

Integration of Entrepreneurial Activities and Entrepreneurial Skills among Home Economics – Cookery Students

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Abstract

This study aimed to find out the significant relationship between the perceived integration of entrepreneurial activities and perceived integration of entrepreneurial skills among one hundred eighty-one (181) Home Economics - Cookery students from different schools within the Division of San Pablo City in which majority of the respondents were dominated by female gender. This study also attempted to find out how gender moderates the relationship of the perceived integration of entrepreneurial activities and perceived integration of entrepreneurial skills of the respondents. The researcher used descriptive correlational research design, purposive sampling technique, and adapted research instruments for data collection. The findings of this study demonstrated that the perceived integration of entrepreneurial activities in terms of planning, budgeting, production, and marketing were integrated in the learning competencies of the home economics cookery student wherein the perceived integration of entrepreneurial activities can enhance the perceived entrepreneurial skills like innovation, resilience, communication, problem-solving, decision-making, and financial literacy. This paper also concluded that there is a strong significant relationship between the perceived integration of entrepreneurial activities and the perceived entrepreneurial skills, and sex profile does no moderation on this relationship. Therefore, the researcher recommended to strengthen entrepreneurial integration, expand business simulation through mentorship and industry partnership and provide technical assistance to the teachers to strengthen teacher's capacity in delivering integrated lessons.

Keywords: Budgeting; Communication; Decision-making; Entrepreneurial Activity; Entrepreneurial Skills; Financial Literacy; Innovation; Marketing; Planning; Problem-solving; Production; Resilience; Sex Profile.

1. Introduction

According to Ferreira (2011), not everyone needs to become an entrepreneur, but all members of the society needs to be more entrepreneurial. Everyone can develop entrepreneurial qualities when given access to entrepreneurial activity and education.

Entrepreneurial activity enrich intention of pursuing opportunities, initializing creative concepts, and producing valuable products or services that can foster social and economic development. Instead of just having the desire to launch a business, it encompasses the actual activities of entrepreneurs such as organizing, managing, planning, and innovating. Entrepreneurial activity can be done through participation in entrepreneurship programs, hands-on projects, exposure to actual businesses, and experiential learning. By engaging in entrepreneurial activities, one can develop entrepreneurial skills like critical thinking, decision-making, leadership, communication, financial literacy, and adaptability. These skills are crucial for starting and maintaining business as well as developing an entrepreneurial mindset that promotes individual creativity, adaptability and employment (Kissi, E. et al 2020).

Entrepreneurial skills acquired in entrepreneurial activity was both helpful in entrepreneurship and home

economics. Entrepreneurial activities in home economics enhance student's practical skills such as cooking, sewing and innovating products that can create ease of doing business (Delas alas et al 2023). Through effective teaching of entrepreneurial activities students could be prepared with the essential marketable and entrepreneurial skills to be qualified for employment (Daluba, 2009). Entrepreneurial activities can be strengthened through integration to curriculum to enhance knowledge and entrepreneurial skills and help students be more equipped for self-employment (Olowe, 2008). However, curricular improvements in the Technical Vocational Livelihood track in senior high school were implemented to give graduates more options for earning after graduation. One of the program's objectives is to investigate different business options and entrepreneurial activity rather than primarily depending on the labor market. Graduates will have the choice to be self-employed through entrepreneurship ((Bureau of Secondary Education, DECS, as cited in Philippine Home Economics Association, 1994, p. 57). In Nigeria, the purpose of integrating entrepreneurial activities in home economics is to develop student's entrepreneurial skills for self-employment (Abanobi, 2017). It is evident that the focus of entrepreneurial activities in home economics will focus on educating people and families on how to manage their resources in order for them to satisfy their needs.

However, despite the fact that these curriculum innovations encourage entrepreneurial activities and enhance entrepreneurial skills in both entrepreneurship and home economics, their efficacy is often hindered by the enduring gender discrimination that shapes the way in which male and female students and entrepreneurs are portrayed in society.

Students' entrepreneurial behavior was influenced by their gender. On the other hand, supportive educational and cultural environments can reduce this gap and empower more women to engage in entrepreneurship (Daim, T. et al, 2016). Women's perception of entrepreneurship was influenced by the alignment of their gender-role and cultural expectations for entrepreneurs. On the other hand, inclusive entrepreneurial environments can facilitate this alignment (Liñán, F. et al 2022). Women's entrepreneurship greatly enhances family income and community development, particularly when bolstered by education, skills training, and strong social networks (Purba, T. et al. 2025). Conversely, male students in home economics challenge traditional gender roles despite of showing that practical life skills have no gender.

Given these challenges, it is important to investigate the perceived of integration entrepreneurial activities and perceived entrepreneurial skills among Home Economics – Cookery while taking into considerations the moderating role of sex profile. This paper aims to determine how male and female students might overcome social preconceptions, develop effective entrepreneurial competencies, and boost their readiness for future career and opportunities. This study also helps understand the differ perspectives of the society to support gender inclusivity and creativity in the classroom.

1.1 Background of the Study

Education is the process of imparting and obtaining knowledge, skills and desirable attitudes. It has made a crucial contribution to the country's economic growth, enhancement, and societal inclusion (Lamichhane, 2018). One of the vital forces for economic development was entrepreneurship. Entrepreneurship is the crucial economic driver that can foster growth, innovation, and change in society (Dromereschi, M. I. (2013). Policymakers believe that enhancing entrepreneurship through entrepreneurial education can lead to strengthening stages of business growth (European Commission, 2006). Raposo, M. L. B., & Paço, A. M. F. D. (2011) stated in their study that relevant literature recommends significant correlation between scheme generation, education, entrepreneurial presentation, education and activity.

According to Origenes, A. M. D., & Andal, E. Z. (2024), there is a significant relationship between the integration of entrepreneurial activities and entrepreneurial skills. Entrepreneurial activities are efficient and effective in assisting home economics students specializing cookery with budgeting, planning, production and marketing for livelihood projects in Cookery. Schelfhout et al. (2016), stated that integration of entrepreneurial activities of students is expected to possess an entrepreneurial competency which allows students on business start-ups. Hua et. al (2022) stated in their study that between entrepreneurial activities and entrepreneurial abilities has significant relationship by participating in entrepreneurial activities like business planning, creative courses, entrepreneurship seminars and training, innovation to consistently enhance their entrepreneurial skills. Additionally, experiential and practical entrepreneurial activities in schools can improve student's skills and capabilities. Moreover, Pham M. et al (2023) showed in their study that gain entrepreneurial knowledge through entrepreneurial activities and experiences can improve entrepreneurial skills and confidence to students which can help them digital business. Zhang, H. (2022) stated that hands-on entrepreneurial activities such as business simulations, on the job training, business planning can foster students' entrepreneurial skills like opportunity seeking, decision-making, risk-taking as well as leadership and management skills. Entrepreneurial activities are not just an additional competency to education programs but also essential learning experiences that can transfer knowledge into skills. When students engage in different entrepreneurial activities it can also improve their self-efficacy and intention. Both entrepreneurial knowledge and practical entrepreneurial activities can strengthen student's skills and motivation needed for doing business.

However, researcher on business and entrepreneurship believes that there is a higher dominance of

entrepreneurship for men than for women due to their ability to enter unsecure areas, narrow focus and visionary approach (Veena, M., & Nagaraja, N., 2013). In Germany, Strohmeier, R., Tonoyan, V., & Woywode, M. (2010) stated that females are less likely to be jack of all trades than males. Women who own businesses are fewer than men who own businesses. They have problems like not having enough resources, not meeting society's expectations, and not being able to get funding (Minitti, 2009; Tsyganova et al., 2010; Geeks Premier League, 2023). Research shows that women often need more training, have less confidence and drive to start their own businesses, and have less experience than men (Schwab, 2021). In the Philippines, entrepreneurship is part of home economics, which is usually seen as a subject for women. This is different from technical courses, which are usually seen as for men (Chua C.T., 2018). One of the respondents of Cansico et al. (2020) in the study about "Gender Bias in Technical Vocational Livelihood Program: A Qualitative Study on the Experience of Male Students in Home Economics Strand" stated that a male classmate was told that it wasn't appropriate for him to become a cook because it was not that hard physically; it was more of a woman's job. Kabia (2022) stated that female students are more interested on home economics strand. Lee, E. S., & Jun, M. (2019) study about participation on home economics learning states that female students showed better results in product making, and procedures for food and drink services than male students.

Having had discrimination against male students in home economics – cookery (Lee, E. S., & Jun, M., 2019; Cansico et al., 2020; Kabia, 2022) and female entrepreneurs in entrepreneurship (Veena, M., & Nagaraja, N., 2013; Strohmeier, R., Tonoyan, V., & Woywode, M., 2010; Minitti, 2009; Tsyganova et al., 2010), there is still a percentage of females doing entrepreneurship and males taking home economics – cookery. Studies have indicated that there is a high possibility of growth in the quantity of female entrepreneurs in the Philippines, which will also contribute to the increasing number of females engaging in paid employment and compensation (Investing in Women, 2017). Gusto's survey about "The Rise of Women Entrepreneurs" on 2020 found that 47% of new business owners are female, compared to only 29% in 2019. After three years, women are still more likely to start their own businesses. In 2021, 49% of new businesses were owned by women entrepreneurs, and 47% in 2022. Moreover, Jun (2021) asserts that male students enroll in home economics courses to acquire knowledge and essential skills pertinent to family life and home economics-related professions which can facilitate their overall development.

Therefore, this research study aims to determine the perceived integration of entrepreneurial activities and perceived entrepreneurial skills while taking into considerations the moderating role of sex profile. Thus, the perceived entrepreneurial skills of male students in entrepreneurial activities are higher than those of female students, or the perceived entrepreneurial skills of female students in Home Economics – Cookery is higher than those of male students or other way around. Also, this study helps students choose their future career tracks considering their sex profile as well as reduce the discrimination of both male and female in entrepreneurship and home economics.

2. Methodology

This section presented the description of the research design, research setting, population and sample technique, data gathering procedure, research instrument, and statistical treatment of data.

2.1. Research Design

The descriptive correlational research design was used. A descriptive correlational design used in investigating the relationship between two or more variables within a single group. In this research study, the researcher determined the relationship between the perceived integration of entrepreneurial activities and perceived entrepreneurial skills among Home Economics - Cookery students within the Schools Division of San Pablo City, Laguna. Also, the researcher investigated if sex profile does moderation on the perceived integration of entrepreneurial activities and perceived entrepreneurial skills of the respondents.

2.2. Respondents of the Study

The respondents are Senior High School students currently taking Home Economics - Cookery within the Schools Division of San Pablo City Laguna in academic year 2025 - 2026. Specifically, sixty-three (63) female students and twenty-six (26) male students are from Crecencia Drucila Lopez Senior High School, eleven (11) female students and twenty-two (22) male students are from San Bartolome Integrated High School, thirty (30) female students and thirteen (13)

male students are from San Cristobal Integrated High School and ten (10) female students and six (6) male students are from San Vicente Integrated High School. Overall, sixty-seven (67) are male respondents, and one hundred fourteen (114) are female respondents with the total of one hundred eighty-one (181) number of respondents.

2.3. Population and Sampling Technique

This study was sought to assess the relationship on the integration of entrepreneurial activities and entrepreneurial skills among home economics – cookery students as well as determined how sex profile moderates the relationship.

In this study, participants are chosen based on pre-defined criteria that align with the purpose of the study. Therefore, purposive sampling technique was used because all Senior High School students currently taking Technical-Vocational-Livelihood Track, Home Economics – Cookery within the Division of San Pablo City, Laguna.

2.4. Data Gathering Procedure

This research study was consisted of two parts. The first part of this paper explained how entrepreneurial activities were integrated in Home Economics – Cookery, while the second part illustrated the data collection procedure.

The first part of this study involves the discussion of integrated entrepreneurial activities in Home Economics – Cookery. The integration of entrepreneurial activities was also indicated on the curriculum guide of Home Economics – Cookery, specifically the Personal Entrepreneurial Competencies as the first lesson to be discussed before the discussion of core competencies. Additionally, the researcher discussed concepts of entrepreneurial activities such as entrepreneurial planning, budgeting, production and marketing that can strengthened the knowledge of the students in entrepreneurship before the start of data collection procedure.

On the second part of this study, the data gathering procedure begun with the development and verification of the research instrument. After the construction of the survey questionnaire, the researcher had sought for external validators to check and give comments and suggestions to the survey instrument. External validators are consisting of Technology and Livelihood Education Coordinators from San Bartolome Integrated High School, San Cristobal Integrated High School, San Vicente Integrated High School, and the School Principal from Crecencia Drucila Lopez Senior High School. After the validation, pilot testing has done on the first week of third quarter in the academic school year 2025 – 2026. The validated instrument was administered to fifteen (15) males and fifteen (15) females' students who are not part of the respondents. This is done to check the index discrimination and index difficulty of the instrument.

The researcher also asked permission from Schools Division Superintendent, Education Program Supervisor in Technology and Livelihood Education and School Head of Crecencia Drucila Lopez Senior High School, San Bartolome Integrated High School San Cristobal Integrated High School and San Vicente Integrated High School, through a letter of request to conduct the research study. The researcher conducted the research study with the consent of the School Principals.

The researcher administered printed survey questionnaires to the respondents on the second week of the first quarter on their second semester. All Home Economics - Cookery in Crecencia Drucila Lopez Senior High School, San Bartolome Integrated High School, San Cristobal Integrated High School and San Vicente Integrated High School answered the survey questionnaires. Moreover, all students are briefed on the study's general objective, importance and privacy of their participation. Instructions are also provided to guide students in completing the questionnaire correctly.

This study ensured that there was an ethical conduct of the research and avoid the manipulation of respondents. It supports the comprehensive and reliable data collection.

2.5. Research Instrument

The researcher adapted the research instrument from the study of Origenes, A. M. D., & Andal, E. Z. (2024) about "Integration of Livelihood Project in the Cookery Specialization and Entrepreneurship Skills Development among Grade 11-TVL Students".

The research instrument was modified to address the objectives of the study comprehensively. The research instruments were consisted of three parts; the first part covered the gender of the respondents. The second part focused on the perceived integration of entrepreneurial activities integrated in Home Economics – Cookery and the third part covered the research questions to measure the perceived entrepreneurial skills of the respondents.

Each variables contains important statements on the variables, then the respondents provided their impressions on a 4-point Likert scale. Perceived integration of entrepreneurial activities and entrepreneurial skills in Home Economics - Cookery were interpreted from “Strongly Agree” to “Strongly Disagree”. This kind of format provides nuanced understanding of the perceptions of the respondents. Moreover, “Strongly Agree” scale of agreement also indicates that the perceived integration of entrepreneurial activities was “Highly Integrated”, the “Agree” scale of agreement indicates “Integrated”, the “Disagree” scale of agreement indicates “Least Integrated” and the “Strongly Disagree” indicates “Not Integrated at all”. Additionally, “Strongly Agree” scale of agreement also indicates that the perceived entrepreneurial skills of students correspond to verbal interpretation of “Highly Skilled”, the “Agree” scale of agreement indicates “Skilled”, the “Disagree” scale of agreement indicates “Developing Skill” and the “Strongly Disagree” indicates “Not Skilled”.

2.6. Statistical Treatment of Data

The data gathered were interpreted through the following statistical treatment: frequency, percentage distribution, mean and standard deviation were used for descriptive problem and Pearson moment correlation coefficient (Pearson R) was used for inferential questions.

The frequency and percentage distribution was used in this study to determine the responses of male and female respondents in the perceived integration of entrepreneurial activities integrated in Home Economics – Cookery as well as the perceived entrepreneurial skills of the respondents.

Mean was used to describe the respondent's perception in the integration of entrepreneurial activities and entrepreneurial skills among Home Economics students specializing in Cookery. This was provided with a summary of the data and indicated how much variation existed within the responses.

Pearson Moment Correlation Coefficient (Pearson R) was used to help the researcher in understanding how these variables were interrelated and whether changes in one variable were associated with changes in another.

3. Results and Discussion

3.1. Profile of the Respondents as to Sex Profile

As shown in the Table 1 below, the result presented the distribution of the respondents in terms of sex profile. It can be seen from the table that out of one hundred eighty-one respondents with a frequency count of one hundred fourteen or 63% are female respondents, while the remaining sixty-seven respondents or 37% are male respondents. This only shows that majority of the Home Economics - Cookery students was dominated by female.

Table 1. Distribution of the Respondents in terms of Sex Profile

Sex Profile	F	%
Male	67	37.0
Female	114	63.0
TOTAL	181	100.0

3.2. Perceived Integration of Entrepreneurial Activities in Home Economics - Cookery

3.2.1. Perceived Integration of Entrepreneurial Activities as to Planning

Table 2 shown the respondent's perceived integration of entrepreneurial activities as to planning. It can be seen from the results that among all indicators, indicator one obtained the highest mean score of 3.54 and with 0.58 standard deviation and was verbally interpreted as Highly Integrated.

Table 2. Perceived Integration of Entrepreneurial Activities as to Planning

Indicators	Mean	SD	VI
1. I understand the importance of effective planning in achieving goals.	3.54	0.58	Highly Integrated
2. I feel more confident in my ability to create detailed and organized plans.	3.23	0.69	Integrated
3. I enhanced my understanding of breaking down complex tasks into manageable steps within a plan.	3.13	0.73	Integrated
4. I believe I can now develop plans to potential obstacles and contingency measures.	3.10	0.79	Integrated
5. I can effectively allocate resources and time effectively within a plan.	3.12	0.75	Integrated
6. I can now better analyze the feasibility and practicality of plans.	3.20	0.74	Integrated
7. I can consider long-term goals and strategic alignment in planning efforts.	3.24	0.74	Integrated
8. I feel more equipped to monitor progress and make necessary adjustments in the plans.	3.17	0.73	Integrated
9. I can apply practical tools and techniques to improve planning skills.	3.30	0.71	Integrated
10. I enhanced my planning skills for the upcoming tasks and projects.	3.29	0.79	Integrated
Overall	3.23	0.51	Integrated

Legend: 3.50-4.00 (Highly Integrated); 2.50-3.49 (Integrated); 1.50-2.49 (Least Integrated); 1.00-1.49 (Not Integrated at all)

The results show that respondents believe that entrepreneurial planning is an important part of being an entrepreneur. It indicates that effective planning was deeply embedded in their entrepreneurial competencies and thereby augmenting their capacity to foresee challenges, structure tasks, and establish explicit objectives. The respondents also developed relating planning skills that can help them achieve entrepreneurial practices. On the other hand, indicator four obtained the lowest mean score of 3.10 and with 0.79 standard deviation and was verbally interpreted as Integrated. The results show that even though respondents know how to make plans, they still think about what challenges and obstacles may be encountered. Although respondents can expect problems, they can still improve their skills in contingency planning to help make entrepreneurial planning practices more flexible and stronger. Furthermore, the overall mean score of 3.23 and a standard deviation of 0.51 of entrepreneurial planning shows that respondents are equipped at the different skills needed for entrepreneurial planning. It is evident that they demonstrate their capability to consistently employ planning-related skills, including goal setting, organization, and decision-making, across various tasks. Therefore, the curriculum effectively integrated entrepreneurial planning and developed planning-related entrepreneurial skills of Home Economics - Cookery students which can help them ready to start a business and used their planning and cooking-related skills.

According to Quijano (2024) effective planning for teaching and performance-based assessment can help Cookery students improve their skills and reach their goals. This was supported by the study of Lumbo, H. (2025) which emphasized that efficient lesson planning and practical laboratory sessions can enhance student performance in Cookery.

3.2.2. Perceived Integration of Entrepreneurial Activities as to Budgeting

Table 3 illustrated the respondent's perceived integration of entrepreneurial activities as to budgeting. It can be seen from the results that all indicators were verbally interpreted as Integrated. Indicator one obtained the highest mean score of 3.48 and with 0.73 standard deviation. This result shows that respondents know the importance of budgeting especially when it comes to creating budget. It shows that budgeting is an important entrepreneurial skill for managing finances well.

Table 3. Perceived Integration of Entrepreneurial Activities as to Budgeting

Indicators	Mean	SD	VI
1. I understand the importance of creating a budget.	3.48	0.73	Integrated
2. I feel more confident in my ability to allocate funds to different expense categories.	3.14	0.67	Integrated
3. I enhanced my understanding on tracking and managing expenses within a budget.	3.18	0.73	Integrated
4. I can now prioritize financial plans to potential obstacles and contingency measures.	3.07	0.75	Integrated
5. I can now effectively demonstrate how to adapt budget when unexpected expenses arise.	2.98	0.90	Integrated
6. I can now differentiate essential and non-essential expenses.	3.13	0.80	Integrated
7. I can set long-term financial goals and consider them on budgeting.	3.19	0.86	Integrated
8. I feel more equipped to analyze my spending habits and make meaningful adjustments in the budget.	3.23	0.75	Integrated
9. I can now apply practical tools and strategies to manage finances better.	3.13	0.77	Integrated
10. I Improved my financial management skills.	3.33	0.70	Integrated
Overall	3.19	0.51	Integrated

Legend: 3.50-4.00 (Highly Integrated); 2.50-3.49 (Integrated); 1.50-2.49 (Least Integrated); 1.00-1.49 (Not Integrated at all)

On the other hand, indicator five obtained the lowest mean scores of 2.98 and with 0.90 standard deviation. This result means that students might struggle to adapt their financial plans when unexpected situations arise. So, the necessity for enhanced instruction and practical exercises centered on budget adaptability and financial problem-solving may be emphasized to further develop their entrepreneurial competencies in budgeting specifically in effective demonstration on how respondents will adapt budget when unexpected expenses arise. Moreover, the overall mean score of 3.19 and a standard deviation of 0.51 which verbally interpreted as Integrated, indicates that the respondents may possess a strong level of understanding in entrepreneurial budgeting. Entrepreneurial budgeting was well integrated in the Home Economics – Cookery curriculum which helps students become more literate on financial management. Furthermore, the result also suggests that respondents still need to keep practicing their financial skills in real life to build their confidence and adaptability in business situations. This makes financial budgeting play an important part on culinary training and activities.

The Department of Education Region IV-A CALABARZON has made sure that cookery students learn how to budget by giving and aligning curriculum that follows TESDA's performance standards. According to Lumbo (2025) proper budgeting on how to use resources and materials in cooking lessons is very important for improving student performance and making sure that resources are used wisely. Moreover, Quijano (2024) stated that matching teaching materials with performance-based tests helps students become more competent and reach their learning goals.

3.2.3. Perceived Integration of Entrepreneurial Activities as to Production

Table 4 presented the respondent's perceived integration of entrepreneurial activities as to production. It can be seen from the results that all indicators were verbally interpreted the as Integrated. 1.

Table 4. Perceived Integration of Entrepreneurial Activities as to Production

Indicators	Mean	SD	VI
1. I improved my skills in product development.	3.33	0.65	Integrated
2. I enhanced my knowledge and techniques to improve the quality of my products.	3.37	0.68	Integrated
3. I broaden my understanding on the market trends and consumer preferences related to my products.	3.19	0.76	Integrated
4. I can navigate challenges specific to food product production in an entrepreneurial setting.	3.12	0.77	Integrated
5. I strengthen my knowledge about efficient production techniques	3.20	0.70	Integrated
6. I can optimize production costs without compromising quality.	2.92	0.89	Integrated
7. I can connect gap between theoretical knowledge and hands-on experience in cookery.	3.25	0.68	Integrated
8. I can apply the skills I acquired from the specialized subject to create marketable products.	3.21	0.75	Integrated
9. I can foster collaboration and knowledge sharing among my fellow learners to enhance the variety and appeal of cookery products.	3.29	0.66	Integrated
10. I feel well-prepared to handle challenges and opportunities in production.	3.21	0.72	Integrated
Overall	3.21	0.50	Integrated

Legend: 3.50-4.00 (Highly Integrated); 2.50-3.49 (Integrated); 1.50-2.49 (Least Integrated); 1.00-1.49 (Not Integrated at all)

Moreover, indicator two obtained the highest mean scores of 3.37 and with standard deviation of 0.68. Therefore, entrepreneurial production-related activities were integrated into Home Economics – Cookery to effectively foster the development of production competencies, particularly in augmenting knowledge, practice, and techniques for enhancing product quality. However, indicator six obtained the lowest mean scores of 2.92 and with 0.89 standard deviation. This means that students may be struggling in finding a balance between keeping costs low and keeping quality high. So, Home Economics – Cookery needs more focused on instruction and hands-on production activities to improve their skills in managing costs and using resources wisely. Moreover, the overall mean score of 3.21 and a standard deviation of 0.50 show that entrepreneurial production was properly integrated in the curriculum and develop production skills. The result implies that it was important to improve product quality and business performance by integrating entrepreneurial activities that focused on production. This helped Home Economics – Cookery students learn more about production and accomplish it effectively.

According to Capiña, M. V. (2021), stated that production can affect the business performance therefore, it is important to enhance knowledge and techniques to improve products quality. Additionally, Davis (2014), continuous improvement and learning of strategies and techniques can enhance the production of products in terms of quality. Also, Bhaskar, H. L. (2020), concluded that organizations that make investments in talent development and knowledge acquisition see improvements in customer satisfaction, product quality, and competitiveness.

3.2.5. Perceived Integration of Entrepreneurial Activities as to Marketing

Table 5 presented the respondent's perceived integration of entrepreneurial activities as to marketing. It can be seen from the results that all indicators were verbally interpreted as Integrated. Indicator two obtained the highest mean scores of 3.35 and with 0.64 standard deviation. The results show that respondents are equipped at figuring out target market interest in culinary products and services. On the other hand, indicator eight obtained the lowest mean score of 3.00 and with 0.86 standard deviation. This means that students might need more help and hands-on experience with data analysis to have wise marketing decisions. Strengthening this area through practical activities and real-world examples may improve their overall marketing effectiveness in entrepreneurial culinary ventures.

Table 5. Perceived Integration of Entrepreneurial Activities as to Marketing

Indicators	Mean	SD	VI
1. I understand the key principles and concepts of marketing.	3.26	0.75	Integrated
2. I can identify target audiences for cookery products/services confidently.	3.35	0.64	Integrated
3. I can create persuasive marketing messages.	3.15	0.70	Integrated
4. I can now develop marketing strategies that align with the needs and preferences of customers.	3.17	0.75	Integrated
5. I can utilize various marketing channels and platforms.	3.02	0.82	Integrated
6. I can now analyze market trends and consumer behavior.	3.16	0.78	Integrated
7. I can consider ethical and social responsibility in marketing strategies.	3.20	0.78	Integrated
8. I can design marketing campaigns and making data-driven decisions.	3.00	0.86	Integrated
9. I can apply practical tools and techniques that can improve marketing outcomes.	3.24	0.72	Integrated
10. I can now practice real-world marketing challenges.	3.21	0.81	Integrated
Overall	3.18	0.54	Integrated

Legend: 3.50-4.00 (Highly Integrated); 2.50-3.49 (Integrated); 1.50-2.49 (Least Integrated); 1.00-1.49 (Not Integrated at all)

Moreover, the overall mean score of 3.18 and with 0.54 standard deviation shows that respondents are competent in entrepreneurial marketing. The results indicate that students are sufficiently equipped to implement entrepreneurial marketing principles in practical and entrepreneurial settings.

According to Collinson and Shaw (2001) highlight entrepreneurial marketing as a root for networking, resourcefulness and management competencies. Proactiveness, innovativeness and resources-conscious marketing approach are applicable for both macro and micro-organizations (Kraus et. al, 2010).

Summary of the Perceived Integration of Entrepreneurial Activities among Home Economics – Cookery Students

As shown in the Table 6 below, the entrepreneurial planning stands out as a highest perceived integrated entrepreneurial activity of the respondents with a mean score of 3.23 and 0.51 standard deviation which was verbally interpreted as Integrated.

The result indicates that students have an ability to set goals, organize tasks, and make informed decisions in their entrepreneurial activities. Moreover, entrepreneurial planning was effectively highlighted in the curriculum and significantly enhance students' readiness for entrepreneurial endeavors to successfully oversee culinary projects. Effective entrepreneurial planning was deemed essential and consistently acknowledged as the primary catalyst for the successful integration of entrepreneurial activities in Home Economics – Cookery. On the other hand, entrepreneurial marketing obtained the lowest mean score of 3.18 and a standard deviation of 0.54 means that compared to planning, budgeting, and production, marketing skills may need to be improved through

more real-world experience and hands-on marketing activities to make students feel more confident and effective in real-world business situations.

Table 6. Summary Table of the Perceived Integration of Entrepreneurial Activities among Home Economics – Cookery Students

Variables	Mean	SD	VI
1. Planning	3.23	0.51	Integrated
2. Budgeting	3.19	0.51	Integrated
3. Production	3.21	0.50	Integrated
4. Marketing	3.18	0.54	Integrated
Overall	3.20	0.52	Integrated

Legend: 3.50-4.00 (Highly Integrated); 2.50-3.49 (Integrated); 1.50-2.49 (Least Integrated); 1.00-1.49 (Not Integrated at all)

The overall mean score of 3.20 and a standard deviation of 0.52 across all variables are verbally interpreted as Integrated. Also, the results show that entrepreneurial activities were integrated in Home Economics – Cookery. Therefore, the students developed the entrepreneurial skills related to planning, budgeting, production, and marketing. These entrepreneurial skills may be used in conceptualizing business ideas and concepts.

According to Success O.E., planning is the most important management tool to the good performance of a business organization. Additionally, Barcibal, H. E. A., & Chavez, J. C. (2025), highlighted that effective lesson and laboratory session planning significantly enhances student skills and product outcomes. It stated that planning is the key management function that can influence the budgeting, production, and marketing in cookery education. Therefore, effective entrepreneurial planning importance in delivering effective and efficient learning, as well as producing quality product. It can ease organized lessons, and aids students to confidently apply techniques for anticipated learning outcomes. Moreover, it directs budgeting, production, and marketing during knowledge integration and skills performances in cookery education.

3.3. Perceived Entrepreneurial Skills through Integration of Entrepreneurial Activities among Home Economics – Cookery Students

3.3.1. Perceived Entrepreneurial Skills as to Innovation

Table 7 below showed the respondent's perceived entrepreneurial skills as to innovation. It can be seen from the results that all indicators were verbally interpreted innovation as Developed Skill.

Table 7. Perceived Entrepreneurial Skill as to Innovation

Indicators	Mean	SD	VI
1. I improved my understanding of creative thinking techniques and strategies.	3.39	0.65	Developed Skill
2. I am more confident in my ability to generate innovative ideas and solutions.	3.18	0.76	Developed Skill
3. I can step out of my comfort zone and explore unconventional approaches to problem-solving and creativity.	3.14	0.79	Developed Skill
4. I can apply practical tools and methodologies for fostering innovation in my professional tasks.	3.11	0.80	Developed Skill
5. I can overcome challenges and obstacles while implementing innovative solutions.	3.08	0.85	Developed Skill
Overall	3.18	0.57	Developed Skill

Legend: 3.50-4.00 (Highly Developed Skill); 2.50-3.49 (Developed Skill); 1.50-2.49 (Poorly Developed Skill); 1.00-1.49 (Not Developed Skill at all)

Indicator one had the highest mean score of 3.39, with a standard deviation of 0.65. This result shows that respondents have a good understanding on the importance of creative thinking techniques and strategies to

come up new ideas. This indicates that innovation skills were effectively developed through entrepreneurial activities specifically empowering students to formulate novel ideas and enhance practices in culinary activities.

On the other hand, indicator five had the lowest mean score of 3.08 and a standard deviation of 0.85. This implies that students might face challenges in maintaining innovation during practical implementation. So, students need more hands-on activities and guided experiences to help them become more resilient, better at solving problems, and more confident in using new ideas in the real-world scenario.

The overall mean score of 3.18 and the standard deviation of 0.57 show that respondents have learned how to be creative and innovative as part of the Home Economics – Cookery program. The result also implies that entrepreneurial planning, production and marketing are all entrepreneurial activities that help the respondents improve their ability to come up with new ideas and develop innovation skills.

In this study, entrepreneurial planning support innovation through strategical thinking in setting goals, and looking into other ways of doing things. Second, entrepreneurial production involves respondents to use, test, and improve products which pushes them to come up with new ideas and creative solutions in production. Entrepreneurial marketing makes students think about what customers want, look at trends, and come up with creative ways to market products to formulate new ideas, flexibility, and creativity. The results show that Home Economics – Cookery students have developed innovation skills. They possess creative thinking, idea generation, and the application of innovative strategies in cookery-related tasks. Entrepreneurial activities show how well innovation skills have been added to the curriculum. This means that the program integrated well of getting students ready to think outside the box, deal with problems, and use new ideas that are important for success as an entrepreneur and in the real world.

Rinonos, M. J. M. (2023), highlighted that integrating innovation skills in cookery significantly develops students' creative skills, crucial for global competitiveness and career preparedness. Effective pedagogy enhances creativity in learners, as noted by Forte-Celaya et al. (2021), fostering a deeper understanding of creative techniques and enabling confident application in various contexts.

3.3.2. Perceived Entrepreneurial Skills as to Resilience

Table 8 below illustrated the respondent's perceived entrepreneurial skills as to resilience. It can be seen from the results that indicator one obtained the highest mean score of 4.00 and with 0.00 standard deviation and was verbally interpreted as Highly Developed Skill.

Therefore, Home Economics – Cookery students think that being able to bounce back from setbacks is an important skill for entrepreneurs because it helps them stay determined and focused even when things get tough. This also means that resilience skills was a good base for dealing with problems, failures, and unknowns in both business and real-life cooking situations.

Table 8. Perceived Entrepreneurial Skill as to Resilience

Indicators	Mean	SD	VI
1. I improved my understanding of the importance of resilience in navigating challenges.	4.00	0.00	Highly Developed Skill
2. I am more equipped to handle unexpected changes and setbacks.	3.07	0.79	Developed Skill
3. I can embrace a more flexible mindset and consider alternative strategies when faced with difficulties.	3.23	0.64	Developed Skill
4. I can recognize and manage stress or challenges effectively.	3.12	0.76	Developed Skill
5. My ability increases to bounce back from failures.	3.13	0.77	Developed Skill
Overall	3.31	0.45	Developed Skill

Legend: 3.50-4.00 (Highly Developed Skill); 2.50-3.49 (Developed Skill); 1.50-2.49 (Poorly Developed Skill); 1.00-1.49 (Not Developed Skill at all)

On the other hand, indicator two had the lowest mean score of 3.07 and a standard deviation of 0.79. This result shows that students need more help and hands-on learning activities that can help them become more adaptable and confident in dealing with changes. Resilience skills are important for staying in business and in real life. Moreover, the overall mean score of 3.31 and a standard deviation of 0.45 shows that integration of

entrepreneurial activities in the curriculum play vital role in helping students become more persistent, flexible, and ready to face real-world and business challenges with confidence.

Moreover, entrepreneurial planning and production are the entrepreneurial activities that have the most effect on the respondents' ability to be resilient. Entrepreneurial planning teaches them to expect problems, set goals, and make plans for when things go wrong. Additionally, entrepreneurial production puts them in real-world situations where they have to deal with problems like quality control, cost management, and efficiency. Learners develop resilience, stress management skills, and the ability to bounce back from mistakes or failures by dealing with and fixing problems that come up during production.

According to Tükel et al. (2024), resilience is identified as a crucial skill for overcoming obstacles and adapting to pressure in challenging environments. It enhances work interest and satisfaction, enabling individuals to manage challenges effectively. Coronado T. W. E. (2025) highlights that resilience and motivation are vital for culinary students to complete their training, even amidst academic and personal obstacles. Additionally, Ruffolo (2025) notes that high-pressure kitchen experiences improve resilience in culinary education, fostering adaptability and emotional regulation, thus making it a fundamental aspect of cookery education.

3.3.3. Perceived Entrepreneurial Skills as to Communication

Table 9 highlighted the respondent's perceived entrepreneurial skills as to communication. It can be seen from the results that all indicators were verbally interpreted as Developed Skill. Indicator one obtained the highest mean score of 3.38 and with a 0.64 standard deviation. This result shows that respondents know a lot about good communication, especially how to listen actively and express themselves clearly.

Table 9. Perceived Entrepreneurial Skill as to Communication

Indicators	Mean	SD	VI
1. I improved my understanding of the key components of effective communication, such as active listening and clear expression.	3.38	0.64	Developed Skill
2. I feel more confident in my ability to convey ideas and information clearly and persuasively	3.20	0.65	Developed Skill
3. I can practice empathy and consider the perspectives of others in my communication interactions.	3.22	0.67	Developed Skill
4. I can enhance my ability to articulate ideas clearly and concisely.	3.16	0.77	Developed Skill
5. I can tailor my communication style to different audiences or contexts.	3.02	0.81	Developed Skill
Overall	3.20	0.52	Developed Skill

Legend: 3.50-4.00 (Highly Developed Skill); 2.50-3.49 (Developed Skill); 1.50-2.49 (Poorly Developed Skill); 1.00-1.49 (Not Developed Skill at all)

This also shows that students have good basic communication skills that let them share their thoughts clearly and have meaningful conversations with other people. Communication skills are effectively developed through entrepreneurial activities which facilitates students' entrepreneurial growth by enhancing collaboration, persuasion, and interpersonal interaction in culinary and entrepreneurial settings.

On the other hand, indicator five obtained the lowest mean score of 3.02 and with a 0.52 standard deviation. This means that needs to be more hands-on activities and guided practice to help students improve their communication skills with different audiences. This is important for successful business interactions, teamwork, and customer engagement in Home Economics – Cookery.

The overall mean score of 3.20 and the standard deviation of 0.52 show that respondents improved their communication skills by doing entrepreneurial activities in Home Economics – Cookery. Consequently, this study demonstrates that respondents have acquired communication skills. This means that most students can clearly express their ideas, listen well, show empathy, and change how they talk in different learning and business situations.

Entrepreneurial activities that show high impact on the development of communication skills of the respondents are entrepreneurial marketing, planning and production. Specifically, entrepreneurial marketing significantly enhances communication skills by enabling students to articulate their ideas clearly and effectively for diverse audiences. Engaging in activities such as identifying target markets, crafting promotional messages, and developing marketing plans fosters adaptability in communication, empathy, and persuasive presentation

skills. Entrepreneurial planning improves respondents' communication skills through collaborative discussions, ensuring mutual understanding of goals and tasks, which promotes logical expression and active listening. Lastly, entrepreneurial production emphasizes teamwork and problem-solving during practical tasks, further refining students' communication abilities.

According to Kalogiannidis (2020), business individuals should enhance their communication skills through active listening and collaboration to foster business growth. Effective communication can also bolster brand awareness through clear messaging and is vital for customer service, enhancing consumer connections. Umoh (2025) emphasizes that strong internal communication builds trust and shared responsibility, improving operational performance, teamwork, and employee satisfaction. Additionally, to develop students' communication skills, home economics teachers must prioritize effective communication practices in food preparation and decision-making (Pisani, 2025).

3.3.4. Perceived Entrepreneurial Skill as to Problem-Solving

Table 10 below presented the respondent's perceived entrepreneurial skills as to problem solving. It can be seen from the results that all indicators were verbally interpreted as Developed Skill.

Table 10. Perceived Entrepreneurial Skill as to Problem-Solving

Indicators	Mean	SD	VI
1. I facilitated my understanding of breaking down complex problems into manageable steps for effective solutions.	3.20	0.68	Developed Skill
2. I feel more capable of collaborating with others to brainstorm and implement solutions.	3.18	0.66	Developed Skill
3. I can consider short-term and long-term consequences when evaluating potential solutions to problems.	3.23	0.70	Developed Skill
4. I have increased my awareness of different problem-solving techniques that can be applied to various situations.	3.27	0.65	Developed Skill
5. I can view challenges as opportunities for growth and learning, fostering my problem-solving skills	3.25	0.68	Developed Skill
Overall	3.23	0.50	Developed Skill

Legend: 3.50-4.00 (Highly Developed Skill); 2.50-3.49 (Developed Skill); 1.50-2.49 (Poorly Developed Skill); 1.00-1.49 (Not Developed Skill at all)

Indicator four obtained the highest mean score of 3.27 and with 0.65 standard deviation. This result shows that respondents are very aware of different ways to solve problems and can use these methods in different situations. Also, Home Economics – Cookery students know how to choose the best strategies when facing challenges to solve it well. However, indicator two obtained the lowest mean score of 3.18 and with 0.66 standard deviation. This means that enhancing group activities, discussions, and collaborative tasks may further augment students' capacity to collaborate effectively, thereby refining their overall problem-solving skills in entrepreneurial and culinary contexts.

The overall mean score of 3.23 with a standard deviation of 0.50 shows that respondents are good at the different entrepreneurial problem-solving skills which was developed through entrepreneurial activities in Home Economics – Cookery. Therefore, it is important how well students act along with good techniques and strategies to give them the power analyze and adapt to problems in different situations. This can help students feel surer of themselves and better prepared to handle real-life responsibilities and problems.

Entrepreneurial activities that have the most effect on the respondents' ability to solve problems are entrepreneurial planning, production, and marketing. In this study, all of these business activities together help students learn how to see problems as chances to learn and deal with them in a confident and strategic way. Specifically, entrepreneurial planning improves the ability to think and make decisions in a systematic way. Entrepreneurial production gives students real-world problems that need to be solved right away. Finally, entrepreneurial marketing improves analytical and strategic thinking, and communication helps with group brainstorming and putting solutions into action.

According to Nurjanah et al. (2017), functional literacy, numeracy, and problem-solving skills enhance student creativity and learning performance, particularly for TVL students in culinary tasks. Techanamurthy et al. (2020) found that culinary students can improve these skills through interventions like the flipped classroom module, which helps them in recognizing and applying solutions. The study identified four problem-solving strategies: analogizing, modeling, causal reasoning, and argumentation. It noted that while students showed strong

reliance on argumentation, they were less proficient in analogizing, highlighting the need for better intellectual preparedness and strategic problem-solving in culinary practice.

3.3.5. Perceived Entrepreneurial Skill as to Decision-Making

Table 11 in page 52, showed the respondent's perceived entrepreneurial skills as to decision making. It can be seen from the results that all indicators were verbally interpreted as Developed Skill.

This result shows that respondents have improved their ability to find and understand important information before making decisions. Indicator one obtained the highest mean score of 3.34 and with a 0.63 standard deviation. This result shows that respondents can make smart and well-thought-out choices by carefully looking at the data and possible outcomes. However, Indicator three obtained the lowest mean score of 3.13 and with 0.76 standard deviation, therefore to improve students' understanding of risk assessment through structured activities, real-life situations, and decision-making exercises to bolster their confidence and judgment when confronted with uncertain or difficult circumstances in Home Economics – Cookery.

Table 11. Perceived Entrepreneurial Skill as to Decision-making

Indicators	Mean	SD	VI
1. I improved my ability to gather and analyze relevant information before deciding.	3.34	0.63	Developed Skill
2. I am more capable in weighing and balancing competing priorities when making decisions.	3.27	0.67	Developed Skill
3. I consider my perspective on risk in decision-making.	3.13	0.76	Developed Skill
4. I feel more confident because of positive changes in my ability to involve others in the decision-making process and foster a collaborative approach.	3.22	0.67	Developed Skill
5. I can adjust my decisions when presented with new information or changes in circumstances.	3.25	0.67	Developed Skill
Overall	3.24	0.49	Developed Skill

Legend: 3.50-4.00 (Highly Developed Skill); 2.50-3.49 (Developed Skill); 1.50-2.49 (Poorly Developed Skill); 1.00-1.49 (Not Developed Skill at all)

The overall mean score of 3.24 and a standard deviation of 0.49 shows that respondents are skilled on the various entrepreneurial skills in decision-making through the integration of entrepreneurial activities in Home Economics – Cookery.

Entrepreneurial planning helps respondents to make wise decisions through gathering information, look at their options, and choose the best course of action before they do anything. Entrepreneurial budgeting helps respondents learn how to set priorities, use limited resources, and think about the effects of their financial decisions before they make them. Entrepreneurial production requires respondents on making decisions in real time about quality control, resource use, time management, and cost-effectiveness.

According to Moyano (2020), effective decision-making involves a methodical approach that relies on supported facts and risk assessment. The process includes weighing evidence, examining alternatives, and conducting a final review to ensure sound choices (Simon, H. A., 1979). Quadrat-Ullah (2025) emphasizes the importance of gathering and analyzing relevant information, clearly defining goals, and using reliable resources to enhance decision accuracy and effectiveness. Additionally, Baba and HakemZadeh (2012) advocate for the use of trustworthy evidence over intuition, underscoring the need for integrating both experiential and research-based evidence to make informed decisions.

3.3.6. Perceived Entrepreneurial Skill as to Financial Literacy

Table 12 presented the respondent's perceived entrepreneurial skills as to financial literacy. It can be seen from the results that all indicators were verbally interpreted as Developed Skill. Indicator one obtained the highest mean score of 3.33 and with a 0.66 standard deviation. This shows that respondents know a lot about basic financial ideas like saving, budgeting, and investing. It also shows that students in Home Economics – Cookery have a good understanding of finances, which helps them make good financial decisions and use their resources

wisely. This also means that important financial ideas and literacy are well integrated into the curriculum for their real-life and business-related financial responsibilities.

Conversely, indicator two obtained the lowest standard deviation of 3.12 and with a standard deviation of 0.78. This study indicates students need more hands-on activities and real-life financial situations to help them feel more confident and consistent when making smart financial choices in business and cooking contexts.

Table 12. Perceived Entrepreneurial Skill as to Financial Literacy

Indicators	Mean	SD	VI
1. I improved my understanding of basic financial concepts (e.g., budgeting, saving, investing, etc.)	3.33	0.66	Developed Skill
2. I feel more confident in making informed financial decisions.	3.12	0.78	Developed Skill
3. I can apply practical tools and resources in my financial situations.	3.19	0.73	Developed Skill
4. I have increased my awareness of the importance of financial planning and investment/spending strategies.	3.25	0.62	Developed Skill
5. I enhance my understanding of different financial decisions' potential risks and benefits.	3.24	0.70	Developed Skill
Overall	3.23	0.53	Developed Skill

Legend: 3.50-4.00 (Highly Developed Skill); 2.50-3.49 (Developed Skill); 1.50-2.49 (Poorly Developed Skill); 1.00-1.49 (Not Developed Skill at all)

Overall mean score of 3.23 and a standard deviation of 0.53 shows that respondents are good at different business skills in financial literacy through the integration of business activities in Home Economics – Cookery. The entrepreneurial activities that significantly influence the development of respondents' financial literacy includes entrepreneurial budgeting, planning, and production. Entrepreneurial budgeting help students learn about money management by keeping track of costs, managing expenses, and allocating resources. Additionally, entrepreneurial planning help students set financial goals, plan for costs, and think about how their decisions will affect their finances in the long run. Entrepreneurial production helps respondents by dealing with real-world financial issues like controlling costs, using resources, and making money. Making financial decisions during production activities enables learners to apply financial knowledge practically and understand the risks and benefits of different financial choices.

According to Suprihandari et al. (2024), basic financial management skills such as budgeting, investing, saving, and expense tracking significantly enhance productivity in the business sector, particularly for culinary entrepreneurs. These skills enable better record-keeping and cash flow monitoring, helping owners adapt to changing customer demands and improve long-term business performance through stronger financial literacy. Additionally, Jose et al. (2023) emphasize that financial concepts are vital life skills for students, enhancing their ability to make responsible financial decisions and improving their financial management skills as they mature.

Summary of the Perceived Entrepreneurial Skills among Home Economics – Cookery Students

As shown in the Table 14, the resilience skills stand out as highest perceived entrepreneurial skills developed through the integration of entrepreneurial activities in Home Economics – Cookery, with a mean score of 3.24 and with a 0.45 standard deviation and was verbally interpreted as Developed Skill.

This result shows that students in Home Economics – Cookery are very adaptable, able to handle stress, and able to bounce back from setbacks. They are great at dealing with problems and staying motivated, but their ability to come up with new ideas is not as strong, which limits their creative potential in business. Improving teaching methods and giving students real-world, hands-on activities could help them think creatively and solve problems in business and cooking. The overall mean score of 3.23 and a standard deviation of 0.51 across all indicators, which can be interpreted as Developed Skill. The study shows that Home Economics—Cookery students have developed entrepreneurial skills. In general, entrepreneurial activities was integrated well by preparing students to deal with problems and use entrepreneurial thinking in both cooking and everyday life.

Table 13. Summary Table of the Perceived Integration of Entrepreneurial Skills among Home Economics – Cookery Students

Variables	Mean	SD	VI
1. Innovation	3.18	0.57	Developed Skill
2. Resilience	3.31	0.45	Developed Skill
3. Communication	3.20	0.52	Developed Skill
4. Problem-solving	3.23	0.50	Developed Skill
5. Decision-making	3.24	0.49	Developed Skill
4. Financial Literacy	3.23	0.53	Developed Skill
Overall	3.23	0.51	Developed Skill

Legend: 3.50-4.00 (Highly Developed Skill); 2.50-3.49 (Developed Skill); 1.50-2.49 (Poorly Developed Skill); 1.00-1.49 (Not Developed Skill at all)

According to Ghafar A. (2020) accepts that among all skills that should graduates acquired, entrepreneurial skills show more significant value because it can help students adapt on the fundamental problem in the 21st century like joblessness. Entrepreneurial skills are important substances for individuals to develop in order to become entrepreneurs, either in school or after graduation. Moreover, acquired entrepreneurial skills can operate and establish a business start-up successfully (Liñan and Chen, 2009).

3.4. Test of Sex Profile Moderation on the relationship between the Perceived Integration of Entrepreneurial Activities and Perceived Entrepreneurial Skills of the Respondents

As shown in Table 1., the p-value of 0.230 shows that sex profile does not significantly expect perceived entrepreneurial skills. Sex profile alone does not have a significant effect on perceived entrepreneurial skills of the respondents. Most importantly, the perceived integration of entrepreneurial activities and the test of moderation on sex profile is not statistically significant.

Table 15. Test of Sex Profile Moderation on the Perceived Integration of Entrepreneurial Activities and Perceived Entrepreneurial Skills among Home Economics – Cookery Students

	Estimate	SE	Z	P
Entrepreneurial Activities	0.7863	0.0361	21.76	< .001
Sex	0.0413	0.0344	1.20	0.230
Entrepreneurial Skills* Sex	0.1407	0.0747	1.88	0.060

Legend: A p-value < 0.05 is statistically significant.

A p-value > 0.05 is statistically not significant.

The result also implies that sex profile does not significantly moderate the relationship between perceived integration of entrepreneurial activities and perceived entrepreneurial skills of the respondents.

In the study of Soliman, M. M., & Gabutin, D. R. (2025), Home Economics - Cookery is typically regarded as a feminized strand. Students, particularly males, are progressively contesting these stereotypes. It finds that learners' perceptions of gender still affect how they experience the Cookery strand. However, teachers who are supportive and schools that are open to everyone help reduce bias. In the end, it says that even though there are still stereotypes, students see cooking as a useful and marketable skill, and gender does not completely limit participation.

Figure 2.
Simple Slope Analysis

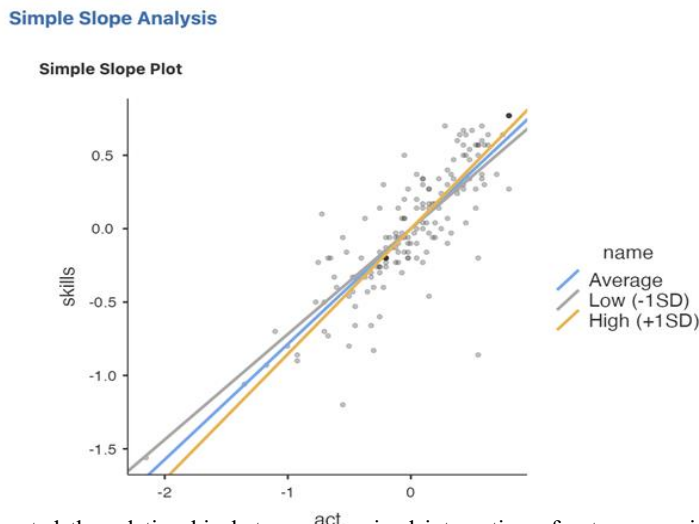


Figure 2 presented the relationship between perceived integration of entrepreneurial activities and perceived entrepreneurial skills among Home Economics – Cookery students in the Division of San Pablo City.

The result shows that Home Economics - Cookery Students who think that entrepreneurial activities are well-integrated are more likely to think that they have good entrepreneurial skills. The three lines are very close to each other, and slightly different in steepness shows that gender does not affect the link between the perceived integration of entrepreneurial activities and perceived entrepreneurial skills among Home Economics - Cookery students in the Division of San Pablo City.

Cano, M. (2019), indicated in their study that gender discrimination exists, but it is not absolute; gender does not completely control the expression or advancement of skills. According to Soliman, M. M., & Gabutin, D. R. (2025), cookery remains a female oriented specialization, but both male and female students participate actively and show interest. Cookery students do no gender-based differences in skills but show differences in cultural perceptions. To ensure equal opportunities and avoid gender biased in terms of competence or performance, educators and facilitators should support and employ inclusive pedagogy in Home Economics - Cookery.

3.5. Significant Relationship between Perceived Integration of Entrepreneurial Activities and Entrepreneurial Skills among Home Economics – Cookery Students

Table 16 below presented the relationship between the perceived integration of entrepreneurial activities such as planning, budgeting, production, and marketing and entrepreneurial skills like innovation, resilience, communication, problem-solving, decision-making, and financial literacy among Home Economics - Cookery students in the Division of San Pablo City Laguna. The results shows that all entrepreneurial activities have positive and significant relationships with the different entrepreneurial skills of the respondents.

In terms of entrepreneurial planning, the results reveal moderate to strong positive relationship with all entrepreneurial skills. This means that students who take part in entrepreneurial planning activities tend to get better at being creative, bouncing back from setbacks, talking to others, solving problems, making decisions, and managing money. The strongest connections are between problem-solving (.0636), innovation (.614) and financial literacy (.614), which means that good planning helps students better understand situations and use their resources wisely and innovatively.

For entrepreneurial budgeting, the result indicates significant positive relationships with all entrepreneurial skills. The highest relationship was found between problem solving (.689), financial literacy and innovation (.661) followed by decision-making (.644) and communication (.631). This means that being involved in budgeting activities can help students get better at making smart financial decisions, talking about what resources they need, and solving problems that have to do with money.

Table 15. Significant Relationship between Entrepreneurial Activities and Entrepreneurial Skills among Home Economics – Cookery Students

Entrepreneurial Activities	Entrepreneurial Skills					
	Innovation	Resilience	Communication	Problem-solving	Decision-making	Financial Literacy
Planning	.614**	.544**	.519**	.636**	.559**	.614**
Budgeting	.661**	.506**	.631**	.689**	.644**	.661**
Production	.730**	.604**	.628**	.723**	.670**	.730**
Marketing	.768**	.684**	.678**	.734**	.699**	.768**

Legend: **Correlation is significant at 0.01 level

In terms of entrepreneurial production, the results show positive relationship observed with innovation and financial literacy (.730) followed by problem-solving (.723). This indicates that participating in production activities encourages learners to think creatively, develop innovative ideas, and effectively address challenges encountered during the production process.

Lastly, entrepreneurial marketing demonstrates the highest relationship among all entrepreneurial activities. The strongest relationship is between innovation and financial literacy (.768) followed by problem-solving (.734). This means that marketing activities are very important for developing entrepreneurial skills because students need to be able to think creatively, talk to customers clearly, and make smart decisions. Therefore, strong relationship across entrepreneurial skills such as innovation, resilience, communication, problem-solving, decision-making, and financial literacy indicates that students who actively understand the integrated entrepreneurial activities can develop stronger entrepreneurial skills and competencies.

According to Origenes, A. M. D., & Andal, E. Z. (2024), Integration of entrepreneurial activities significantly enhances students' entrepreneurial skills. Schelfhout et al. (2016) emphasize that students engaged in entrepreneurial activities develop competencies for business start-ups. Practical experiences in schools further bolster their skills. Pham et al. (2023) found that knowledge gained from entrepreneurial experiences boosts students' skills and confidence. Additionally, participation in activities such as marketing and planning fosters essential skills, including creativity, problem-solving, and decision-making, according to Hua et al. (2022).

4. Conclusions and Recommendations

Based on the findings of the study, the following conclusions on the perceived integration of entrepreneurial activities and perceived entrepreneurial skills among Home Economics - Cookery students in the Division of San Pablo City Laguna. This paper concluded that sex profile does no moderation on the perceived entrepreneurial activities and perceived entrepreneurial skills among Home Economics - Cookery students in the Division of San Pablo City, Laguna. On the other hand, the study also concluded that there was a significant relationship between the perceived entrepreneurial activities and perceived entrepreneurial skills of the respondents. With all these findings it is concluded that hypothesis on the moderation analysis and significant relationship but the variable in the study was correlated.

In view of the findings and conclusions generated in this study, the following recommendations are specified for considerations:

1. Integration of entrepreneurial activities in terms of planning, budgeting, production and marketing in Home Economics Cookery NC II may be strengthened by providing learning materials with specific learning competencies to make it highly integrated.
2. The researcher suggested the expand business simulation through mentorship and industry partnerships. so that students will practice both technical and entrepreneurial skills in real-world scenarios and to make integration of entrepreneurial skills in terms of innovation, resilience, communication, problem-solving, decision-making and financial literacy highly developed skills.

3. The school may provide technical assistance to the teachers with regards to training and workshops to strengthen teacher's capacity in delivering integrated lessons and competencies on entrepreneurial activities and skills.
4. Since the result of the study revealed that there is a significant relationship between entrepreneurial activities and entrepreneurial skills, schools may strengthen entrepreneurial integration in Home Economics Cookery NC II by embedding real-life entrepreneurial tasks.
5. Schools and teachers may implement gender-inclusive learning activities and experiences Since both male and female students respond similarly to entrepreneurial activities in developing entrepreneurial skills. Curriculum planners and Home Economics teachers should focus on strengthening the quality, relevance, and frequency of entrepreneurial activities rather than tailoring them by gender.
6. Students may have a genuine passion for cooking to be encouraged to enroll in the Home Economics Cookery program. A strong interest in culinary activities fosters higher motivation, deeper engagement, and better skill development.
7. Other researchers with a similar study using other variables which are not included in this study may use it to further investigate other factors that may enhance the technical-vocational-livelihood education specifically in Home Economics – Cookery.

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