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ORIGINAL ARTICLE

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TEACHING EFFICACY AMONG PUBLIC HIGHER EDUCATION INSTITUTIONS (HEIs) IN SULU

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ABSTRACT

This descriptive-correlational study determines the teaching efficacy among public Higher Education Institutions during the Academic Year 2021-2022. With 200 teacher-respondents, and with the use of weighted mean, standard deviation, t-test for independent samples, One-way ANOVA, and Pearson's r, the findings are. 1) There is a significant difference in the extent of teaching efficacy of college instructors of HEIs in Sulu when data are categorized according to age, civil status, and educational attainment. But there is no significant difference in terms of gender, length of service, and appointment status. Teachers who are 30 years old & above, separated, and with MA/MS degrees have better ways of assessing the level of confidence college instructors of HEIs in Sulu in their ability to guide students to success which includes helping students learn, building effective programs for students, and effectively changing student learning. 2) There is a very high correlation among the sub-categories subsumed under the extent of teaching efficacy of college instructors of HEIs in Sulu.

Keywords: *Teaching Efficacy, Higher Education Institutions, Sulu, College Instructors*

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INTRODUCTION

Pursuant to Republic Act 7722 and given the national government's commitment to transformational leadership that puts education as the central strategy for investing in the Filipino people, alleviating poverty, and building national competitiveness, Commission on Higher Education (CHED) shall, among others, guarantee and protect academic freedom for continuing intellectual growth, advancement of learning and research, development of responsible and effective leadership, education of high-level professionals, and enrichment of historical and cultural heritages.

Administratively, CHED has the regulating power of all higher education institutions in the Philippines both public and private entities. For public higher education institutions, CHED cascaded some of its programs to State Universities and Colleges (SUCs) for implementation processes. In fact, pursuant to Republic Act 7722 all SUCs Governing Boards (GB) are being chaired by CHED commissioners. This is to ensure that formulation and implementation of all policies and programs of SUCs are congruent with the mandate of the CHED central office or government higher education system.

Theoretically, a strong faculty force can be equated to what is known as a teacher's teaching efficacy. Key to Bandura's (1986 in Vinney, Cynthia, 2019) Social Cognitive Theory is his concept of

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self-efficacy, which is one of the personal factors. Bandura defines self-efficacy as belief in one's capabilities to organize and execute the courses of action required to produce given attainments. Self-efficacy beliefs is the most influential factor in human agency and play a powerful role in determining the choices people make, the effort they will expend, how long they will persevere in the face of challenge, and the degree of anxiety or confidence they will bring to the task at hand.

Mazlum et al. (2015) study confirmed that teachers' self-efficacy plays an important role in students' educational outcomes. Pieces of evidence show that there is a relationship between teachers' self-efficacy beliefs and students' achievement and motivation. Teachers' self-efficacy beliefs also affect their teaching activities, commitment, and behaviors. Consequently, having self-efficacy, the teacher would develop personal teaching efficacy which represents a teacher's beliefs of his or her own ability to influence students' learning and behavior. It includes the beliefs in implementing effective teaching strategies, adopting better pedagogical skills, dealing with difficult students, bringing about positive changes in students' learning, etc.

Believing that self-efficacy means the teacher's belief in his/her capability to organize and perform the actions needed to fulfill a particular teaching task in a specific context successfully, Tschannen-Moran et al. (2001) proposed a theoretical model which constitutes a teacher's efficacy for student engagement, instructional strategies, and classroom management. This, however, can be equated to a teacher's pedagogical knowledge and skills in teaching.

Teaching efficacy is the belief that one's teaching can affect certain educational outcomes. A teacher's efficacy beliefs are related to their behavior in the classroom and the amount of effort they invest in teaching. There is a relationship between what a teacher believes and how they interact and work with students in the classroom (Dalanon and Matsuka, 2017).

A considerable number of educational research works tried to connect leadership skills with the use of certain kinds of instructional strategies to the teaching efficacy of the teacher; but seldom of such kind of research has been reported in the local context, especially in the Philippines, particularly in rural settings like Sulu which is the concern of this study. Therefore, this study was conducted in Sulu among public higher education institutions so as to gather empirical data neither to support nor deny the above premises on the extent of leadership skills and teaching efficacy.

Research Questions

1. What is the extent of the teaching efficacy of college instructors of higher education institutions (HEIs) in Sulu in terms of efficacy for student engagement, efficacy for classroom management, and efficacy for instructional strategies?
2. Is there a significant difference in the extent of the teaching efficacy of college instructors of higher education institutions (HEIs) in Sulu when data are grouped?
3. Is there a significant correlation between the sub-categories subsumed under transformational leadership style and teaching efficacy

RESEARCH METHODOLOGY

Research Design

Bless and Higson-Smith (1995) introduced the concept of a research design as "a program that guides a researcher in collecting, analyzing and interpreting observed facts." (p.63). Similarly, Babbie and Mouton (2001:75) regard research design as the road map or blueprint by which one intends to conduct research and achieve his/her research goals and objectives." A descriptive research design method was employed in this study, that is, with the intent to describe, quantify, and as well as discover relationships among variables and to allow the prediction of future events from present knowledge or phenomenon of college faculty members, namely: 3) The extent of teaching efficacy of college instructors of higher education institutions (HEIs) in Sulu in terms of Efficacy for student engagement, Efficacy for classroom management, and Efficacy for instructional strategies; 4) The significant difference in the extent of teaching efficacy when data are grouped classified according to Gender, Age,

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Civil Status, Length of Service, Educational Attainment, and Status of Appointment; and the correlation among the sub-categories subsumed and teaching efficacy.

Faculty members of public HEIs in Sulu were the main source of data which to be quantified to answer the research questions in this study. Library and internet researches and publications were the sources of information that were used to enrich the theoretical and conceptual frameworks of this research. The data from the respondents were collected through the use of questionnaires.

Research Respondents

The respondents of this study were faculty members of public HEIs in Sulu who are currently employed and teaching at different colleges and universities regardless of their academic ranks/positions during the Academic Year 2020-2021. 200 samples were used in this study wherein 75 were from MSU-Sulu, 100 from Sulu State College, 15 from Hadji Butu School of Arts and Trade (HBSAT), and 12 from Lapak Agricultural School.

Research Instrument

A survey questionnaire was the main instrument employed to gather data on the extent of the teaching efficacy of faculty members. It was adapted and patterned from standardized questionnaires of Tschannen-Moran et al. (2001) Teacher's Efficacy Scales.

The research instrument used in this study consists of three parts. Part I of the questionnaire focused on obtaining the demographic profile of the respondents which includes gender, age, length of service, educational attainment, and status of appointment variables.

Part II focused on gathering data on the extent of teaching efficacy of teachers at public HEIs in Sulu with the following dimensions Efficacy for classroom management (7 items), Efficacy for instructional strategies (7 items), and Efficacy for student engagement, (8 items).

A 5-point Likert-Scale was used to measure the variables subsumed under the teaching efficacy.

Data Analysis

Both descriptive and inferential statistical tools were appropriately employed in the treatment of data to be gathered for this study, namely:

1) For research question number 1, mean and standard deviation were employed to determine the extent of teaching efficacy;

2) For research question number 2, a t-test for independent samples was employed to determine the significant differences in the extent of teaching efficacy when data are grouped according to gender; and One-way Analysis of Variance (ANOVA) when data are grouped according to age, length of service, educational attainment and status of appointment; and

3) For research question number 3, the Pearson Product Moment Correlation Coefficient was employed to determine the significant correlation among the sub-categories subsumed under actual teaching efficacy.

The following rating scales intervals were adopted in the analyses of the results of the computations yielded by both descriptive and inferential statistical tools:

A) Rating Scales Interval on respondents' levels of teaching efficacy based on a 5-point Likert's Scale:

Point	Scale Value	Descriptors
5	4.50-5.00	A great deal
4	3.50-4.49	Quite a bit
3	2.50- 3.49	Some influence
2	1.50- 2.49	Very little
1	1.00- 1.49	Nothing

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RESEARCH FINDINGS AND DISCUSSION

1. **For Research Question Number 1: On the Extent of Teaching efficacy of Instructors of HEIs in Sulu**

College instructors of HEIs in Sulu are "Quite a Bit" or have high teaching efficacy in terms of efficacy for student engagement, efficacy for classroom management, and efficacy for instructional strategies. That is, they have a high level of confidence in their ability to guide students to success which includes helping students learn, building effective programs for students, and effectively changing student learning behavior.

2. **For Research Question Number 2: On Differences in Attitudes towards Flexible Learning**

There is a significant difference in the extent of teaching efficacy of college instructors of HEIs in Sulu when data are categorized according to age, civil status, and educational attainment. But there is no significant difference in terms of gender, length of service, and appointment status. Teachers who are 30 years old & above, separated, and with MA/MS degrees have better ways of assessing the level of confidence college instructors of HEIs in Sulu in their ability to guide students to success which includes helping students learn, building effective programs for students, and effectively changing student learning.

3. **For Research Question Number 3: On Correlation among the Sub-Categories Subsumed under the extent of teachers' instructional competence and attitude towards blended learning amidst covid-19 pandemic?**

There is a very high correlation between the sub-categories subsumed under the extent of the transformational leadership style of school administrators and teaching efficacy of college instructors of HEIs in Sulu.

1. What is the extent of the teaching efficacy of college instructors of higher education institutions (HEIs) in Sulu in terms of 1.1 Efficacy for student engagement, 1.2 Efficacy for classroom management, and 1.3 Efficacy for instructional strategies?

1.1 In terms of Efficacy for Student Engagement

Table 1.1 shows the extent of the teaching efficacy of college instructors of Higher Education Institutions (HEIs) in Sulu in terms of efficacy for student engagement. Under this category, teacher-respondents obtained a total weighted mean score of 4.0863 with a standard deviation of .45930 which is rated as "Quite a Bit". This result indicates that teacher-respondents perceive that the college faculty of HEIs in Sulu have strong teaching efficacy and the ability to get learners involved in classroom activities. In other words, HEIs teachers in Sulu have the ability to foster student creativity, and cultivate students' critical thinking skills, etc.

Consequently, under this category, teacher-respondents rated with "Very Satisfactory" the following items: "How much can you do to control disruptive behavior in the classroom?", "To what extent can you make your expectations clear about student behavior?", "How well can you establish routines to keep activities running smoothly?", "How much can you do to get students to follow classroom rules?", "How much can you do to calm a student who is disruptive or noisy?", "How well can you establish a classroom management system with each group of students?", "How well can you keep a few problem students from ruining an entire lesson?", "How well can you respond to defiant students?", and "Develops unity and oneness through commonalities of diversities in experiences".

Table 1.1 Extent of the teaching efficacy of college instructors of higher education institutions (HEIs) in Sulu in terms of efficacy for student engagement

Statements		Mean	S.D.	Rating
1.	How much can you do to control disruptive behavior in the classroom?	4.3450	.71310	Quite a bit
2.	To what extent can you make your expectations clear about student behavior?	4.2600	.60351	Quite a bit

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3.	How well can you establish routines to keep activities running smoothly?	3.9350	.80873	Quite a bit
4.	How much can you do to get students to follow classroom rules?	4.2250	.66829	Quite a bit
5.	How much can you do to calm a student who is disruptive or noisy?	4.2650	.60548	Quite a bit
6.	How well can you establish a classroom management system with each group of students?	4.1450	.58797	Quite a bit
7.	How well can you keep a few problem students from ruining an entire lesson?	3.7600	.77161	Quite a bit
8.	How well can you respond to defiant students?	3.7550	.75353	Quite a bit
Total Weighted Mean		**4.0863**	**.45930**	**Quite a bit**

Legend: (5) 4.50-5.00=A Great Deal; (4) 3.50-4.49=Quite a Bit; (3) 2.50- 3.49=Some Influence; (2) 1.50- 2.49=Very Little; (1) 1.00- 1.49=Nothing

1.2 In terms of Efficacy for Classroom Management

Table 1.2 shows the extent of the teaching efficacy of college instructors of Higher Education Institutions (HEIs) in Sulu in terms of efficacy for classroom management. Under this category, teacher-respondents obtained a total weighted mean score of 4.0431 with a standard deviation of .42396 which is rated as “Quite a Bit”. This result indicates that teacher-respondents perceive that the college faculty of HEIs in Sulu have strong teaching efficacy and the ability to get learners involved in classroom activities. In other words, HEIs teachers in Sulu have the ability to make known expectations for students’ behavior, establish classroom routines, and get students to follow classroom rules and management.

Consequently, under this category, teacher-respondents rated with “Quite a Bit” the following items: “How much can you do to control disruptive behavior in the classroom?”, “To what extent can you make your expectations clear about student behavior?”, “How well can you establish routines to keep activities running smoothly? “How much can you do to get students to follow classroom rules?”, “How much can you do to calm a student who is disruptive or noisy?”, “How well can you establish a classroom management system with each group of students?”, “How well can you keep a few problem students from ruining an entire lesson?”, and “How well can you respond to defiant students?”

Table 1.3 Extent of the teaching efficacy of college instructors of higher education institutions (HEIs) in Sulu in terms of efficacy for instructional strategies

Statements		**Mean**	**S.D.**	**Rating**
1.	How much can you do to control disruptive behavior in the classroom?	4.3350	.62024	Quite a bit
2.	To what extent can you make your expectations clear about student behavior?	4.1200	.55420	Quite a bit
3.	How well can you establish routines to keep activities running smoothly?	4.1550	.64268	Quite a bit
4.	How much can you do to get students to follow classroom rules?	4.2000	.60151	Quite a bit
5.	How much can you do to calm a student who is disruptive or noisy?	4.2950	.73531	Quite a bit
6.	How well can you establish a classroom management system with each group of students?	4.1750	.56210	Quite a bit
7.	**How well can you keep a few problem students from ruining an entire lesson?**	**3.5900**	**.73799**	**Some influence**
8.	How well can you respond to defiant students?	3.4750	.77614	Quite a bit
Total Weighted Mean		**4.0431**	**.42396**	**Quite a bit**

Legend: (5) 4.50-5.00=A Great Deal; (4) 3.50-4.49=Quite a Bit; (3) 2.50- 3.49=Some Influence; (2) 1.50- 2.49=Very Little; (1) 1.00- 1.49=Nothing

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2. Is there a significant difference in the extent of the teaching efficacy of college instructors of higher education institutions (HEIs) in Sulu when data are grouped according to: 2.1 Gender, 2.2 Age, 2.3 Civil Status, 2.4 Length of Service, 2.5 Educational Attainment, and 2.6 Status of Appointment?

2.1 According to Gender

Table 2.1 depicts the difference in the extent of teaching efficacy of college instructors of HEIs in Sulu when data are grouped according to gender. It can be gleaned from this table that the Mean Differences, t-values, and probability-values of all sub-categories subsumed under the extent of teaching efficacy of college instructors are not significant at alpha .05. This means that, generally, male and female teacher-respondents in this study do not differ in their perceptions toward the extent of teaching efficacy of college instructors of HEIs in Sulu. This result implies that being a male instructor may probably make him a better perceiver toward the extent of teaching efficacy of college instructors than his female counterpart, or vice versa.

Moreover, it can be inferred further that instructors of higher education institutions in Sulu though they vary in gender, yet they do not differ in ways of perceiving the HEIs instructors' teaching efficacy. That is, teachers of HEIs in Sulu have similar ways of perceiving the level of confidence teachers have in their ability to guide students to success which includes helping students learn, building effective programs for students, and effectively changing student learning.

Hence, it is safe to say that variable gender has no significant influence in the ways how teachers of higher education institutions in Sulu perceive the extent of teaching efficacy of college instructors of HEIs in Sulu. Therefore, the hypothesis which states that "There is no significant difference in the extent of the teaching efficacy of college instructors of higher education institutions (HEIs) in Sulu when data are grouped according to gender" is accepted.

Table 2.1 Differences in the extent of teaching efficacy of college instructors of HEIs in Sulu when data are grouped according to gender

VARIABLES	Grouping	Mean	S. D.	Mean Difference	*t*	Sig.	Description
Efficacy for classroom management	Male	4.0798	.36147	.06917	1.153	.250	Not Significant
	Female	4.0106	.47186				
Efficacy for instructional strategies	Male	4.1237	.43745	.06353	.944	.347	Not Significant
	Female	4.0601	.50628				
Efficacy for student engagement	Male	4.1184	.39074	.06057	.930	.353	Not Significant
	Female	4.0578	.51269				

*Significant at alpha 0.05

2.2 According to Age

Table 2.2 depicts the difference in the extent of teaching efficacy of college instructors of HEIs in Sulu when data are grouped according to age. It can be gleaned from this table that except for Efficacy for Student Engagement, the F-values and Probability-values of all other sub-categories subsumed under teaching efficacy of instructors of HEIs I Sulu are not significant at alpha .05. This means that, generally, the fact that teacher-respondents vary in age range yet they indeed differ in their perceptions toward the extent of teaching efficacy. This result implies that a teacher being 51 years old and above may probably make him/her a better perceiver toward the extent of teaching efficacy than those who are 21-30 years old, 31-40 years old, and 41-50 years old, or vice versa.

Moreover, it can be inferred further that while teachers of higher education institutions in Sulu vary in age range, still they differ in ways of perceiving the teaching efficacy of instructors of HEIs in Sulu. That is, due to differences in age level, teachers differ in ways of judging the level of confidence

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teachers have in their ability to guide students to success which includes helping students learn, building effective programs for students, and effectively changing student learning.
Hence, it is safe to say that variable age has indeed a significant influence in the ways how teachers of HEIs in Sulu perceive the extent of teaching efficacy of instructors of HEIs in Sulu. Therefore, the hypothesis which states that "There is no significant difference in the extent of the teaching efficacy of college instructors of higher education institutions (HEIs) in Sulu when data are grouped according to age" is rejected.

Table 2.2 Differences in the extent of teaching efficacy of college instructors of HEIs in Sulu when data are grouped according to age

SOURCES OF VARIATION		Sum of Squares	df	Mean Square	F	Sig.	Description
Efficacy for classroom management	Between	2.939	3	.980	5.849*	.00	Significant
	Within Groups	32.830	19	.167			
	Total	35.769	19				
Efficacy for instructional strategies	Between	5.197	3	1.732	8.549*	.00	Significant
	Within Groups	39.715	19	.203			
	Total	44.911	19				
Efficacy for student engagement	Between	1.574	3	.525	2.544	.05	Not Significant
	Within Groups	40.407	19	.206			
	Total	41.981	19				

*Significant at alpha 0.05

A Post Hoc Analysis using Scheffe's Test was conducted to determine which groups classified according to age had different levels of meaning in areas subsumed under the extent of teaching efficacy of instructors of HEIs in Sulu when data are categorized according to their demographic profile in terms of age.

The result of the analysis which is shown in Table 2.2.1 indicates that the difference in the means of Efficacy for Classroom Management and Efficacy for Instructional Strategies are obtained by way of lower group means minus higher group means.

On Efficacy for Classroom Management: It shows that 30 years old & above group of respondents obtained a mean difference of .35119* with a Standard Error of .08931 ana d p-value of .002 which is significant at alpha=.05 over 51 years old & above. So, under this sub-category, no other groups of teachers are supposed to have better ways of perceiving the extent of teaching efficacy of HEIs in Sulu in terms of Efficacy for Classroom Management than teachers 30 years old & above of age.

On Efficacy for Instructional Strategies: It shows that 30 years old & above group of teachers obtained a mean difference of .42560* with a Standard Error of .09823 and a p-value of .000 which is significant at alpha=.05 over 51 years old & above. So, under this sub-category, no other groups of teachers are supposed to have better ways of perceiving the extent of teaching efficacy of teachers of HEIs in Sulu in terms of Efficacy for Instructional Strategies than those teachers aged 30 years old & above.

Table 2.2.1 Post Hoc Analysis: Differences in the extent sub-categories subsumed under the extent of teaching efficacy of instructors of HEIs in Sulu when data are categorized according to their demographic profile in terms of age

Dependent Variables	(I) Grouping by Age	(J) Grouping by Age	Mean Difference (I-J)	Std. Error	Sig.
Efficacy for Classroom Management	30 years old & below	31-40 years old	.09252	.08690	.769
		41-50 years old	.08993	.08010	.739
		51 years old & above	**.35119***	**.08931**	**.002**
	31-40 years old	31-40 years old	.09252	.08690	.769
	30 years old & below	31-40 years old	.02983	.09558	.992
		41-50 years old	.05499	.08810	.942

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Efficacy for Instructional Strategies	**51 years old & above**	**.42560***	**.09823**	**.000**
	31-40 years old	.02983	.09558	.992

* The mean difference is significant at the 0.05 level.

5.3 According to Civil Status

Table 5.3 depicts the difference in the extent of teaching efficacy of instructors of HEIs in Sulu when data are categorized according to their demographic profile in terms of civil status. It can be gleaned from this table that the F-values and Probability-values of all the sub-categories subsumed under teaching efficacy are indeed significant at alpha .05. This means that, generally, teacher respondents the fact that they vary in marital status indeed differ in their perceptions toward the extent of teaching efficacy. This result implies that being a married teacher may probably make him/her a better perceiver toward the extent of teaching efficacy than those who are single, separate, and widowed, or vice versa.

Moreover, it can be inferred further while teachers of higher education institutions in Sulu vary in marital status, still they differ in ways of perceiving the teaching efficacy of instructors HEIs in Sulu. That is, due to differences in civil status, teachers differ in ways of judging the level of confidence teachers have in their ability to guide students to success which includes helping students learn, building effective programs for students, and effectively changing student learning.

Hence, it is safe to say that variable civil status has indeed a significant influence on the ways how teachers of HEIs in Sulu perceive the extent of teaching efficacy. Therefore, the hypothesis which states that "There is no significant difference in the extent of the teaching efficacy of college instructors of higher education institutions (HEIs) in Sulu when data are grouped according to civil status" is rejected.

Table 2.3 Differences in the extent of teaching efficacy of instructors of HEIs in Sulu when data are categorized according to their demographic profile in terms of civil status

SOURCES OF VARIATION		Sum of Squares	df	Mean Square	F	Sig.	Description
Efficacy for classroom management	Between	2.743	3	.914	5.425*	.00	Significant
	Within Groups	33.026	19	.169			
	Total	35.769	19				
Efficacy for instructional strategies	Between	5.656	3	1.885	9.414*	.00	Significant
	Within Groups	39.255	19	.200			
	Total	44.911	19				
Efficacy for student engagement	Between	2.126	3	.709	3.484*	.01	Significant
	Within Groups	39.855	19	.203			
	Total	41.981	19				

*Significant at alpha 0.05

A Post Hoc Analysis using Scheffe's Test was conducted to determine which among groups classified according to civil status to have different levels of mean in areas subsumed under the extent of teaching efficacy of instructors of HEIs in Sulu when data are categorized according to their demographic profile in terms of civil status.

The result of the analysis which is shown in Table 4.3.1 indicates that the difference in the means of Efficacy for Classroom Management, Efficacy for Student Engagement and Efficacy for Instructional Strategies are obtained by way of lower group means minus higher group means.

On Efficacy for Classroom Management: It shows that Separated group of respondents obtained the mean difference of .28094* with Standard Error of .08765 and p-value of .018 which is significant at alpha=.05 over Married group. So, under this sub-category, no other groups of teachers supposed to have better ways of perceiving the extent of teaching efficacy of HEIs in Sulu in terms of Efficacy for Classroom Management than teachers with separated status.

On Efficacy for Instructional Strategies: It shows that Separated group of teachers obtained the mean difference of .56950* with Standard Error of .17872 and p-value of .019 which is significant at alpha=.05 over 51 years old & above. So, under this sub-category, no other groups of teachers supposed to have better ways of perceiving the extent of teaching efficacy of teachers of HEIs in Sulu in terms of Efficacy for Instructional Strategies than those teachers with Widowed status.

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Table 5.3.1 Post Hoc Analysis: Differences in the extent sub-categories subsumed under the extent of teaching efficacy of instructors of HEIs in Sulu when data are categorized according to their demographic profile in terms of civil status

Dependent Variables	(I) Grouping by civil Status	(J) Grouping by Civil Status	Mean Difference (I-J)	Std. Error	Sig.
Efficacy for Classroom Management	**Separated**	Single	.09483	.09010	.775
		Married	**.28094***	**.08765**	**.018**
		Widowed	.39170	.16393	.130
Efficacy for Instructional Strategies	**Separated**	Single	-.00691	.09823	1.000
		Married	.29138*	.09556	.028
		Widowed	**.56950***	**.17872**	**.019**

* The mean difference is significant at the 0.05 level.

2.4 According to Length of Service

Table 2.4 depicts the difference in the extent of teaching efficacy of instructors of HEIs in Sulu when data are grouped according to length of service. It can be gleaned from this table that except for Efficacy for Classroom Management, the F-values and Probability-values of all other sub-categories subsumed under teaching efficacy are not significant at alpha .05. This means that, generally, teacher-respondents the though they vary in length of service do not differ in their perceptions toward the extent of teaching efficacy. This result implies that for a teacher-respondent who have been teaching for 31 years & above may not probably make him/her better perceiver toward the extent of teaching efficacy than those who have been in teaching profession for 10 years & below, 11-20 years, 21-30 years, and 31 years & above, or vice versa.

Moreover, it can be inferred further while teachers of higher education institutions in Sulu vary in number of years in teaching, they do not differ in ways of perceiving the teaching efficacy of college instructors of HEIs. That is, due to difference in length of service, teachers do not differ in ways of judging the level of confidence teachers have in their ability to guide students to success which includes helping students learn, building effective programs for students, and effectively changing student learning.

Hence, it is safe to say that variable length of service has no significant influence in the ways how teachers of HEIs in Sulu perceive the extent of teaching efficacy. Therefore, the hypothesis which states that “There is no significant difference in the extent of the teaching efficacy of college instructors of higher education institutions (HEIs) in Sulu when data are grouped according to civil status” is accepted.

Table 2.4 Differences in the extent of teaching efficacy of instructors of HEIs in Sulu when data are grouped according to length of service

SOURCES OF VARIATION		Sum of Squares	df	Mean Square	F	Sig.	Description
Efficacy for classroom management	Between	2.638	3	.879	5.202	.00	Significant
	Within Groups	33.131	19	.169			
	Total	35.769	19				
Efficacy for instructional strategies	Between	1.453	3	.484	2.184	.09	Not Significant
	Within Groups	43.458	19	.222			
	Total	44.911	19				
Efficacy for student engagement	Between	1.008	3	.336	1.607	.18	Not Significant
	Within Groups	40.973	19	.209			
	Total	41.981	19				

*Significant at alpha 0.05

5.5 According to Educational Attainment

Table 5.5 depicts the difference in the extent of teaching efficacy

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Moreover, it can be inferred further while teachers of higher education institutions in Sulu vary in educational attainment, still they differ in ways of perceiving the teaching efficacy of college instructors of HEIs. That is, due to differences in educational attainment, teachers differ in ways of assessing the level of confidence teachers have in their ability to guide students to success which includes helping students learn, building effective programs for students, and effectively changing student learning.

Hence, it is safe to say that variable educational attainment has indeed a significant influence on the ways how teachers of HEIs in Sulu perceive the extent of teaching efficacy. Therefore, the hypothesis which states that "There is no significant difference in the extent of the teaching efficacy of college instructors of higher education institutions (HEIs) in Sulu when data are grouped according to educational attainment" is rejected.

Table 2.5 Differences in the extent of teaching efficacy when data are grouped according to educational attainment

SOURCES OF VARIATION		Sum of Squares	df	Mean Square	F	Sig.	Description
Efficacy for classroom management	Between	5.108	4	1.277	8.122	.00	Significant
	Within Groups	30.660	19	.157			
	Total	35.769	19				
Efficacy for instructional strategies	Between	9.586	4	2.396	13.229	.00	Significant
	Within Groups	35.325	19	.181			
	Total	44.911	19				
Efficacy for student engagement	Between	3.803	4	.951	4.856	.00	Significant
	Within Groups	38.178	19	.196			
	Total	41.981	19				

*Significant at alpha 0.05

A Post Hoc Analysis using Scheffe's Test was conducted to determine which among groups classified according to educational attainment to have different levels of mean in areas subsumed under the extent of teaching efficacy among HEIs college instructors in Sulu when data are categorized according to their demographic profile in terms of educational attainment.

The result of the analysis which is shown in Table 5.5.1 indicates that the difference in the means of Efficacy for classroom Management, Efficacy for Instructional Strategies, Efficacy for student Engagement is obtained by way of lower group means minus higher group means.

On Efficacy for Classroom Management: It shows that MA/MS full-fledged group of teachers obtained the mean difference of .36559* with Standard Error of .08544 and p-value of .001 which is significant at alpha=.05 over MA/MS with units in PhD/MAEd/DPA group of teachers. So, under this sub-category, no other groups of teachers supposed to have better ways of perceiving the extent of teacher efficacy of HEIs in Sulu in terms of Visioning Skills than those teachers with MA/MS full-fledged.

On Efficacy for Instructional Strategies: It shows that MA/MS full-fledged group of teachers obtained the mean difference of .57918* with Standard Error of .09171 and p-value of .000 which is significant at alpha=.05 over MA/MS with units in PhD/MAEd/DPA group of teachers. So, under this sub-category, no other groups of teachers supposed to have better ways of perceiving the extent of teaching efficacy of instructors of HEIs in Sulu in terms of Anticipating Skills than those teachers with MA/MS fledged degree.

On Efficacy for Student Engagement: It shows that MA/MS full-fledged group of teachers obtained the mean difference of .37928* with Standard Error of .09534 and p-value of .004 which is significant at alpha=.05 over MA/MS with units in PhD/MAEd/DPA group of teachers. So, under this sub-category, no other groups of teachers supposed to have better ways of perceiving the extent of teaching efficacy of instructors of HEIs in Sulu in terms of Values Congruence Skills than those teachers with MA/MS full-fledged degree.

Table 2.5.1 Post Hoc Analysis: Differences in the levels of meaning in areas subsumed under the extent of the transformational leadership style of administrators of HEIs in Sulu when data are categorized according to their demographic profile in terms of educational attainment

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Dependent Variables	(I) Grouping by Educational Attainment	(J) Grouping by Educational Attainment	Mean Difference (I-J)	Std. Error	Sig.
Efficacy for Classroom Management	**MA/MS full-fledged**	AB/BS	.10517	.12505	.950
		AB/BS with units in MA/MS	.22999*	.07345	.047
		MA/MS with units in PhD/MAEd/DPA	**.36559***	**.08544**	**.001**
		PhD/EdD/DPA full-fledged	-.08287	.08169	.905
Efficacy for Instructional Strategies	**MA/MS full-fledged**	AB/BS	.17103	.13423	.804
		AB/BS with units in MA/MS	.36782*	.07884	.000
		MA/MS with units in PhD/MAEd/DPA	**.57918***	**.09171**	**.000**
		PhD/EdD/DPA full-fledged	.04987	.08769	.988
Efficacy for Student Engagement	**MA/MS full-fledged**	AB/BS	.08098	.13955	.987
		AB/BS with units in MA/MS	.26261*	.08196	.039
		MA/MS with units in PhD/MAEd/DPA	**.37928***	**.09534**	**.004**
		PhD/EdD/DPA full-fledged	.16925	.09116	.488

* The mean difference is significant at the 0.05 level.

2.6 According to Status of Appointment

Table 2.6 depicts the difference in the extent of teaching efficacy of instructors of HEIs in Sulu when data are grouped according to the status of the appointment. It can be gleaned from this table that, except for efficacy for Student Engagement, the F-values and Probability-values of all other sub-categories subsumed under teaching efficacy are not significant at alpha .05. This means that, generally, though teacher-respondents vary in the status of appointment they do not differ in their perceptions toward the extent of teaching efficacy. This result implies that a teacher-respondent with permanent teaching status may not probably make him/her better perceiver toward the extent of teaching efficacy than those with temporary, contractual or part-time teachers, or vice versa.

Moreover, it can be inferred further that while teachers of higher education institutions in Sulu vary in the status of appointment, nevertheless they do not differ in ways of perceiving the teaching efficacy of college instructors of HEIs. That is, though they vary in nature of their employment status, teachers do not differ in ways of assessing the level of confidence teachers have in their ability to guide students to success which includes helping students learn, building effective programs for students, and effectively changing student learning.

Hence, it is safe to say that the variable status of appointment has no significant influence in the ways how teachers of HEIs in Sulu perceive the extent of teaching efficacy. Therefore, the hypothesis which states that “There is no significant difference in the extent of the teaching efficacy of college instructors of higher education institutions (HEIs) in Sulu when data are grouped according to educational attainment” is accepted.

Table 2.6 Differences in the extent of teaching efficacy when data are grouped according to status appointment

SOURCES OF VARIATION		Sum of Squares	df	Mean Square	F	Sig.	Description
	Between	.895	2	.448	2.528	.08	Not Significant

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Efficacy for classroom management	Within Groups	34.874	19	.177			
	Total	35.769	19				
Efficacy for instructional strategies	Between	1.266	2	.633	2.857	.06	Not Significant
	Within Groups	43.645	19	.222			
	Total	44.911	19				
Efficacy for student engagement	Between	1.774	2	.887	4.345*	.01	Significant
	Within Groups	40.207	19	.204			
	Total	41.981	19				

*Significant at alpha 0.05

3. Is there a significant correlation among the sub-categories subsumed under the extent of teaching efficacy?

Table 6 illustrates the correlation among the sub-categories subsumed under the extent of teaching efficacy (Efficacy for student engagement, Efficacy for classroom management, and Efficacy for instructional strategies).
Specifically, the degrees of correlations among the sub-categories under teaching efficacy are as follows:
1) Very high positive correlation between Efficacy for student engagement Efficacy for classroom management, and Efficacy for instructional strategies;
7) Very high positive correlation between Efficacy for classroom management **and** Efficacy for instructional strategies;
These results indicate that the teachers of higher education institutions in Sulu who generally perceived the sub-categories subsumed under the Teaching Efficacy Skills as “Quite a Bit” or “High Tendency”.
Meanwhile, it is safe to say that, generally the extent of sub-categories subsumed under transformational leadership style and teaching efficacy are highly correlated.
Therefore, the hypothesis which states that “There is no significant correlation among the sub-categories subsumed under the extent of teaching efficacy” is rejected.

Table 6. Correlation among the sub-categories subsumed under the extent of teaching efficacy

Variables					
Dependent	**Independent**	**Pearson *r***	**Sig**	**N**	**Description**
Efficacy for Classroom Management	Efficacy for instructional strategies	.873**	.000	200	Very High
	Efficacy for student engagement	.774**	.000	200	Very High
Efficacy for Instructional Strategies	Efficacy for student engagement	.836**	.000	200	Very High

*Correlation Coefficient is significant at alpha .05
Correlation Coefficient Scales Adopted from Hopkins, Will (2002):
0.0-0.1=Nearly Zero; 0.1-0.30=Low; .3-0.5 0=Moderate; .5-0.7-0=High; .7-0.9= Very High; 0.9-1=Nearly Perfect.

CONCLUSION

This study forwards the conclusions: there is a sufficient representation of teachers of HEIs in Sulu in terms of gender, age, civil status, length of service, educational attainment, and status of appointment. On average, instructors of HEIs in Sulu manifest a high teaching efficacy in terms of classroom management, use of instructional strategies, and engaging students in learning activities.

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Teachers differ in their assessment of instructors' teaching efficacy. Sub-categories subsumed under teachers' teaching efficacy are highly correlated.

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