competency assessment results and academic performance, variations were observed among different schools. In School A, the computed value (13.818) exceeded the critical value (5.991, $df = 2$), leading to the rejection of the null hypothesis and suggesting that academic grades had a negligible influence on competency. In contrast, Schools B, C, and D showed no significant relationship between academic performance and competency, with computed values below critical thresholds. Additionally, when core courses were analyzed, no significant relationship was found in Schools B, C, and D, though a slight but significant relationship emerged in School A. When data from all four schools were combined, no significant relationship between academic performance and national competency was identified. These findings suggest that while academic performance may influence competency in isolated cases, it is not a consistent determinant. Instead, other factors such as gender and school of graduation appear to play a more significant role in employability outcomes.

Conclusion

Based on the findings of the study, the majority of participants were within the age bracket of 17–18 years old, with most being female. A significant number of participants received grades ranging from 2.0 to 2.6, categorized as "good," and most belonged to the Housekeeping Service NC II program. In terms of employment status, the majority of unemployed participants were from School D, followed by School A, while most employed participants came from School B. Regarding the inferential question on the relationship between profile and employability, the results indicate that age has no significant relationship with employability. However, gender, final grades, and the school where participants graduated were found to have significant relationships with employability.

Furthermore, the study revealed no significant relationship between the National Competency II (NC II) results and academic performance, suggesting that the grades obtained in academic subjects are not directly relevant to NC II outcomes.

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