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Research Competence and Attitude toward Research of Faculty in State Universities and Colleges in Iloilo

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Abstract. The research competence of Faculty in State Universities and Colleges (SUCs) is crucial in advancing research progress. A positive attitude toward research encourages faculty to engage in research activities and professional development actively, fostering a research-driven academic environment. Research competence and attitude toward research are influenced by years of experience and access to research training, which can either enhance or limit faculty's ability to contribute effectively to institutional research goals. This descriptive-correlational study examined the relationship between research competence and attitude toward research of 256 faculty in State Universities and Colleges (SUCs) in Iloilo. Using a researcher-made questionnaire, results revealed that the Faculty of SUCs were "Competent" in research and exhibited a "Positive attitude" toward research. The research competence of faculty in SUCs was not statistically different when classified as years of teaching experience and significantly different when classified as research-related training. The attitude toward research was not significantly different when classified as to years of teaching experience and significantly different when classified as to the number of research-related training. There was no significant relationship between research competence and attitude toward research of faculty in SUCs.

Keywords: Attitude toward research; Descriptive correlational; Faculty; Research competence; State universities and colleges.

1.0 Introduction

Research competence is essential for conducting research, as it is a means of acquiring new knowledge and making novel discoveries. Research competency is the foundation for developing a faculty's intellectual, linguistic, and design skills and their critical thinking and creative ability (Whitman & Kelleher, 2017). It is very important to all Faculty, both inexperienced and experienced, as it forms the basis of progress in a university. Higher education institutions around the world consider research as one of the criteria for success because it entails the transfer of teaching skills and the output of research. In the Philippines, for instance, research is deemed an essential function alongside instruction and community extension (CHED, 2009). Several accrediting bodies consider research as a fundamental element during the accreditation process. The academic reputation of professors in academic institutions is based on their capacity to conduct scientific research and to contribute new knowledge, ideas, and learnings that will advance current procedures, methods, and strategies. Research output is one of the accreditation standards in evaluating programs and institutions, as well as the professional growth of Faculty.

However, despite the initiatives and parameters from the Commission on Higher Education (CHED), the Association of Accredited Chartered Colleges and Universities of the Philippines (AACCUP), and other accrediting bodies, research culture in academe is still weak due to a lack of research skills and knowledge training for instructors, as well as poor and inadequate research in higher education. Some research proposals are simply that: proposals. They are never carried out. Some of the research findings are presented at scientific conferences. However, they are not published in peer-reviewed journals or used for development, institutional change, or innovation and commercialization. Faculty attitudes toward research play a significant role in their research success, which can, in turn, affect the institution's overall research productivity (Maravilla, 2020). Positive attitudes toward research are associated with enhanced research output and academic performance, while negative attitudes can hinder learning and limit research contributions (Ahmed et al., 2010; Waters et al., 1988; Zeidner, 1991). Several studies have confirmed that faculty members possess varying research skills, and their attitudes toward research significantly influence their engagement and output (Dinagsao, 2013; Sahan & Tarhan, 2015; Basilio & Bueno, 2019).

Thus, fostering research competence and positive research attitudes is essential for empowering faculty members to contribute meaningfully to their institutions and academic knowledge. Research competency must be cultivated through experience and continuous skill-building opportunities, as it forms a foundational pillar for institutional progress and innovation. Faculty members have an important role in the publication of scientific papers. Their competence and attitude in carrying out research activities help determine academic research output. Given these challenges and the essential role competence and attitude play in research productivity, this study aimed to determine the research competence and attitude toward faculty members' research in State Universities and Colleges (SUCs) in Iloilo.

2.0 Methodology

2.1 Research Design

This study employs a descriptive-correlational research design, utilizing a quantitative approach to assess the research competence, engagement in research activities, and attitudes toward research among faculty members at State Universities and Colleges in the Province of Iloilo.

2.2 Research Locale

The study was conducted at four State Universities and Colleges in the Province of Iloilo: Iloilo State College of Fisheries, Iloilo Science and Technology University, Northern Iloilo Polytechnic College, and West Visayas State University.

2.3 Research Respondents

This study's respondents consisted of 256 permanent faculty members from the main campuses of four State Universities and Colleges (SUCs) in Iloilo: Iloilo State College of Fisheries, Iloilo Science and Technology University, Northern Iloilo Polytechnic College, and West Visayas State University for the school year 2020-2021. The respondents were categorized based on variables such as years of teaching experience and b) a number of research-related training.

2.4 Research Instruments

The study used a researcher-made questionnaire as the research instrument. Data collection used the researcher-made questionnaire that was distributed to the respondents and served as the primary instrument. The research instrument was subjected to validation and reliability testing. Experts in research and guidance counselors conducted the validation. These experts examined each item to confirm its relevance, clarity, and appropriateness in capturing the constructs under study. Their feedback helped refine the instrument to ensure it accurately measured the research competence and attitude toward faculty research. The instrument's reliability was assessed using Cronbach's alpha, resulting in a score of 0.86, demonstrating that the instrument is reliable.

2.5 Data Gathering Procedure

The campus Administrators of the four SUCs in the Province of Iloilo granted approval to conduct the study. Once approval was obtained, the researchers either sent the data collection instrument via email or personally administered it. Office staff were asked to distribute the questionnaires when respondents were unavailable for face-to-face administration. Data was collected during a subsequent visit. For online administration, responses

were gathered via Google Forms. Telephone and social media chat interviews were also conducted to support the quantitative data further.

2.6 Data Analysis Procedure

The collected data were encoded, tallied, and analyzed using SPSS version 21, using descriptive and inferential statistical methods. For descriptive analysis, the mean and standard deviation were used to assess the levels of research competence, involvement, and attitudes toward research among faculty members in SUCs while also measuring the homogeneity of responses. Inferential analysis involved t-tests and one-way ANOVA to determine differences in research competence, involvement, and attitudes based on different factors. Pearson's r correlation was applied to explore the relationships between research competence, involvement, and attitudes. A .05 alpha significance level was used as the criterion for accepting or rejecting the null hypotheses.

2.6 Ethical Considerations

Before administering the questionnaire, the researcher obtained permission from the Presidents of the respective State Universities and Colleges to conduct the study. Ethical considerations were prioritized, as professionals were involved as respondents. Respondents were assured that their responses would remain confidential, a guarantee explicitly stated in the Letter to Respondents. The researcher respected the participants' rights, needs, values, and preferences and exercised caution when posing questions that might evoke sensitive or personal responses. Great care was taken to ensure transparency and integrity in discussing the methods, procedures, and reporting of results. All study-related records were properly archived, including data collection, research design, and communication with agencies.

3.0 Results and Discussion

3.1 Research Competence of Faculty in SUCs

In terms of Years of Teaching Experience

Results in Table 1 reveal that when classified as to years of teaching experience, Faculty who have less than 10 years of experience (M = 3.86, sd = 0.56), 10 – 20 years of experience (M = 3.85, sd = 0.67), 21 – 30 years of experience (3.91, sd = 0.61), and those with experience of 31 years and above (M = 4.02, sd = 0.51) were "Competent." All four groups were "Competent" in Basic Skills, Problem-solving, and Critical Thinking Skills; Dissemination of Research Results; Function of Faculty Researcher in SUCs; and Other Relevant Key Competencies.

Table 1. Mean results on the level of research competence of faculty in SUCs when classified as to years of teaching experience

Category	Less than 10 years				10 – 20 years			
	n	Mean	sd	Description	n	Mean	sd	Description
As a whole	77	3.86	0.56	Competent	95	3.85	0.67	Competent
Basic Skills	77	4.03	0.60	Competent	95	3.97	0.64	Competent
Problem-solving and Critical Thinking Skills	77	3.78	0.72	Competent	95	3.93	0.76	Competent
Dissemination of Research Results	77	3.82	0.62	Competent	95	3.81	0.76	Competent
Function of Faculty Researcher in SUCs	77	3.79	0.67	Competent	95	3.72	0.77	Competent
Other Relevant Key Competencies	77	3.89	0.60	Competent	95	3.81	0.75	Competent

Category	21 – 30 years				31 years and above			
	n	Mean	sd	Description	n	Mean	sd	Description
As a whole	52	3.91	0.61	Competent	32	4.02	0.51	Competent
Basic Skills	52	3.99	0.63	Competent	32	4.06	0.53	Competent
Problem-solving and Critical Thinking Skills	52	4.00	0.64	Competent	32	4.13	0.53	Competent
Dissemination of Research Results	52	3.84	0.66	Competent	32	4.00	0.63	Competent
Function of Faculty Researcher in SUCs	52	3.85	0.63	Competent	32	4.02	0.69	Competent
Other Relevant Key Competencies	52	3.87	0.75	Competent	32	3.87	0.58	Competent

Note: 4.21–5.00 Highly Competent; 3.41–4.20 Competent; 2.61–3.40 Moderately Competent; 1.81–2.60 Less Competent; 1.00–1.80 Not Competent

When the total mean per group was assessed, those with less than 10 years and 10-20 years of teaching experience Basic Skills got the highest mean (M = 4.03, sd = 0.60; M = 3.97, sd = 0.6, respectively), while Function of Faculty Researcher in SUCs got the lowest mean (M = 3.79, sd = 0.67; M = 3.72, 0.77, respectively). This means that even

the less experienced faculty have the adequate skills to carry out research but need more support in formulating research proposals. For those with 21 – 30 years of teaching experience, Problem-solving and Critical Thinking Skills got the highest mean (M = 4.00, sd = 0.64), while Dissemination of Research Results got the lowest mean (M = 3.84, sd = 0.66). For those with 31 and above years of teaching experience, Problem-solving and Critical Thinking Skills got the highest mean (M = 4.13, sd = 0.53), while Other Relevant Key Competencies got the lowest mean (3.87, sd = 0.58).

These results may be explained in the sense that the faculty with more teaching experience are more equipped with Problem-Solving and Critical Thinking Skills. However, they must also improve their skills in preparing and presenting research results, writing papers for publication, and translating research output to benefit stakeholders or beneficiaries. Experiences in conducting research also enhance research competencies (Mallari & Santiago, 2013).

In terms of Number of Research-Related Training

Data in Table 2 reveal that Faculty with less than 5 (M = 3.66, sd = 0.57) and those with 5-10 research-related training (M = 3.90, sd = 0.60) were "Competent." Those with more than ten research-related training were "Highly Competent." In terms of Basic Skills, those with less than 5 (M =3.84, sd = 0.65) and with 5 – 10 (M = 4.00, sd = 0.58) number of research-related training were "Competent." In contrast, those with more than 10 (M = 4.32, sd = 0.48) number of research-related training were "Highly Competent." The same results were found regarding problem-solving, critical thinking skills, dissemination of results, the function of faculty researchers in SUCs, and other relevant key competencies. This means that more attendance and participation in research-related training activities could result in a higher level of competency. The results conform to the results of Bueno and Basilio (2019), where Master Teachers cannot undertake research due to a lack of training in research-related conferences. These findings are consistent with teacher attendance at research training, i.e., most teachers have not attended research conferences at all levels, from school to international.

Table 2. Mean results on the level of research competence of faculty in SUCs when classified as to the number of research-related training

Category	Less than 5				5-10			
	n	Mean	sd	Description	n	Mean	sd	Description
As a whole	106	3.66	0.57	Competent	88	3.90	0.60	Competent
Basic Skills	106	3.84	0.65	Competent	88	4.00	0.58	Competent
Problem-solving and Critical Thinking Skills	106	3.65	0.72	Competent	88	3.96	0.68	Competent
Dissemination of Research Results	106	3.58	0.60	Competent	88	3.87	0.70	Competent
Function of Faculty Researcher in SUCs	106	3.58	0.66	Competent	88	3.80	0.70	Competent
Other Relevant Key Competencies	106	3.64	0.62	Competent	88	3.85	0.70	Competent

Category	More than 10			
	n	Mean	sd	Description
As a whole	62	4.26	0.49	Highly Competent
Basic Skills	62	4.32	0.48	Highly Competent
Problem-solving and Critical Thinking Skills	62	4.30	0.52	Highly Competent
Dissemination of Research Results	62	4.25	0.58	Highly Competent
Function of Faculty Researcher in SUCs	62	4.20	0.64	Competent
Other Relevant Key Competencies	62	4.21	0.62	Highly Competent

Note: 4.21–5.00 Highly Competent; 3.41–4.20 Competent; 2.61–3.40 Moderately Competent; 1.81–2.60 Less Competent; 1.00–1.80 Not Competent

The teacher's capability to conduct research is enhanced by attending research-related events. Likewise, knowledge and attitude toward research are other factors that contribute to research capability at 66% variance (Wong, 2019). Li et al. (2019) pointed out that time, teamwork, administrative support, and attendance to training activities are some factors that influence the research capability of nurses with a master's degree. As to Aziz and Akhtar (2014), trained faculty demonstrated a considerable difference in their pedagogical, management, assessment, and research competencies. Even though thesis writing is a requirement for master's degree recipients, it is possible that if it is just done once and is not practiced frequently, it will not necessarily translate into superior research skills (Wong, 2019).

3.2 Attitude Toward Research of Faculty in SUCs

In terms of Years of Teaching Experience

Results in Table 3 show that Faculty in SUCs exhibit a "Positive" attitude toward research in all categories except for Research Anxiety. Faculty with less than 10 years and 10-20 years of teaching experience assessed themselves to have a "Negative" attitude regarding Research Anxiety (M = 3.0, sd = 0.95). This means these groups are less anxious and confident in analyzing data; they are not afraid that their research proposals will get rejected. Moreover, they do not find research to be exhausting, and they do not have difficulty understanding the concept of research. The results agree with Maravilla (2020), who reported that teachers who taught 0-10 years were more research-oriented, more influenced by rewards for research, more personally interested in research, and more perceptive of research use. This finding is understandably associated with the results regarding age, as young professionals usually have fewer teaching years. Moreover, this finding suggests that those teachers who had just started their careers were more optimistic about the research. The study of Shafqat et al. (2018) also revealed that university Faculty have no anxiety or fear about research. They did not find research stressful or unsettling, although a considerable percentage did.

Table 3. Mean results on the attitude toward research of faculty in SUCs when classified as to years of teaching experience

Category	Less than 10 years				10 – 20 years			
	n	Mean	sd	Description	n	Mean	sd	Description
As a whole	77	4.14	0.53	Positive	95	4.04	0.45	Positive
Research Orientation	77	4.22	0.60	Positive	95	4.20	0.66	Positive
Rewards Influence Research	77	4.30	0.62	Positive	95	4.23	0.66	Positive
Personal Motivation	77	4.15	0.65	Positive	95	4.02	0.71	Positive
Mission of College/ University	77	4.48	0.60	Positive	95	4.43	0.70	Positive
Utilization of Research	77	4.37	0.61	Positive	95	4.26	0.73	Positive
Research Anxiety	77	2.92	0.95	Negative	95	2.94	0.73	Negative

Category	21 – 30 years				31 years and above			
	n	Mean	sd	Description	n	Mean	sd	Description
As a whole	52	4.11	0.60	Positive	32	4.03	0.43	Positive
Research Orientation	52	4.31	0.60	Positive	32	4.31	0.62	Positive
Rewards Influence Research	52	4.27	0.60	Positive	32	4.19	0.80	Positive
Personal Motivation	52	4.16	0.57	Positive	32	4.17	0.65	Positive
Mission of College/ University	52	4.50	0.51	Positive	32	4.69	0.42	Positive
Utilization of Research	52	4.43	0.53	Positive	32	4.48	0.41	Positive
Research Anxiety	52	3.07	1.09	Positive	32	3.10	0.91	Positive

Note: 3.01–5.00 Positive; 1.00-3.00 Negative
The items in Research Anxiety were reversed, i.e., the lower the value, the less anxious the respondent was.

In terms of Number of Research-Related Training

When classified as the number of research-related training, all groups exhibit a "Positive" attitude toward research in all categories except Research Anxiety. As shown in Table 4, those with less than 5 and with 5 – 10 research-related training show a "Negative Attitude" (M = 2.90, sd = 0.86, M = 292, sd = 0.84, respectively). This indicates that faculty who have attended research-related training tend to embrace research. However, those with less than 10 participants in research-related training find research difficult. They feel exhausted from research and are not confident in analyzing research data. The findings are consistent with Wa-Mbaleka (2015), who noted that a lack of training in research publication is one of the reasons faculty are unable to publish, along with lack of time, fear of rejection, lack of enthusiasm, faculty laziness, financial constraints, and institutional support.

Table 4. Mean results on the attitude toward the research of faculty in SUCs when classified as to the number of research-related training

Category	Less than 5				5-10			
	n	Mean	sd	Description	n	Mean	sd	Description
As a whole	108	4.04	0.56	Positive	88	4.08	0.46	Positive
Research Orientation	108	4.07	0.66	Positive	88	4.24	0.59	Positive
Rewards Influence Research	108	4.13	0.70	Positive	88	4.30	0.61	Positive
Personal Motivation	108	3.95	0.68	Positive	88	4.07	0.64	Positive
Mission of College/University	108	4.32	0.58	Positive	88	4.53	0.69	Positive
Utilization of Research	108	4.17	0.60	Positive	88	4.42	0.69	Positive
Research Anxiety	108	2.90	0.86	Negative	88	2.92	0.84	Negative

Category	More than 10			
	n	Mean	sd	Description
As a whole	62	4.17	0.46	Positive
Research Orientation	62	4.53	0.48	Positive
Rewards Influence Research	62	4.39	0.61	Positive
Personal Motivation	62	4.42	0.53	Positive
Mission of College/University	62	4.74	0.40	Positive
Utilization of Research	62	4.58	0.46	Positive
Research Anxiety	62	3.52	1.04	Positive

Note: 3.01–5.00 Positive; 1.00-3.00 Negative
The items in Research Anxiety were reversed, i.e., the lower the value, the less anxious the respondent was.

3.3 Difference in the Research Competence

In terms of Years of Teaching Experience

A one-way Analysis of Variance (ANOVA) was carried out to measure the difference in the research competence of the faculty when classified as to years of teaching experience. The results in Table 5 show no significant difference that existed in the level of research competence in terms of Basic Skills (F = 0.605, p = 0.612), Problem-solving, and Critical Thinking Skills (F = 1.598, p = 0.190), Dissemination of Research Results (F= .674, p = 0.568); Function of Faculty Researcher in SUCs (F = 1.559, p = 0.200); and Other Relevant Key Competencies (F = .208, p = 0.891). Thus, the null hypothesis states that there is no significant difference in the research competence of Faculty in SUCs in terms of basic skills, problem-solving, and critical thinking skills; dissemination of research results; function of faculty researchers in SUCs; and other relevant key competencies when classified as to years of teaching experience is not rejected. This means that the length of teaching experience is not a significant factor in determining the research competence of faculty in SUCs.

Table 5. One-way ANOVA results on the difference in the research competence of faculty in SUCs in terms of years of teaching experience

Category		Sum of Squares	df	Mean Square	F	Sig.
Basic Skills	Between Groups	0.688	3	0.229	0.605	0.612
	Within Groups	95.40	252	0.379		
	Total	96.09	255			
Problem-solving and Critical Thinking Skills	Between Groups	2.364	3	0.788	1.598	0.190
	Within Groups	124.2	252	0.493		
	Total	126.5	255			
Dissemination of Research Results	Between Groups	0.950	3	0.317	0.674	0.568
	Within Groups	118.2	252	0.469		
	Total	119.2	255			
Function of Faculty Researcher in SUCs	Between Groups	2.325	3	0.775	1.559	0.200
	Within Groups	125.2	252	0.497		
	Total	127.5	255			
Other Relevant Key Competencies	Between Groups	0.292	3	0.097	0.208	0.891
	Within Groups	118.1	252	0.469		
	Total	118.4	255			

p>.05, not significant

This result agrees with the results of Aspiras (2019), which revealed no significant difference in the research competence of the faculty when measured as to the number of years in service. As to the experience as a researcher, the research and knowledge of those with less than 5 years of experience are significantly lower than those with more than 6-10 years or those with more than 10 years of experience in research. According to Caingcoy (2020), low, negative, significant differences existed between teachers' research performance, age, and length of service. As a result, their competency declines as they gain years of experience. Motivation, research productivity, and age are some factors that can help identify and predict the research capability of faculty. Furthermore, age, faculty rank, research-related training, conduct of research, and research involvement affect the research competence of master teachers (Wong, 2019).

In terms of Number of Research-Related Training

Table 6 shows a one-way Analysis of Variance results on the test for significant differences in research competence when the faculty are classified according to the number of research-related training sessions. Results revealed that there was no significant difference in the level of research competence in terms of Basic Skills (F = 13.117, p = 0.000), Problem-solving, and Critical Thinking Skills (F = 18.814, p = 0.000), Dissemination of Research Results (F= 22.246, p = 0.000); Function of Faculty Researcher in SUCs (F = 17.162, p = 0.000); and Other Relevant Key Competencies (F = 14.908, p = 0.000). Thus, the null hypothesis states that there is no significant difference in the research competence of Faculty in SUCs in terms of basic skills, problem-solving, and critical thinking skills, dissemination of research results, the function of faculty researchers in SUCs, and other relevant key competencies when classified as to the number of research-related training is rejected. This means that the number of research-related training determines the research competence of faculty in SUCs. This result is in contrast with the study of Narag et al. (2016), which reported that training attended by faculty members does not affect their research capabilities.

Table 6. One-way ANOVA results on the difference in the research competence of faculty in SUCs in terms of the number of research-related training

Category		Sum of Squares	df	Mean Square	F	Sig.
Basic Skills	Between Groups	9.028	2	4.514	13.11	.000
	Within Groups	87.06	253	0.344		
	Total	96.09	255			
Problem-solving and Critical Thinking Skills	Between Groups	16.38	2	8.194	18.81	.000
	Within Groups	110.1	253	0.436		
	Total	126.5	255			
Dissemination of Research Results	Between Groups	17.83	2	8.915	22.24	.000
	Within Groups	101.3	253	0.401		
	Total	119.2	255			
Function of Faculty Researcher in SUCs	Between Groups	15.24	2	7.621	17.16	.000
	Within Groups	112.3	253	0.444		
	Total	127.5	255			
Other Relevant Key Competencies	Between Groups	12.48	2	6.243	14.90	.000
	Within Groups	105.9	253	0.419		
	Total	118.4	255			

p>.05, not significant

Based on Table 7, Post-hoc comparisons using the Scheffe test for multiple comparisons found that the mean score of Basic Skills for Research-related Training of more than 10 was significantly different from less than 5 (MD=-.480, p= .000) and 5-10 (MD= -.312, p= 0.007).

Table 7. Post hoc tests multiple comparisons; Scheffe test for research competence in terms of the number of research-related training

Dependent Variable	(I) Research-Related Training	(J) Research-Related Training	Mean Difference (I-J)	Sig.
Basic Skills	less than 5	5-10	-0.169	0.139
		more than 10	-0.480*	0.000*
	5-10	more than 10	-0.312*	0.007*
Problem-Solving and Critical Thinking Skills	less than 5	5-10	-0.304*	0.007*
		more than 10	-0.642*	0.000*
	5-10	more than 10	-0.338*	0.009*
Dissemination of Research Results	less than 5	5-10	-0.285*	0.008*
		more than 10	-0.674*	0.000*
	5-10	more than 10	-0.389*	0.001*
Function of Faculty Researcher in SUCs	less than 5	5-10	-0.216	0.082
		more than 10	-0.624*	0.000*
	5-10	more than 10	-0.408*	0.001*
Other Relevant Key Competencies	less than 5	5-10	-0.213	0.076
		more than 10	-0.565*	0.000*
	5-10	more than 10	-0.352*	0.005*

From the Scheffe Multiple Comparison, the mean score of Problem-Solving and Critical Thinking Skills and Dissemination of Results for Research-related Training was significantly different for all variables. Results of the Post-hoc comparisons using the Scheffe test revealed that the mean score of Function of Faculty Researchers in SUCs for Research-related Training of more than 10 was significantly different from less than 5 (MD=-.6240, p= .000) and 5-10 (MD= -.408, p= .001). Finally, the Scheffe test indicated that the mean score for other relevant key competencies for more than ten research-related training was significantly different from that with less than 5 (MD=-.565, p= .000) and 5-10 (MD=- 0.352, p= .005)

3.4 Difference in the Attitude Toward Research

In terms of Years of Teaching Experience

Table 8 shows the one-way Analysis of Variance (ANOVA) results on the attitude toward the research of faculty in SUCs toward research in terms of research orientation, rewards that influence research, personal motivation, mission of college/university, utilization of research, and research anxiety when classified as to years of teaching experience. Results revealed no significant difference existed in the attitude toward research of faculty in SUCs in terms of Research Orientation (F = .525, p = 0.666), Rewards Influence Research (F = .289, p = 0.834), Personal Motivation (F = .812 p = 0.488), Mission of College/University (F = 1.586, p = 0.193), Utilization of Research (F = 1.444, p = 0.231), and Research Anxiety (F = .355, p = 0.785). Thus, the null hypothesis states that there is no significant difference in the attitude of faculty in SUCs toward research in terms of research orientation, rewards that influence research, personal motivation, mission of college/university, utilization, and research anxiety when classified as to years of teaching experience is not rejected. This means that years of teaching experience are not a significant factor in determining the attitude toward the research of Faculty in SUCs.

Table 8. One-way ANOVA results on the difference in the attitude toward research of faculty in SUCs when classified as to years of teaching experience

Category		Sum of Squares	df	Mean Square	F	Sig.
Research Orientation	Between Groups	0.611	3	0.204	0.525	0.666
	Within Groups	97.84	252	0.388		
	Total	98.45	255			
Rewards Influence Research	Between Groups	0.373	3	0.124	0.289	0.834
	Within Groups	108.5	252	0.431		
	Total	108.9	255			
Personal Motivation	Between Groups	1.058	3	0.353	0.812	0.488
	Within Groups	109.4	252	0.435		
	Total	110.5	255			
Mission of College/ University	Between Groups	1.743	3	0.581	1.586	0.193
	Within Groups	92.31	252	0.366		
	Total	94.05	255			
Utilization of Research	Between Groups	1.683	3	0.561	1.444	0.231
	Within Groups	97.92	252	0.389		
	Total	99.61	255			
Research Anxiety	Between Groups	0.867	3	0.289	0.355	0.785
	Within Groups	205.04	252	0.814		
	Total	205.91	255			

p>.05, not significant

Maravilla (2020) reported that teachers who taught 0-10 years were more research-oriented, more influenced by rewards for research, more personally interested in research, and more perceptive of research use. This finding is understandably associated with the results regarding age, as young professionals usually have fewer teaching years. This finding also suggests that those teachers who just started their careers were more optimistic about research and thus should be supported. Aspiras (2019) reported that no significant difference existed in the research motivation of the faculty when classified by the number of years in service.

In terms of Number of Research-Related Training

Table 9 shows the one-way ANOVA results on the test for significant differences in the attitude toward faculty research in SUCs when classified as to the number of research-related training. Results showed significant difference existed in the attitude toward research of faculty in SUCs in terms of Research Orientation (F = 11.291 p = 0.000), Rewards Influence Research (F = 3.476, p = 0.032), Personal Motivation (F = 11.77 p = 0.000), Mission of College/University (F = 10.331, p = 0.000), Utilization of Research (F = 9.520, p = 0.000), Research Anxiety (F =

9.723, p = 0.000). Thus, the null hypothesis states that there is no significant difference in the attitude of faculty in SUCs toward research in terms of research orientation, rewards that influence research, personal motivation, mission of college/ university, utilization of research, and research anxiety when classified as to the number of research-related training is rejected. This means that the amount of research-related training is significant in determining the attitude toward faculty research in SUCs.

Table 9. One-way ANOVA results on the difference in the attitude toward research of faculty in SUCs when classified as to the number of research-related training

Category		Sum of Squares	df	Mean Square	F	Sig.
Research Orientation	Between Groups	8.068	2	4.034	11.29	0.000
	Within Groups	90.39	253	0.357		
	Total	98.45	255			
Rewards Influence Research	Between Groups	2.913	2	1.457	3.476	0.032
	Within Groups	106.0	253	0.419		
	Total	108.9	255			
Personal Motivation	Between Groups	9.049	2	4.524	11.27	0.000
	Within Groups	101.5	253	0.401		
	Total	110.5	255			
Mission of College/ University	Between Groups	7.101	2	3.551	10.33	0.000
	Within Groups	86.95	253	0.344		
	Total	94.05	255			
Utilization of Research	Between Groups	6.972	2	3.486	9.520	0.000
	Within Groups	92.64	253	0.366		
	Total	99.61	255			
Research Anxiety	Between Groups	17.80	2	8.902	9.723	0.000
	Within Groups	231.6	253	0.916		
	Total	249.4	255			

p<.05, significant

As shown in Table 10, Post-hoc comparisons using the Scheffe test indicated the mean score of research orientation for several research-related training of more than 10 was significantly different from less than 5 (MD=-.454, p=.000), and 5-10 (M=-.283, p=.018). From the Scheffe multiple comparisons, a significant difference existed in the mean score of the Number of Research-Related Training of more than 10 and less than 5 (M=-.258, p=.046). Multiple comparisons also show that the mean score of personal motivation for several Research-Related Training of more than 10 was significantly different from less than 5 (M=-.477, p=.000) and 5-10 (M=-.350, p=.004).

Table 10. Post hoc tests multiple comparisons; Scheffe test for attitude toward research in terms of several research-related training.

Dependent Variable	(I) Research-Related Training	(J) Research-Related Training	Mean Difference (I-J)	Sig.
Research Orientation	less than 5	5-10	-0.171	0.140
		more than 10	-0.454*	0.000
	5-10	more than 10	-0.283*	0.018
Rewards Influence Research	less than 5	5-10	-0.168	0.200
		more than 10	-0.258*	0.046
	5-10	more than 10	-0.090	0.702
Personal Motivation	less than 5	5-10	-0.127	0.379
		more than 10	-0.477*	0.000
	5-10	more than 10	-0.350*	0.004
Mission of College/ University	less than 5	5-10	-0.212*	0.045
		more than 10	-0.420*	0.000
	5-10	more than 10	-0.208	0.103
Utilization of Research	less than 5	5-10	-0.242*	0.022
		more than 10	-0.407*	0.000
	5-10	more than 10	-0.165	0.262
Research Anxiety	less than 5	5-10	-0.016	0.993
		more than 10	-0.623*	0.000
	5-10	more than 10	-0.607*	0.001

For the Mission of the College/University, the mean score of the Number of Research-Related Training of more than 10 was significantly different from less than 5 (M=-.477, p=.000) and 5-10 (M=-.350, p=.004. For research utilization, the mean scores of Number of Research-Related Training of 5-10 and more than 10 significantly

differed from less than 5 (M=-.242, p=.022; M=-.407, p=.000, respectively). For research anxiety, the mean score of several research-related training of more than 10 was significantly different from less than 5 (M=.623, p=.000).

3.5 Relationship Between Research Competence and Attitude Toward Research

Table 11 shows Pearson's r Test for a significant relationship between research competence and the attitude toward faculty research in SUCs. Results show no significant relationship between research competence and attitude toward research of faculty in SUCs. Furthermore, the results show a very low or negligible correlation between the two variables, r = 0.106, n = 256, p = 0.090. Thus, the null hypothesis that there is no significant relationship between the research competence and attitude toward the research of faculty in SUCs is not rejected. Research competence does not affect the faculty's attitude toward research.

Table 11. Pearson's r results on the relationship between the research competence and the attitude toward research of faculty in SUCs

		Attitude toward Research
Research Competence	Pearson Correlation	0.106
	Sig. (2-tailed)	0.090
	n	256

Note: **. Correlation is significant at the 0.05 level (2-tailed).

The findings contradict prior research findings of Manongsong et al. (2018), which found a favorable and significant association between faculty's research competence and their attitudes (motivation) toward research. According to Wong (2019), there is a significant relationship between the research capability of Master Teachers and the value of research to the faculty's profession, research anxiety, positive attitude toward research, the relevance of research to everyday life, the difficulty of research, knowledge of research, mentoring, financial assistance, research facilities and resource materials, and rewards. Correlations between attitude toward research and research capability showed a relationship between the two variables (Wong, 2019).

4.0 Conclusions

This study attempted to determine the research competence and attitude toward research of faculty in SUCs in Iloilo. The faculty is "Competent" in basic skills, problem-solving, critical thinking skills, dissemination of research results, the function of faculty researcher in SUCs, and other relevant vital competencies. The Faculty in SUCs have a "Positive" attitude toward research. They have a negative attitude toward Research Anxiety, which means that they feel that research is not complex and they are less anxious about research. No significant difference existed in the Faculty's research competence in SUCs regarding fundamental skills, problem-solving, and critical thinking skills; research results in dissemination, faculty researcher's function in SUCs, and other relevant key competencies when classified as years of teaching experience.

The research competence significantly differed regarding Basic Skills, Problem-solving and Critical Thinking Skills, Dissemination of Research Results, Function of Faculty Researchers in SUCs, and Other Relevant Key Competencies when classified as research-related training. The number of research-related training determines the research competence of faculty in SUCs. The attitude toward research was not significantly different regarding Research Orientation, Rewards Influence Research, Personal Motivation, Mission of College/University, Utilization of Research, and Research Anxiety when classified as years of teaching experience. When classified as the number of research-related training, Significant differences existed in the attitude toward research regarding Research Orientation, Rewards Influence Research, Personal Motivation, Mission of College/University, Utilization of Research, and Research Anxiety. This means that the amount of research-related training significantly determines the attitude toward faculty research in SUCs. Research competence and attitude toward research of faculty in SUCs were not significantly correlated. Furthermore, the two variables had a very low or negligible correlation.

5.0 Contribution of Authors

This is sole authorship. There is no co-author in this study.

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7.0 Conflict of Interests

The author declares that there are no conflicts of interest regarding the publication of this paper.

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