# Achievement Goal Orientation and Culinary Efficacy: Determinants of Students' Food Processing Skills

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Abstract- Preserving food is one of the solitary components of the concentrations of Technology and Livelihood Education – Home Economics, as it is perceived as a noteworthy area in the lives of many learners and each individual as it teaches them the necessary values, skills, and practical applications to genuine life situations. This study explored the level of mastery and performance goal orientation as well as culinary efficacy among the students of East II District National High School in Cagayan de Oro City and how these are associated to their food processing skills. Descriptivecorrelational design was used to facilitate the collection and organization of the data. The study revealed that the students' achievement goal orientation both mastery and performance is highly correlated to their sense of culinary-efficacy. The findings of this study point to the need to further enhance the food processing skills of the learners in order for them to achieve the desired standard competency set by the teacher.

Indexed Terms– Achievement Goal Orientation, Culinary-efficacy, Food Processing Skills

## I. INTRODUCTION

An individual's beliefs about themselves greatly influence how they perform and on what they can do. If a student thinks that one's characteristic, like intelligence, can be improved, they engage in ways to enhance it which allows them to perform better in school or in any academic engagement.

Students go to school with the purpose of developing their skills and competence, while others focus on competing with their peers. When students believe that they are competent to successfully accomplish a task, they are more motivated to engage in completing the task. The more confident students are in their capacity to learn, the more active they will be in the learning process [18]. There are those whose main aspiration is to master in certain course content, and there are also those who want to get achievements.

For the students to show their fullest skills in food processing, they should perform different tasks competently and proficiently, accept and utilize the suggestions to improve performance, and achieve their desired skills. Additionally, it is important to understand the level of students' culinary efficacy and getting students to engage more fully and deeply with different performance tasks.

Moreover, there are many constructs that could be investigated when assessing which factors influence students' food processing skills. This fall within two major categories: achievements goal and culinary efficacy. On one hand achievement's goal urges one person to do something. In its simplest words, achievement gives strength for directing and driving one's passion in order to achieve better school performance. On the other hand, culinary efficacy provides opportunity to people to master one's confidence in making culinary as standard and competent.

As it has been observed that the learners are reluctant and had no interest in their TLE classes which has been reflected in their performance and the grades they get during examinations and practical activities. This affirms to the study of [17] that lack of culinary knowledge and interest constraints played a significant role in achieving their goal towards the desired competencies. Hence, this study intends to determine the level of students' achievement and culinary efficacy in East II District National High School of Cagayan de Oro City, S.Y. 2021-2022 as related to their food processing skills. The results of this research may yield valuable data that will be important in enhancing the future study to be made.

#### II. METHODS

This study used the descriptive-correlational design which involves the conditions or relationships that exist between variables. This was deemed the most suitable design since the study will describe the relationship between the students' food processing skills and their achievement goal orientation and culinary efficacy. The participants of the study were the seventy (70) Grade 9 students of East II District of National High School in Cagayan de Oro City during school year 2021-2022 where forty-one (41) of them were males and twenty-nine (29) were females. These seventy (70) students were enrolled and had food processing as their course in TLE. The research instruments were subjected to content validity by the experts in the field for comments, suggestions, improvements, and refinement. After incorporating their suggestions, the revised instruments were pilot tested to Grade 9 Food processing students of East III District of National High School in Cagayan de Oro City. The researcher determined during the try out if there were vague items. In addition, the researcher asked permission to one of the TLE teacher as inter-rater of the performance of the students. To ensure the internal consistency of the items in the questionnaire, Cronbach's Alpha Reliability Coefficient was used. In this study, the items on mastery orientation got the Cronbach's Alpha of 0.976 while the performance orientation got the Cronbach's Alpha of 0.968; the culinary efficacy had 0.968 and the rubrics for food processing skills got the following (1) food preparation .9191, (2) food production .8863, (3) food presentation .9261 and (4) storage .8437. This means that the items were reliable to administer.

#### III. RESULT AND DISCUSSION

Lack of culinary knowledge and skill, financial instability, inadequate access to healthy food options, and other time/lifestyle constraints may have played a significant role in limiting their ability to prepare and consume healthy meals [17]. Personal responsibility over preparing and consuming food can play a key role in addressing the problem of poor nutrient intakes. the importance of designing programs with effective strategies to motivate and encourage college students to improve their food behaviors and practices.

Table 1. Frequency, Percentages and Mean Distribution of Participants' level of Achievement Goal Orientation (Mastery)

	<b>T</b>		
Range	Interpretation	Frequency	%
3.25 –	Very High		
4.00		21	30.00
2.50 -	Moderate		
3.24		38	54.29
1.75 –	Low		
2.49		10	14.29
1.00 -	Very Low		
1.74		1	1.43
Total		70 100	
Overall Mean		3.01	
Interpretation		Moderate	
SD		0.64	

Indicators	Mean	Interpretation	SD
1. I want to learn			
as much as	2 16	Moderate	0 77
possible from my	5.10	Moderate	0.77
TLE class.			
2.I want to make			
my performance			
good in preparing,			
cooking,	2 10	Moderate	0.02
presenting and	5.19	Moderate	0.82
storing the			
different dishes in			
food processing.			
3. I work hard to			
learn new things in	2.94	Moderate	0.93
my TLE class.			
4. I gain			
satisfaction once I	2.02	Madamata	0.02
learn new things in	3.03	Moderate	0.82
TLE.			
5. I am striving to			
carry out what I			
have to do as	2.80	Moderate	1.03
thoroughly as			
possible.			
6. My aim is to	2.01	Moderate	0.00
completely master	3.01	Moderate	0.89

what I have to do			
in the class.			
7. I desire to			
completely master			
the materials	3.14	Moderate	0.92
presented in my			
TLE class.			
8. It is important			
for me to			
understand the			
content of this	3.01	Moderate	0.91
subject as			
thoroughly as			
possible.			
9. I consider the			
lesson in TLE	2 97	Moderate	0.88
Food Processing is	2.91	Widderate	0.00
beneficial to me.			
10. I am striving to			
do my best for	2.87	Moderate	0.96
excellent.			

Tables 1 shows the frequency, percentage, and mean distributions of the participants' level of achievement goal orientation in terms of mastery. It can be gleaned from the table that as a whole; the participants assessed their mastery orientation as "moderate" which is indicated by the overall mean of 3.01. This finding implies that the participants were moderately stimulated by their personal enjoyment, interest, or pleasure in learning the skills.

It is worth mentioning that among the ten (10) items of mastery scale, it was making my performance good in preparing, cooking, presenting and storing the different dishes in food processing, making my performance good in preparing, cooking, presenting and storing the different dishes in food processing, and the aim is to completely master what I have to do in the class got the highest mean ( $\mu = 3.19$ ,  $\mu = 3.16$ ,  $\mu = 3.14$ ) respectively. The lowest mean was related to striving to do my best for excellent ( $\mu = 2.87$ ) and striving to carry out what I have to do as thoroughly as possible ( $\mu = 2.80$ ). The result of the study implies that the participants put emphasizes in good performance in the preparation, production presentation, and storage of food. Since the lowest mean is for the participants to strive more so that they will be able to carry out what they to do, there is a need for teachers to develop a creative and unique way for the students to able be to perform their task smoothly and easily.

This finding is in consonance with the result of the study of [2] who emphasized that being interested in a topic improves learning, which leads to better performance and achievement.

Table 2. Frequency, Percentages and Mean Distribution of Participants 'level of Achievement Goal Orientation (Performance)

Range	Interpre	etation	Frequency	%
3.25 -	Very	High		
4.00			22	31.43
2.50 -	Mode	erate		
3.24			26	37.14
1.75 –	Lo	W		
2.49			22	31.43
1.00 -	Very	Low		
1.74			0	0.00
Total			70100	
Overall Me	ean		3.01	
Inter	pretation		Moderat	e
	SD		0.71	
T 1'		N	<b>T</b>	(ID)
Indica	tors	Mean	Interpretation	n SD
1. My an	n is to			
perform	better	3.06	Moderate	0.92
than	other			
students.	-1 : <u>-</u> +-			
2. My go	al 15 to	2.00	Madanata	0.04
progress a	sinuch	2.99	Moderate	0.94
as my clas	sinates.			
ologic is to				
bottor gra	do then	3 1 1	Moderate	0.83
most of th	ue ulali	5.11	Moderate	0.85
students				
A L wou	ld feel			
really good	nd if I			
were the o	nlvone			
who	could			
nerform	the	2.94	Moderate	0.98
teacher's	the			
question	in the			
class				
5. It is in	portant	2.94	Moderate	1.02

for me to do well compare to others in this class.

Tables 2 shows the frequency, percentage, and mean distributions of participants' level of achievement goal orientation in terms of performance. It can be gleaned from the table that as a whole; the participants assessed their performance orientation as "moderate" which is indicated by the overall mean of 3.01. This finding implies that the participants are striving in achieving and getting their grades high. Here, the students are achieving for the goal to have an excellent grade as well as to develop their learning skills to fully accomplish the task given to them.

It is interesting to mention that among the five (5) items of performance scale, *wanting to get a better grade than most of the other students* got the highest mean (3.11). This is followed by *wanting to perform better than other students* (3.06). None of the items were rated "very low" by the participants but the perception that they were *motivated because they would feel really good if they were the only one who could perform the teacher's question in the class and It is important for me to do well compare to others in this class got the lowest mean (2.94).* 

This finding is supported by [4-5] that being driven in performing an activity with the intention of attaining some separable consequence, such as receiving an award or gaining appreciation from their co-learners and teacher so that they can work hard and perform well in accordance with the given task or activity that the learners are having fun and enjoyment.

Table 3. Frequency, Percentages and Mean Distribution of Participants' perceived level of culinary efficacy?

Range	Interpretation	Frequency	%
3.25 -	Very High		
4.00		19	27.14
2.50 -	Moderate		
3.24		35	50.00
1.75 –	Low		
2.49		16	22.86
1.00 -	Very Low	0	0.00

1.74	
Total	70100
Overall Mean	2.93
Interpretation	Moderate
SD	0.65

Tables 3shows that participants reported a "moderate" culinary efficacy which is indicated by the overall mean of 2.93. This finding implies means that the student-participants generally believe their capabilities to achieve a goal outcome to a moderate extent.

The data also revealed that all the ten (10) items, are interpreted as "moderate". The highest mean among all the indicators of culinary efficacy is on their *belief that they can remain calm when facing difficulties in their culinary subject because they can rely on their coping abilities* ( $\mu = 3.07$ ). This is followed by the lowest mean of (2.74) indicated their belief that it is *easy for them to stick to their aims and accomplish their goals in their culinary subject.* 

It is, therefore, essential for teachers to facilitate the development of culinary efficacy in the classroom if they would aim for students' optimal learning. Even if the indicators of culinary efficacy were perceived "moderate", this finding points to the need of enhancing their culinary efficacy to the desired level. Students then should know how to plan, monitor and manage themselves in engaging various activities.

Indicators	Mean	Interpretation	SD
1. I can always manage to solve difficult problems in culinary subject if I try hard enough.	2.90	Moderate	0.95
2. If someone opposes me, I can find the means and ways to get what I want in my culinary subject.	3.01	Moderate	0.91
3. It is easy for me to stick to my aims and accomplish my goals in my culinary subject.	2.74	Moderate	1.00
4. I am confident that I could deal efficiently	2.93	Moderate	0.80

with unexpected events				1.74			
in the culinary subject.				Total		70100	
5. I can handle				Overall Mean		3.04	
unforeseen situations in				Interpretation		Moderate	
my culinary subject	2.97	Moderate	0.90	SD		0.67	
because I am							
resourceful.				Tables 4 shows the frequ	iency, pe	ercentage, and m	nean
6. I can solve most				distributions of participar	ıts' level	of food prepara	tion
problems in my culinary	2.96	Moderate	0.95	in food processing skills.	It can be	e seen from the t	able
subject if I invest the	2.90	moderate	0.75	that as a whole; the part	icipants	were given a ra	ting
necessary effort.				of "good" in their food p	oreparatio	on $(\mu = 3.04)$ wl	nich
7. I can remain calm				means that they demonst	rated a g	good performanc	e in
when facing difficulties				this skill.			
in my culinary subject	3.07	Moderate	0.82				
because I can rely on my				Even if there is homogen	neity of	"good" rating ir	ı all
coping abilities.				the food preparation ski	lls, amo	ng the five spea	cific
8. When I am confronted				indicators of food prep	aration,	raw ingredient.	s of
with problem during our				papaya pickles are wash	ed with a	clean and tap w	ater
performance tasks in	2.77	Moderate	0.98	got the highest mean (µ	1 = 3.07	) and the staten	nent
culinary, I can usually				ingredients of papaya pic	ckles are	set up accordin	g to
find several solutions.				precise quality and quar	ıtity reqi	<i>uired</i> got the lov	west
9. If I am in a trouble				mean ( $\mu = 3.00$ ). The	se findi	ngs point out	that
during our performance				teacher should guide the	students	s on the proper	way
tasks in culinary, I can	2.97	Moderate	0.96	of washing the ingredie	ents with	h tap water be	fore
usually think of a				slicing it to its standard m	neasurem	nent.	
solution.				T. I'	M	T	OT.
10. I can usually handle				Indicators	Mean	Interpretation	SL
whatever challenges in	3.01	Moderate	0.84	1. Inecessary tools, utensil			
my culinary subject that				and equipment in cooking	3.05	Good	0.7
comes my way.				papaya pickles are			

This finding supports the assertion of [16] in their study which claimed that self-efficacious students tend to plan, monitor, regulate themselves while engaging in tasks; hence, they are able to persist longer, try hard, and show interest in the activities.

## Table 4. Frequency, Percentages and Mean Distribution of Participants' level of food processing skills (Food Preparation)

Range	Interpretation	Frequency	%
3.25 -	Very Good		
4.00		23	32.86
2.50 -	Good		
3.24		29	41.44
1.75 -	Fair		
2.49		18	25.71
1.00 -	Poor	0	0.00

Indicators	Mean	Interpretation	SD
1. Necessary tools, utensil			
and equipment in cooking	2.05	Good	0.75
papaya pickles are	5.05	0000	0.75
sanitized.			
2. Ingredients of papaya			
pickles are gathered	3.05	Good	0.76
according to exact	5.05	0000	0.70
quantity type required.			
3. Ingredients of papaya			
pickles are set up			
according to precise	3.00	Good	0.76
quality and quantity			
required.			
4. Ingredients of papaya			
pickles are measured	2.01	Card	0.70
according to exact and	3.01	Good	0.78
precise used.			
5. Raw ingredients of			
papaya pickles are washed	3.07	Good	0.76
with clean and tap water.			

This finding finds consonance with what [6] asserted that one way of keeping food clean is through washing fresh produce with clean water before using it. Although the items in food preparation are relatively good, the indicator with lower mean is connected to set it according to precise quality and quantity required. The importance of proper measuring and weighing of the ingredients can be appreciated when one realizes that product being cooked is not in accordance to the desired shape and presentation.

Table 5. Frequency, Percentages and Mean
Distribution of Participants' level of food processing
skills (Food Production)

Range	Interpretation	Frequency	%
3.25 -	Very Good		
4.00		22	31.43
2.50 -	Good		
3.24		33	47.14
1.75 –	Fair		
2.49		15	21.43
1.00 -	Poor		
1.74		0	0.00
Total		70100	
Overall M	ean	3.00	
Interpretation		Good	
SD		0.64	

Indicators	Mean	Interpretation	SD
1. The papaya pickle is			
being prepared			
according to its standard	3.02	Good	0.66
recipes using a range of			
cooking procedures.			
2. Papaya pickles are			
prepared and cooked	2.07	Good	0.72
accurately according to	5.07	0000	0.72
the standard procedure.			
3.Sauces of papaya			
pickles are palatable and	2.04	Good	0.70
set according to texture	2.94	0000	0.79
and appearance.			
4. The Papaya pickle is			
cooked and set	2.07	Good	0.72
according to its	2.97	0000	0.72
palatability.			
5. Workstation is			
hygienic and	2.99	Good	0.77
procedures are followed			

according to legal and standard requirements.

Table 5 shows the frequency, percentage, and mean distributions of participants' level of food production in food processing skills. It can be seen from the table that as a whole; the participants were rated as "good" ( $\mu = 3.00$ ) in their food production.

Among the five specific indicators of food production, *papaya pickles are prepared and cooked accurately according to the standard procedure* got the highest mean ( $\mu = 3.07$ ). Although their performance in food production is relatively good, the indicator with the lowest mean is connected to selecting *sauces that are palatable and set according to texture and appearance specific to dish preparations* (2.94).

Table 6. Frequency, Percentages and Mean Distribution of Participants' level of food processing skills (Food Presentation)

Range	Interpretation	Frequency	%	
3.25 -	Very Good			
4.00		23	32.86	
2.50 -	Good			
3.24		28	40.00	
1.75 –	Fair			
2.49		18	25.71	
1.00 -	Poor			
1.74		1	1.43	
Total		70100		
Overall Mean		3.00		
Interpretation		Good	l	
	SD	0.66		

Table 6 shows the frequency, percentage, and mean distributions of participants' level of food processing skills in food presentation. It can be gleaned from the table that as a whole; the participants assessed their food preparation as "good" which is indicated by the overall mean of 3.00. This finding implies that they demonstrated good performances in their food production.

Among the five specific indicators of food presentation, *papaya pickles that are presented with a garnish that offers contrast* got the highest mean ( $\mu$  = 3.13). The item in food presentation is relatively

good but the indicator with lowest mean is *papaya pickles are appropriately labelled* ( $\mu = 2.87$ ). The figures point to the need of enhancing the students' food presentation in terms of proper plating and the art of plating so that the customers will have the appetite to eat and will enjoy because of its beautiful presentation and labelling of the products.

Indicators	Mean	Interpretation	SD
1. Suitable plates or platters and bottles/containers are used according to	3.08	Good	0.70
<ol> <li>2. Cooked Papaya pickles are presented with a garnish that offers contrast.</li> </ol>	3.13	Good	0.67
3. Papaya pickles are presented attractively using suitable garnishes within the required time frame.	2.92	Good	0.80
4. Basic principles in plating papaya pickles are applied and observed.	2.99	Good	0.73
5. Papaya pickles are appropriately labeled.	2.87	Good	0.82

According to study conducted by [19] using the plate as a canvas is the key in mastering the art of plating. A plate should engage the senses and draw the diner into it much as a painting will draw the observer. The dish should be carefully planned to balance tastes, textures, colors, and cooking methods inventory.

Table 7. Frequency, Percentages and Mean Distribution of Participants' level of food processing skills (Storage)

Range	Interpretation	Frequency	%
3.25 -	Very Good		
4.00		40	57.14
2.50 -	Good		
3.24		26	37.14
1.75 –	Fair		
2.49		4	5.71

1.00 – Poor			
1.74	0	0.00	
Total	70100	)	
Overall Mean	3.42		
Interpretation	Very Good		
SD	0.58		

Tables 7 shows the frequency, percentage, and mean distribution of participants' level of storage. The table serves as evidence that as a whole, the participants were assessed to have "very good" skills which is indicated by the overall mean of 3.42.

Indicators	Mean	Interpretatio n	SD
1. Papaya pickles are stored using applying the correct storing techniques.	3.34	Very Good	0.63
2. Optimum quality of papaya pickles is maintained in correct temperature.	3.34	Very Good	0.70
3. Finished products of papaya pickles are clearly labeled with the product description.	3.32	Very Good	0.72
4. Food packing of papaya pickles is clearly dated.	3.32	Very Good	0.72
5. Cooked papaya pickles are stored in accordance with First In First Out (FIFO) operating procedures.	3.75	Very Good	0.26

Among the five specific indicators of storage, proper storing of *cooked dishes in accordance with First in First out (FIFO) operating procedures* got the highest mean ( $\mu = 3.26$ ). The items in storing are relatively good but the indicator with the lowest mean is connected to food packing of dishes that are *finished products of papaya pickles are clearly labelled with the product description and food packing of papaya pickles is clearly dated* respectively ( $\mu = 3.32$ ).

The result implies that there is a need for a teacher to guide the students on how to properly label the products with its appropriate description and date being manufactured and the expiration date in order for the students to be aware of which product should be release first and which product should be left in a period of time.

According to the study conducted by [20] proper storing includes storing new products behind the old product and are always important to use First in First out (FIFO) method. The students' performance was generally assessed as good, storage got the highest overall mean with ( $\mu = 3.42$ ), out of four (4) food processing skills. It is then followed by food preparation with ( $\mu = 3.04$ ). Third in rank is food presentation with ( $\mu = 3.00$ ) and lastly, the food production with ( $\mu = 3.00$ ). The figures point to the need of enhancing the students' food processing skills more specifically the food presentation and production skills to the desired standard.

			Standardized		
	Unstandardiz	ed Coefficient	s Coefficients		
	В	Std. Error	Beta	t	Sig.
(Constant)	.042	.079		.531	.597
Mastery	.220	.078	.212	2.81**	.006
Performance	.483	.053	.516	9.10**	.000
Culinary Efficacy	.299	.064	.291	4.70**	.000
	Ν	Iodel Summa	ry		
R = .980	Adjusted R <sup>2</sup>	= .959	F = 534.80 * *	p = .000	

Table 8. Result of the Regression Analysis for Food Preparation

\*\*Significant at .01 level (two-tailed)

Table 8 signifies the regression analysis of the food preparation as influenced by their achievement goal orientation and culinary efficacy. Based on the result, the whole model is significant with the F = 534.80 and p value is .000. In addition, the R value of .980 indicates a strong correlation of the variables.

Moreover, 95.9% of the variation of the food preparation is explained by a combination of the achievement orientation and culinary efficacy. Both mastery and performance goal orientation and culinary efficacy significantly influence food preparation.

Specifically, for every unit increase in their mastery goal orientation there is a corresponding .220

increase in their food preparation skills (B= .220, t= 2.8, p=.006); a unit increase in performance goal orientation corresponds to a .483 increase in their food preparation skills (B= .483, t= 9.10, p= .000) and for every unit increase in culinary efficacy there is a corresponding .299 in their food preparation skills (B=.299. t= 4.70, p= .000). This would mean that students with efficacy performed well in their different activities and make their learning more meaningful and created an impact to their own lives.

This is consistent with the theoretical guideline of [3] that efficacy has been recognized to play an important role in students' performance.

			Standardized		
	Unstandardized C	Coefficients	Coefficients		
	В	Std. Error	Beta	t	Sig.
(Constant)	.057	.063		.901	.371
Mastery	.406	.062	.407	6.52**	.000
Performance	.295	.042	.329	7.00**	.000
Culinary Efficacy	.283	.051	.287	6.00**	.000
	Mod	el Summary			
R = .986	Adjusted $R^2 = .97$	2 F =	= 787.602**	p = .000	

Table 9. Result of the Regression Analysis for Food Production

\*\*Significant at .01 level (two-tailed)

Table 9 signifies the regression analysis of the food production as influenced by their achievement goal orientation and culinary efficacy. Based on the result, the whole model is significant with the F = 785.60and p value is .000. In addition, the R value of .986 indicates a strong correlation of the variables.

Moreover, 97.2% of the variation of the food production is explained by a combination of the achievement orientation and culinary efficacy. Both mastery and performance goal orientation and culinary efficacy significantly influence food production.

Specifically, for every unit increase in their mastery goal orientation there is a corresponding .406 increase in their food production skills (B= .406, t= 6.52, p=.000); a unit increase in performance goal orientation corresponds to a .295 increase in their food production skills (B=.295, t=7.00, p=.000) and for every unit increase in culinary efficacy there is a corresponding .283 in their food preparation skills (B=.283. t= 6.00, p= .000).

The study of [17] asserted that culinary knowledge and skill, are access to healthy food options, and other time/lifestyle constraints a strong way to produce food with excellent preparation and may have played a significant role in their ability to prepare produce healthy and meals.

			Standardized		
	Unstandardiz	ed Coefficients	Coefficients		
	В	Std. Error	Beta	t	Sig.
(Constant)	015	.065		226	.822
Mastery	.413	.065	.404	6.40**	.000
Performance	.327	.044	.355	7.45**	.000
Culinary Efficacy	.268	.053	.264	5.08**	.000
	Ν	Iodel Summar	y		
R = .986	Adjusted R <sup>2</sup>	=.971 F	= 766.36**	p = .000	

Table 10. Result of the Regression Analysis for Food Presentation

Significant at .01 level (two-tailed)

Specifically, for every unit increase in their mastery goal orientation there is a corresponding .413 increase in their food presentation skills (B= .413, t= 6.40, p=.000); a unit increase in performance goal orientation corresponds to a .327 increase in their food presentation skills (B= .327, t= 7.45, p= .000) and for every unit increase in culinary efficacy there is a corresponding .268 in their food preparation skills(B=.268. t= 5.08, p= .000).

This means that, students should execute the best way of presenting the process food in order for the customers to have fun and enjoyment in eating the food they presented, additionally the art of presentation should be done harmoniously.

This affirms to the study of [7] that culinary skills beliefs conclude that the best way to offer individuals to have some enjoyment in their food are through presentation. In addition, [17] assert the importance of designing with effective strategies to motivate and encourage individuals to further promote harmonious eating habits.

	Unstandardiz	ed Coefficients	Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	2.067	.288		71.74	.000
Mastery	.670	.286	.741	2.345**	.022
Performance	483	.194	592	-2.487**	.015
Culinary Efficacy	.266	.233	.298	-1.144**	.257
	1	Model Summary			
R = .551	Adjusted R <sup>2</sup>	= .272 F	= 9.580**	p = .000	
*Significant at .05 level (tw	o-tailed)				

#### Table 11. Result of the Regression Analysis for Storage

\*\*Significant at .01 level (two-tailed)

Table 11 signifies the regression analysis of the food storage as influenced by their achievement goal orientation and culinary efficacy. Based on the result, the whole model is significant with the F = 10.00 and p value is .000. In addition, the R value of .551 indicates a strong correlation of the variables.

Moreover, 27.2% of the variation of the food storage is explained by a combination of the achievement orientation and culinary efficacy. Both mastery and performance goal orientation and culinary efficacy significantly influence food storage.

Specifically, for every unit increase in their mastery goal orientation there is a corresponding .670 increase in their food storage skills (B=.670, t=2.35, p=.000); a unit increase in performance goal orientation corresponds to a -.483 increase in their food storage skills (B= -.483, t= -2.50, p= .000) and for every unit increase in culinary efficacy there is a corresponding .266 in their food storage skills (B=.266. t= -1.14, p= .000).

The data implies that there is a significant influence between the mastery, performance, and culinary efficacy towards food preparation, food production, food presentation and food storage. Therefore, the performance hypothesis that the participants' achievement goal and culinary efficacy are not

significantly influenced to their food processing skills is accepted. There is evidence to show that the development of one's food processing skills greatly contributed to the ease of mastery, performance and culinary efficacy effectively especially on the aspects of food processing skills.

Thus, it can be put forth that students are confident in the said skills. These findings are akin to the study of [1] who revealed the significant influence between the efficacy and food processing skills.

As observed by the researcher who at the same time is one of the TLE subject teachers, the students who excel in their overall food processing subject are those who have goal in achieving their desired plan and being motivated to work out with the task given to them. It is possible to happen that although these students have food processing skills, they did not believe in their capacity to prepare, produce, present and store food.

## CONCLUSION

Learning is an endless lifelong learning process, as so achieving something with a goal is rewarding the part of the learners and to the teachers as well. The importance of helping one another for the betterment of each individual signifies a huge impact to the learners and to the teachers as well.

Moreover, the researcher's argument advanced in the earlier part of the paper is confirmed. Students who have higher achievement goal orientation demonstrate better food processing skills. This finding implies that students' goals to develop food processing skills are related to their reasons for engaging with a task. In a same manner, high performance on food processing developed a positive perspective towards the task given to them and more likely to contribute to the desire to work out the task given to them. This study also points that it is possible to happen that although students have food processing skills, they did not believe in their susceptibility to prepare, produce, present, and store food.

This implies the essential way of cultivating students' achievement goal and culinary efficacy in the said class as fundamental component in the development of their food processing skills.

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