



# **Technology Integration and Attitude Towards New Food as Predictors of Self-Efficacy in Cooking**

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## **Authors' contributions**

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

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## **ABSTRACT**

This descriptive-predictive study aims to provide a comprehensive overview of the current landscape of technology use in cooking and individuals' attitudes toward experimenting with new ingredients. Through predictive analysis, the study seeks to identify potential relationships and predictive patterns between technology integration, attitude toward new food, and self-efficacy in cooking. There were 7 different restaurant and 110 employees in Santo Tomas and Davao del Norte were chosen through the quota sampling technique. This study used three adapted questionnaires. Mean, Pearson  $r$ , standard deviation, and regression analysis were used as statistical tools. The study's findings showed that technology integration in terms of self-efficacy, performance outcome expectations, self-evaluative outcome expectations, social outcome expectations, and interest was observed. Attitude towards new food in terms of skepticism, innovativeness, and traditionalism is observed. Predictors of self-efficacy in cooking are often

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observed. Also, there was a significant relationship between technology integration, attitude toward new food, and self-efficacy among restaurant employees with a ( $P < 0.001$  &  $R = 0.757$ ) and ( $P < 0$  &  $R = 0.734$ ). Further analysis eventually showed a significant influence of technology integration, attitude towards new food, and self-efficacy in cooking among restaurant employees with a ( $\beta = 0.492$  &  $p < 0.001$ ) and ( $\beta = 0.299$  &  $p < 0.025$ ). Therefore, this emphasizes that restaurant employees are encouraged to take part in specialized training courses or workshops designed to increase their digital literacy and comfort level and increase their self-efficacy in using technology for culinary reasons. Restaurant employees who are less hesitant about trying new foods are strongly encouraged to participate fully in tasting events or cooking classes that introduce them to various products and culinary styles. Promoting teamwork and collaboration among colleagues fosters mutual learning and growth, enhancing morale and self-efficacy. Recognizing and reinforcing progress can shift employees' perspectives, fostering a positive cooking mindset.

*Keywords: Technology integration; attitude towards new food; predictors of self-efficacy in cooking; descriptive and predictive design; regression analysis; Davao del Norte; Philippines.*

## 1. INTRODUCTION

### 1.1 The Problem and Its Setting

Self-efficacy in cooking is a vigorous set-up explaining how motivation progresses and new strategies are adopted. Recognizing areas of self-management and modifications in lifestyle may be beneficial [1]. However, Üngüren and Tekin [2], stated that the negative effects on the kitchen's staff creativity potential are restraints to experience personality traits and high food neophobia. In the same way, as specified by Torres, [3], consuming high-energy foods, such packaged goods and deep-fried fast-food items, might result from a lack of cooking self-efficacy.

In the Cappadocia Region of Turkey, there is a problem of self-efficacy in cooking among the employees working in the kitchen that affects their job performance [4]. In addition, food insecurity is viewed as a serious threat to people's daily lives in South Korea, and it has a strong relationship with self-efficacy in cooking, which affects both psychological and physical well-being [5]. Furthermore, as attested by De Borba et al. [6], several Brazilian students have limited confidence in performing basic cooking skills due to a lack or loss of cooking abilities and cooking self-efficacy.

It has been demonstrated that a cook's self-efficacy can affect both their attitudes toward the work environment and their performance in Ilocos Norte, Philippines [7]. On the other hand, in Angadanan, Isabella, Philippines, as claimed by Jacinto & Samonte [8], being less confident and enthusiastic in terms of skills and performance, they possess lower levels of self-efficacy when it comes to cooking. Measuring

self-efficacy in cooking similarly impacts the resilience of modern approaches to technology [9].

Furthermore, several research investigations have been carried out concerning integration technology [10,11] attitude towards new food [12,13] self-efficacy in cooking [14,15]. Although much research has been carried out in the international setting investigating the self-efficacy in cooking in food service industry, the researchers have not come across any study establishing the technology integration and attitude towards new food as predictors of self-efficacy in cooking particularly in local setting. Given the above conditions, the researchers found the urgency to conduct this study to determine if there is a situation about technology integration and attitude toward new food affecting self-efficacy in cooking in Santo Tomas, Davao del Norte.

The findings of this study will give employees and owners some significant information on how technology integration and attitude towards new food affect self-efficacy in cooking. In addition, this study assessed the capabilities of the local government officials on how they address the issues and factors influencing cooking self-efficacy and inform the development of tailored interventions to promote culinary skills and confidence among diverse populations. The beneficiaries of these studies are business owners, restaurant employees, customers, and future researchers.

### 1.2 Statement of the Problem

This study will focus in the technology integration and attitude towards new food as predictors of

self-efficacy in cooking among restaurant employees: Correlational Studies:

Specifically, this will find answers to the following objectives:

1. What is the level of the effect of technology integration on self-efficacy?
2. What is the level of attitude toward new food?
3. What is the level of self-efficacy in cooking among restaurant employees?
4. Is there a significant relationship between:
  - 4.1 technology integration and self-efficacy in cooking among restaurant employees?
  - 4.2 attitude toward new food and self-efficacy in cooking among restaurant employees?
  - 4.3 Do technology integration and attitude towards new food significantly influence self-efficacy in cooking?

### Hypothesis

The following hypotheses will be created to determine if there is a level of significance, a significant relationship between the variables:

1. There is no significant relationship between technology integration and self-efficacy in cooking.
2. There is no significant relationship between attitude towards new food and self-efficacy in cooking.
3. There is no significant influence on technology integration and attitude towards new food as predictors of self-efficacy in cooking.

### 1.3 Theoretical Framework

The study is anchored on Technology Acceptance Model (TAM) [16] examines the elements that impact technology adoption. It implies that self-efficacy for integrating cooking-related technology is influenced by perceived usefulness and ease of use. Moreover, on Social Cognitive Theory (SCT) was prompted by Bandura, [17] learning theory. The Social Cognitive Theory (SCT) placed emphasis on the influence of an individual's personal views on the ability to accomplish particular activities. Cooking attitudes give insights into the acceptance and integration of technology, based on Venkatesh et

al. [18] Unified Theory of Acceptance and Use of Technology (UTAUT). The literature on integrating technology could be explored to better understand how digital tools can improve cooking skills [19].

On the contrary, Ajzen, [20] the outcomes of cooking new foods influence self-efficacy in cooking according to one's standards, which motivates individuals to explore new food experiences. Additionally, cues to action and moderating factors that could affect an individual's decision to engage in health-promoting behavior are taken into account by the model Health Belief Model (HBM) [21]. Attested by Bandura, [17] those who have confidence in their ability to handle new foods are more likely to have successful self-efficacy when it comes to cooking.

Moreover, integrating these models can provide an extensive framework for investigating the relationship between cooking self-efficacy, attitudes toward new types of food, and technology. As technology plays a significant role in modern kitchen understanding, its influence can impart perception to both educational institutions and industry.

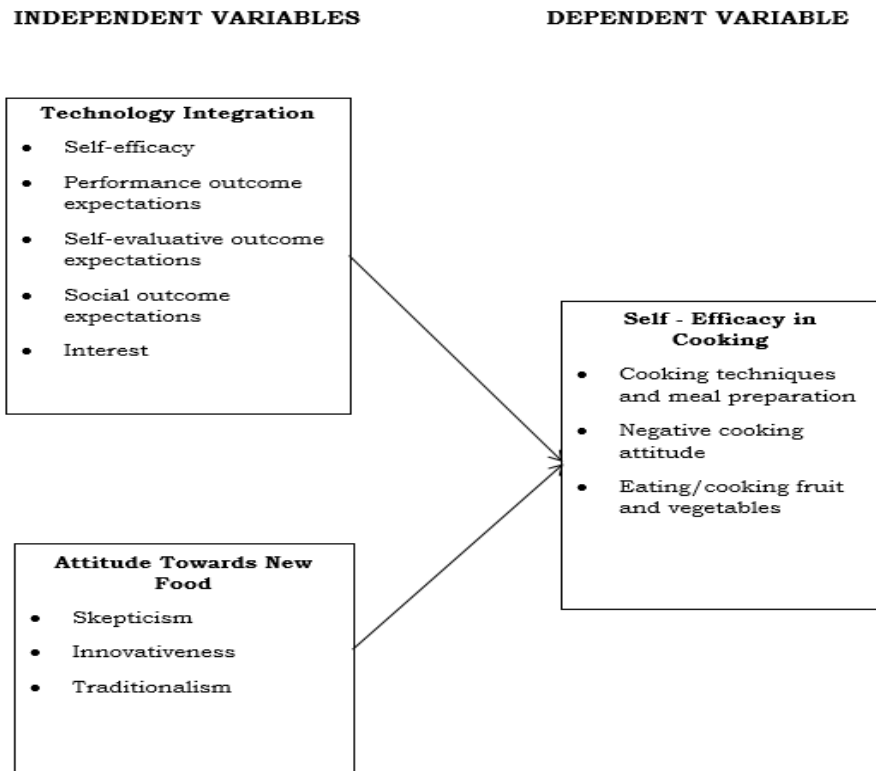
### 1.4 Conceptual Framework

Conversely, Fig. 1 displays the conceptual paradigm of the study. The study's initial independent variable is technology integration, which relates to self-efficacy, performance outcome expectations, self-evaluative outcome expectations, social outcome expectations, and interest. The second independent variable is attitude towards new food, with indicators of skepticism, innovativeness, and traditionalism. The dependent variable of this study is self-efficacy in cooking, with indicators of cooking techniques and meal preparation, negative cooking attitude, and eating and cooking fruit and vegetables. The researcher developed the proposed model depicted in Fig. 1 by tying together the results of multiple experiments.

### 1.5 Significance of the Study

This research aims to be beneficial to a variety of individuals. In particular, this was beneficial to the following beneficiaries.

**Business Owners:** This study will assist them in developing strategies such as decision-making, resource allocation, and competitive advantage



**Fig. 1. Conceptual Paradigm of the Study**

within the food industry. Thus, technology integration is highly significant as it addresses the evolving role of technology in culinary entrepreneurship.

**Restaurant Employees:** This study will help them understand how the integration of technology influences employees' confidence in cooking and their openness to embracing new food trends. Thus, through technology integration, it is of paramount significance as it explores the intersection of culinary skills, technological advancements, and employee performance in the hospitality sector.

## 2. METHODOLOGY

This chapter presented and discussed various methodologies that we used in gathering data and that were relevant to the research, such as the research design, research subject, research instrument, data gathering procedure, statistical tools, and ethical considerations.

### 2.1 Research Design

This study made use of a quantitative research design, namely the descriptive-predictive

design. The quantitative approach to research was a systematic approach that started with clearly defined research questions or hypotheses, then moved on to choosing a suitable research design and sampling strategy, gathering numerical data using structured instruments like surveys, applying statistical techniques to analyze the data, interpreting the results by the research questions, and disseminating the findings through publications or research reports. Quantitative research design was the pragmatic framework used in research projects to gather and assess numerical data in a systematic manner that allowed for the study of correlations, patterns, and phenomena in a measurable context [22].

The quantitative approach centered on various topics: drawing causal connections, tackling measurement issues, handling data, confirming assumptions, dealing with nested data, and demonstrating outcomes [23]. The proposed quantitative methods were initially validated conceptually and mathematically before being implemented in a real-world scenario, as outlined by Moraga et al. [24]. Quantitative research utilizes numerical data and statistical analysis to explore

phenomena. It aimed for objectivity, employing logic to generate accurate results and obtain rich, deep, and valid data [25].

A descriptive-predictive research design involved forecasting (predicting) results, consequences, and other outcomes, which is the main focus of predictive research, expenses, or results. This kind of study attempted to extrapolate from the examination of current occurrences, policies, or other organizations to forecast something that has never been attempted, examined, or suggested before. In a predictive research study, the question of how something might function, how effectively it might, or what influence that item could have [26].

The researcher used the design mentioned above to address the main interests and objectives of the study. Specifically, for quantitative research, this is applied in the study to collect quantifiable data concerning the employees in technology integration and attitude towards new food as predictors of self-efficacy in cooking.

The researcher used a descriptive approach to determine and describe employees in technology integration and attitudes toward new foods as predictors of self-efficacy in cooking. Specifically, it involved the mean test since the study aimed to measure the level of technology integration and attitude toward new food as predictors of self-efficacy in cooking. Moreover, a predictive approach was used to predict the relationship between employees' technology integration and self-efficacy in cooking and employees' attitudes towards new foods and self-efficacy in cooking.

## 2.2 Research Subject

The respondents of this study were the 110 employees who have one year of experience in seven different restaurants in Santo Tomas, Davao del Norte. The researcher chose the quota sampling technique as an appropriate method to set a sample. The researchers used the quota sampling technique, which is defined as a non-probability sampling technique. Quota sampling depended on the non-random selection of a fixed number or percentage of units.

However, the qualified respondents' participation was voluntary, and if they felt that they were

uncomfortable participating in the study, they were free to withdraw or discontinue their participation. Moreover, the respondents' personal information and responses were kept fully confidential to preserve the respondents' privacy. Additionally, the respondents were free from encountering situations that are inappropriate for their physical, mental, emotional, or financial problems.

**Table 1. Distribution of Respondents**

Respondents Total Number	Restaurant Employees	Percentage
Restaurant A	13	11.8%
Restaurant B	19	17.3%
Restaurant C	19	17.3%
Restaurant D	17	15.4%
Restaurant E	11	10%
Restaurant F	18	16.4%
Restaurant G	13	11.8%
Total	110	100%

## 2.3 Research Instrument

In this study, the researchers used three (3) adopted survey questionnaires to determine the relationship between technology integration and self-efficacy in cooking and attitude towards new food and self-efficacy in cooking. These selected and modified to match the overall objectives of the study. This instrument was validated by a panel expert.

The research instrument used was a survey questionnaire, which makes data gathering fast and gives accurate information. Besides, it was a technique that provided a more cost-effective and time-efficient approach to assessing a relatively large number of participants' behavior, attitudes, preferences, opinions, and intentions [27].

## 2.4 Technology Integration

This questionnaire was from "Validation of the Intrapersonal Technology Integration Scale: Assessing the Influence of Intrapersonal Factors that Influence Technology Integration", [28], which consisted 5 indicators of self-efficacy (6 items), performance outcome expectation (3 items), self-evaluative outcome expectations (3 items), social outcome expectations (3 items) and interest (6 items).

**Chart 1. The following parameter limits, with their corresponding descriptions, apply to the level of employees’ technology integration**

Scale	Range	Descriptive	Interpretation Equivalent
5	4.20- 5.00	Very High	This indicated that Technology integration was much observed.
4	3.14 - 4.19	High	The measures describe in technology integration was observed.
3	2.60 – 3.39	Moderate	The measures describe in technology integration was moderately observed.
2	1.80 – 2.59	Low	The measures describe in technology integration was less observed.
1	1.00 – 1.79	Very Low	The measures describe in technology integration was least observed.

**Chart 2. The following parameter limits, with their corresponding descriptions, applied to the level of employees’ attitude towards new food.**

Scale	Range	Descriptive	Interpretation Equivalent
5	4.20- 5.00	Very High	This indicated that attitude towards new food was much observed.
4	3.14 - 4.19	High	The measures describe in attitude towards new food was observed.
3	2.60 – 3.39	Moderate	The measures describe in attitude towards new food was moderately observed.
2	1.80 – 2.59	Low	The measures describe in attitude towards new food was less observed.
1	1.00 – 1.79	Very Low	The measures describe in attitude towards new food was least observed.

## 2.5 Attitude Towards New Food

This questionnaire was from “*Development of the scale for attitude toward new foods*”, [29], which consist 3 indicators of skepticism (9 items), innovativeness (9 items) and traditionalism (7 items).

## 2.6 Self-efficacy in Cooking

This questionnaire was from “*Development of Psychosocial Scales for Evaluating the Impact of a Culinary Nutrition Education Program on cooking and Healthful Eating*”, which consists 3 indicators of cooking techniques and meal

preparation (6 items), negative cooking attitude (4 items) and eating/cooking fruit and vegetables (4 items).

## 2.7 Data Gathering Procedure

The method of obtaining, estimating, and examining precised experiences for research utilizing recognized industry standards was known as data gathering [31]. Furthermore, regardless of whether you were performing academic, industry, or government research, data collection enabled you to gain first-hand information and distinctive insights into your study difficulty [32].

**Chart 3. The following parameter limits, with their corresponding descriptions, applied to the level of employees’ self-efficacy in cooking**

Scale	Range	Descriptive	Interpretation Equivalent
5	4.20- 5.00	Very High	This indicated that self- efficacy in cooking was much observed.
4	3.14 - 4.19	High	The measures describe in self-efficacy in cooking was observed.
3	2.60 – 3.39	Moderate	The measures describe in self-efficacy in cooking was moderately observed.
2	1.80 – 2.59	Low	The measures describe in self-efficacy in cooking was less observed.
1	1.00 – 1.79	Very Low	The measures describe in self-efficacy in cooking was least observed.

## 2.8 Requesting Authorization to Carry out the Research

The researcher obtained a permission letter from the Research Focal Vice President, who granted the researcher authorization in writing to gather demographic data, access the list of restaurant employees, and carry out the study.

## 2.9 Survey Questionnaire Validation

After receiving approval from the panel, the researchers utilized a modified questionnaire. The questionnaire will be used, and after that, it will be validated by their adviser and subsequently by the panel of experts. Following the validation of the questionnaire, the research was carried out in Sto. Tomas, Davao del Norte.

## 2.10 Questionnaire Distribution and Retrieval

The researcher physically gave the survey questionnaires to the study participants after receiving approval. The researcher made sure that every survey that is issued is completed and returned in full in order to guarantee the study's validity and dependability.

## 2.11 Gathering and Tallying of Information

In order to tabulate the data, the research instrument was retrieved, examined, and put together. The designated statisticians were consulted by the researcher in order to analyze the data.

## 3. RESULTS AND DISCUSSION

This chapter presented the results of a discussion that had been gathered from the restaurant employees through the process of conducting a survey of the study on technology integration and attitude towards new food as predictors of self-efficacy in cooking. The

arrangement of the data was based on the statement of the problem.

### 3.1 Summary on the level of Technology Integration

Table 2 presented the summary level of technology integration. The results indicated the overall mean was 4.01 with a standard deviation of 0.94, with a descriptive level of high. This measure described that technology integration was observed.

The highest mean was performance outcome expectations among the five indicators, with a mean of 4.12, while the lowest mean was 3.84 with the indicator of self-evaluative outcome expectations. Both indicators mean obtained the descriptive equivalent of high. Moreover, the category mean standard deviation of 0.94 indicated that the variability in technology integration measures deviated from the mean, which indicated the diverseness of employee responses to these variables.

These results were supported by Zoran et al. [33], who aimed to clarify early guidelines toward a common theoretical framework in which chefs and engineers can collaborate, as well as to illustrate the potential outcomes that can arise from converting a traditional dish into a culinary creation influenced by digital technology. Furthermore, Jin [34] emphasized that an integrated cooker displayed a high degree of technology integration for effective cooking procedures by integrating steaming, frying, and soup-making capabilities into a single machine.

### 3.2 Summary on the Level of Attitude Towards New Food

Table 3 presented the summary on the level of attitude towards new food. The results indicated the overall mean was 4.10 with a standard deviation of 0.88, with a descriptive level of high. This measures described that attitude towards new food was observed.

**Table 2. Summary on the level of the effect of Technology Integration**

Indicators	SD	Mean	Descriptive Equivalent
1. self-efficacy	0.87	4.10	High
2. performance outcome expectations	0.84	4.12	High
3. self-evaluative outcome expectations	1.08	3.84	High
4. social outcome expectations	0.96	3.96	High
5. interest	0.95	4.04	High
<b>Overall</b>	<b>0.94</b>	<b>4.01</b>	<b>High</b>

Out of the three indicators, traditionalism had the highest mean of 4.16, while skepticism had the lowest mean of 4.06. According to both parameters, it scored highly in terms of the description. Additionally, the category mean standard deviation of 0.88 showed that employee reactions to these indicators were different, indicating the diversity in attitudes toward new food measures deviates from the usual range.

**Table 3. Summary on the level of attitude towards new food**

Indicators	SD	Mean	Descriptive Equivalent
1. skepticism	0.86	4.06	High
innovativeness	0.89	4.08	High
traditionalism	0.89	4.16	High
<b>Overall</b>	<b>0.88</b>	<b>4.10</b>	<b>High</b>

These findings were revealed by Głuchowski et al. [35], indicating that food neophobia and innovativeness had an impact on customer attitudes toward new food in cooking, affecting preferences for traditional, molecular, and note by note dishes. Furthermore, different people had different inclinations to try new food, and acceptance of new products in cooking was influenced by food attitudes, neophobia, and textual information on health advantages [36].

### 3.3 Summary on the level of the Self-efficacy in Cooking among restaurant employees

Table 4 presented the level of self-efficacy in cooking among restaurant employees. The results indicated the overall mean was 4.31 with a standard deviation of 0.87, with a descriptive level of very high. This measure described that self-efficacy in cooking among restaurant employees was much observed.

**Table 4. Summary on the level of Self-efficacy in Cooking among restaurant employees**

Indicators	SD	Mean	Descriptive Equivalent
cooking techniques and meal preparation	0.88	4.35	Very High
negative cooking attitude	0.87	4.23	Very High
eating/cooking fruit and vegetables	0.86	4.34	Very High
<b>Overall</b>	<b>0.87</b>	<b>4.31</b>	<b>Very High</b>

The indicator with the highest mean of 4.35, was cooking techniques and meal preparation; the indicator with the lowest mean of 4.23, was a negative cooking attitude. According to both parameters, it scored very high in terms of description. Further evidence that employee responses to these variables vary came from the category mean standard deviation of 0.87, which indicated that restaurant employees' self-efficacy in cooking varies from the expected range.

These findings, which were validated by Jeong and Kim [37], demonstrated how hotel chefs' coaching leadership raises restaurant staff members' self-efficacy, which in turn improved organizational citizenship behavior as reported in the study. Additionally, in order to improve mastery of cooking abilities, occupational self-efficacy in cooking was measured by active experience, model experience, social persuasion, and emotional conditions [38].

### 3.4 Significance of the Relationship between the Technology Integration, Attitude Towards New Food and Self-efficacy in Cooking among Restaurant Employees

Table 5 showed the relationship between technology integration and self-efficacy in cooking, and attitude towards new food and self-efficacy in cooking among restaurant employees. The study found a significant relationship between technology integration and restaurant employees' self-efficacy in cooking, as indicated by the correlation between the two variables (r-value 0.757,  $p < .001$ ). Which was less than 0.05 this signifies the rejection of the null hypothesis. It indicated that there was a strong correlation between restaurant employees' self-efficacy in cooking and technology integration.

On the other hand, the study discovered a significant correlation (r-value 0.734,  $p < .001$ ) between restaurant employees' self-efficacy in cooking and their attitude towards new food. Which was less than 0.05 this proves that the null hypothesis was rejected. It reveals a strong relationship between the attitude towards new food and the self-efficacy in cooking of restaurant employees.

These inferences were supported by Lestari et al. [39], which examined the potential impact of hotel employees' self-efficacy, attitude towards technology adoption, and interpersonal



relationships on their job performance, support these conclusions. They discovered a positive correlation between employee self-efficacy and job performance. Thus, Agwa [40], emphasized the value of training to enhance food safety procedures in his study, highlighting a favorable association between knowledge, attitude, and practices among restaurant employees. Furthermore, investigation of the ways in which socioeconomic factors, food technology neophobia levels, and knowledge about new foods and technologies may influence consumers' attitudes regarding the use of food by-products in relation to the benefits to the environment and their own health [41].

### 3.5 Regression Analysis on the Technology Integration and Attitude Towards New Food on the Self-efficacy in Cooking

Table 6 Regression Analysis was performed to determine the significant relationship between technology integration and attitude towards new food on self-efficacy in cooking. The findings showed that self-efficacy in cooking appears to be statistically significantly predicted by technology integration ( $p < 0.05$ ). The beta value ( $\beta = 0.483$ ) showed that self-efficacy in cooking rises by 0.483 units for every unit increase in technology integration. Moreover, the study's null

hypothesis had been rejected by the results based on the significance level.

However, the results indicated that attitude toward new food appears to be a statistically significant predictor of cooking self-efficacy ( $p < 0.05$ ). The beta value ( $\beta = 0.340$ ) indicated that for every unit increase in attitude towards new food, self-efficacy in cooking will increase by 0.340 units. Furthermore, according to the significance threshold, the results had rejected the null hypothesis of the study.

As the study demonstrated, self-efficacy in cooking was significantly influenced by restaurant employees' attitudes about technology integration. This inference was reinforced by the research of Yogesh [42], which showed how current technology in food preparation and processing devices can prepare and process food in various ways using a single vessel or device structure with an electro-mechanical arrangement.

On the other hand, the finding revealed that the attitude of restaurant employees towards new food directly influences their self-efficacy in cooking. The result that was affirmed by Kudo [43], examined the relationships between food attitudes, food neophobia, and acceptance of both unfamiliar and new foods using an integrative and multidisciplinary approach.

**Table 5. Significance of the relationship between the Technology Integration, Attitude Towards New Food and Self-efficacy in cooking among restaurant employees**

Variables Correlated	r	p-value	Decision on Ho	Decision on Relationship
technology integration and self-efficacy in cooking among restaurant employees	0.757	<.001	Reject	Significant
attitude towards new food and self-efficacy in cooking among restaurant employees	0.734	<.001	Reject	Significant

**Table 6. Regression analysis on the technology integration and attitude towards new food on self-efficacy in cooking**

Independent Variable with indicators	Unstandardized Coefficients		Standardized Coefficients Beta	t-stat	p-value	Decision @ $\alpha = 0.05$
	B	Standard Error				
(Constant)	0.969	0.291				
Technology Integration	0.483	0.129	0.492	3.752	<.001	Rejected
Attitude Towards New Food	0.340	0.149	0.299	2.279	0.025	Rejected

*Dependent Variable: Self-efficacy in Cooking; F-ratio: 77.58 Adjusted R Square: 0.584*

#### 4. SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter includes a summary of the findings of the study, conclusions, and proposed recommendations for possible implementation.

##### 4.1 Summary of Findings

The major findings of the study were the following:

1. For the level of the effect of technology integration, performance outcome expectations had the highest mean of 4.12, with a standard deviation of 0.84 and a descriptive equivalent of high. Followed by self-efficacy and interest were the means of 4.10 and 4.04 and the standard deviations of 0.87 and 0.95, and both had obtained the descriptive equivalent of high. Next were social outcome expectations and self-evaluative outcome expectations, with means of 3.96 and 3.84 and standard deviations of 0.96 and 1.08, respectively. Both had obtained the descriptive equivalent of high. Furthermore, it had an overall mean of 4.01 with an overall standard deviation of 0.94 and with a descriptive equivalent of high.
2. For the level of attitude towards new food, traditionalism obtained the highest mean of 4.16 with a standard deviation of 0.89 and a descriptive equivalent of high. Followed by innovativeness with the mean of 4.08 and the standard deviations of 0.89, and had obtained the descriptive equivalent of high. Next was skepticism with mean of 4.06 and standard deviations of 0.86, had obtained the descriptive equivalent of high. Furthermore, it had an overall mean of 4.10 with an overall standard deviation of 0.88 and with a descriptive equivalent of high.
3. For the level of the self-efficacy in cooking among restaurant employees, cooking techniques and meal preparation obtained the highest mean of 4.35 with a standard deviation of 0.88 and a descriptive equivalent of very high. Followed by eating/cooking fruit and vegetables with the mean of 4.34 and the standard deviations of 0.86, and had obtained the descriptive equivalent of very high. Next was negative cooking attitude with mean of

4.23 and standard deviations of 0.87, had obtained the descriptive equivalent of very high. Furthermore, it had an overall mean of 4.31 with an overall standard deviation of 0.87 and with a descriptive equivalent of very high.

4. Technology integration and attitude towards new food both had a significant relationship with self-efficacy in cooking among restaurant employees ( $r = 0.757$ ,  $r = 0.734$ , and  $p = <.00$  in both independent variables). Specifically, these variables' degree of connection showed a positive correlation and were statistically significant at the less than 0.05 level. This indicated that there is a significant relationship between technology integration, attitude towards new foods, and self-efficacy in cooking. Therefore, the null hypothesis was rejected.
5. Both technology integration and attitude towards new food had a significant influence on self-efficacy in cooking among restaurant employees ( $\beta=0.483$ ,  $\beta=0.340$ ,  $p=<.001$ , and  $p=0.025$ ). Thus, the results concluded that the null hypothesis was rejected based on the degree of significance.

##### 4.2 Conclusions

The following conclusions were drawn in accordance with the study's findings:

1. Technology integration is high.
2. Attitude towards new food is high.
3. The widespread observation of self-efficacy in cooking is very high.
4. There was a significant relationship between technology integration, attitude towards new food, and self-efficacy in cooking among restaurant employees..
5. There was a significant influence of technology integration, attitude towards new food, and self-efficacy in cooking among restaurant employees.

##### 4.3 Recommendations

Based on the findings and conclusions of the study, the following recommendations were offered:

1. Business Owners, Restaurant Employees and Customers who show a low level of

self-evaluative outcome expectations about technology integration are encouraged to take part in specialized training courses or workshops by recommending to employers or HR a training program by TESDA and an agency designed to increase their digital literacy and comfort level when utilizing culinary technology. Furthermore, developing a culture of innovation and growth can be achieved by creating a supportive work atmosphere that emphasizes experimentation and ongoing learning. This will eventually lead to increased self-efficacy in using technology for culinary reasons.

2. Business Owners, Restaurant Employees and Customers who show less hesitation about trying new foods, the business owners, HR, and supervisors are encouraged to communicate with any school like STCAST or TESDA, which can provide proper courses and training in tasting events or cooking classes that introduce employees to a range of products and culinary styles. Providing educational resources or expert guidance can help alleviate any lingering doubts and foster a more adventurous palate. Additionally, creating a supportive environment where trying new foods is celebrated and encouraged can help employees build confidence in exploring novel culinary experiences.
3. Business Owners, Restaurant Employees and Customers with unfavorable attitudes about cooking, business owners, HR, and managers should provide a proper meeting or conference and invite some guest speakers who are experts in cooking, like a chef. This would lead the employees to be open-minded about enhancing their abilities and boosting their self-assurance in the kitchen. Encouraging teamwork and collaboration among colleagues can provide opportunities for mutual learning and growth, helping to boost morale and self-efficacy. Additionally, providing positive reinforcement and recognition for progress made can help shift employees' perceptions and cultivate a more positive cooking mindset.
4. Business owners, Restaurant Employees, HR managers, and supervisors are

encouraged to take part in any webinars, workshops, and seminars headed by some culinary schools so that they can gain more knowledge and new ideas that they can impart to their employees and to those aspiring to be part of their company.

5. Future researchers who wish to investigate the connection between self-efficacy in cooking, attitude toward new food, and technology integration will use continuous or experimental methods to determine connections between them and gain a deeper understanding of the mechanisms involved. Furthermore, considering potential moderating factors like cultural background or prior cooking experience might offer deeper insights into the complex dynamics of culinary skill development. Additionally, adding qualitative approaches like focus groups or interviews can enhance quantitative findings and provide rich contextual understanding, leading to a more thorough understanding of the subject.

#### **DISCLAIMER (ARTIFICIAL INTELLIGENCE)**

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts.

#### **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

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