

The Quality of Researches of a Southeast Asian University as Evaluated by Peer Reviewers

GENARO V. JAPOS, Ph.D.
drgvjapos@yahoo.com
Liceo de Cagayan University

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Abstract - A documentary analysis of peer review results of 92 studies determined the quality of researches of a Southeast Asian university. The study found that mechanisms are in place for the development of a research culture. The strict refereeing process that yielded a high rejection rate is a sound mechanism that identifies researches with potential for utilization and publication in a refereed journal and ensures the integrity of the university's publications. The quality of faculty and student researches is satisfactory in the substantive, methodological, and style aspects as evaluated by peer reviewers from the Visayas and Mindanao. However, the qualitative evaluation of the external referees reveals that the researches have deficiencies along research conceptualization, analysis, and interpretation of research, indicating that the studies are barely adequate to meet the requirement for refereed publication. The acceptance rate of researches is 51 percent while the rejection rate is 49 percent, suggesting that 1 out of 2 researches by faculty and students may be accepted by the referees. The quality of the researches varied significantly across colleges, indicating that the researchers' competencies differed by disciplines.

Keywords - documentary analysis, peer review, quality of researches, external referees

INTRODUCTION

The critical role of research as a defining character of a university is best experienced when an institution reaches Level III accreditation in which research is a primary area to be evaluated, IQUAME Category A(r) in which the institution is declared a research university, and Center of Development/Center of Excellence and Autonomous/Deregulated Status in which an institution is accorded special privileges by the CHED.

To fulfill the research mandate as a function of a higher education institution, SEA University implemented a research program in 1997 shortly before attaining university status. After 10 years, the university has invested about PhP 20 million to run the research program entrenched in each of the eight colleges. As recognition for research capability, the PACUCOA granted the Business Administration and Liberal Arts programs Level III Reaccredited status. The College of Nursing, Master of Arts in Nursing, and Master in Management have impending visits for Level III Accreditation in December 2007. The university has submitted documents for IQUAME A(t) assessment.

The university has adopted the Quality Assurance Monitoring and Evaluation (QUAME) for research since 2005. The intention is to harmonize the policies for research in all colleges to upgrade the standards of excellence. To track down the effects of the quality assurance program on the quality of research outcomes, the university invited experts from the University of Mindanao and Davao Doctors College to evaluate the university's research program.

One of the features cited by the external evaluators is the presence of a reviewing system by a board of referees both for faculty and student researches. The faculty research is propelled by an attractive compensation system while the student's research is a degree requirement for graduation.

Given the investments the university has for research, the gains, however, have been slow. So far, there have been few commissioned researches conducted and few researches accepted for national and international presentations. External agencies have utilized few of

the studies for public policy and programs. Some students are not able to graduate for failure to finish their researches. Some faculty members paid back the initial research compensation for failure to complete the study. Few studies were utilized for academic purposes like curriculum enrichment and requirement for collateral reading. Few faculty are doing researches and the same people are into it.

The reviewing system was launched in 2004. It was of free style wherein referees wrote their comments on the manuscripts. The comments were not summarized. There was no structured form that could accommodate their quantitative and qualitative evaluations. When the SEA University forged a partnership with the University of Mindanao, a structured refereeing form was adopted. Hence, in 2006, evaluations of referees were collected. When the researches were returned by the referees, almost half of them were rejected for publication. Similar comments were given to the faculty and student researches, indicating that they share similar deficiencies. In spite of the generous incentives for faculty to do research, which annual grants amount to PhP 1.5 million, the overall quality has been less than desired.

Given the notion that a research work is an index of the university's research culture, there is an exigent need to examine the quality of researches produced by faculty and students.

A search for literature reveals that there has been no single study ever written that analyzed the evaluation results of external research referees here in the Philippines and abroad. This study, therefore, sets the trail for succeeding studies on external referees' evaluations. This area in research is extremely important considering that the referees represent the best minds in the field and whose research productivity has already been proven through the publication of their work. It is profitable to understand the referees' standards and perceptions of what constitutes a publishable peer refereed research.

This study proceeds from the introduction, the conceptual framework, research methodology, results and discussion, conclusions, implications of the findings, and recommendations.

OBJECTIVES OF THE STUDY

The study pursued the following objectives: (1) to determine the quality of researches of the faculty and students along the substantive, methodological and style aspects; (2) to analyze the qualitative remarks of the referees; and (3) to compare the quality of the faculty and student researches across colleges.

The study tested the hypothesis: **(Ho1)** There are no significant differences in quality of faculty and student researches across colleges.

FRAMEWORK

The concept of peer review in research is within the purview of quality assurance defined by UNESCO as an embracing term referring to an ongoing, continuous process of evaluating (assessing, monitoring, guaranteeing, maintaining, and improving) the quality of a higher education system, institution, or program.

Quality assurance is a process through which a higher education institution guarantees to itself and its stakeholders that its teaching, learning and other services consistently reach a standard of excellence. Therefore quality assurance incorporates all the processes internal to the institution, whereby quality is evaluated, maintained, and improved (Duff et al, 2000 cited in the Primer for IQUAME). One of the indicators for A(r), which makes a school a research institution, is research capability. An institution should have a research program and a community of faculty, postgraduate students, and postdoctoral research workers that fosters and supports creative research and other scholarly activity.

An institution is judged by high level of research skills, a strong research culture, and a fully implemented research agenda supported by adequate resources and well-defined mechanisms to ensure publication and benchmarking. The research program results in excellent outcomes as shown by regular publication of faculty researches in ISI/refereed journal and a highly relevant research program. The institution demonstrates best practices that

make the research community a model for others.

The highest standard in publication is the ISI Citation Index. For a journal publication to get an ISI, a strict refereeing process must be in place involving two to four referees for each manuscript submitted. Referees are from prime publishers in the field/subfields. Acceptance rate is less than 50 percent or much lower at 20 percent.

Articles published in the ISI journals tend to be more highly cited in the field. The highest level of ISI journals typically defines the most original and important contributions in the field/subfield. Publication of a research work in the ISI journal is a very good indicator that one's research is of significant contribution to the field/subfield.

The types of articles published in ISI or other refereed journals are those that are deemed original and are of significant contributions to the research literature. A research article's contribution in the field/subfield has the following characteristics: (1) there is something in the research that other group of scholars will find interesting, (2) the contribution matches the research questions/problem, and (3) the contribution is very clear in terms of its relation to what the present literature is stating (Bernardo, 2006).

The Philippine Association of Institutions for Research, Inc. (PAIR) adopted for use by its member-institutions a refereeing form from the Research Unit of Davao Association of Colleges and Universities Network (DACUN). A publishable peer refereed research must pass the three aspects: substantive, methodological, and style.

The Substantive Aspect. This part covers the introduction, discussion and conclusion, and content and scope. The introduction must show exposition of the research problem by establishing the basis of the study. It must provide a brief review of the pertinent literature as a basis for infusing meaning and substance in the analysis, interpretation, and conclusion of the study. It must provide an overview of the plan of the study and must detail the presentation of the expected results.

The Discussion and Conclusion. This concerns the overview of the findings within the context of the problem. There is a presentation of the results, implications of the findings, and discussion on how the study helped resolve the original problem.

There must be evidence that the data support the conclusion, which is within the boundaries of the findings.

Content and Scope. The article is enough to address the research questions effectively. Theoretical and practical implications can be drawn from the study. The results contribute to the state of knowledge in the field of study. The research possesses potential for research utilization.

Methodological Aspect. There is a fully defined design for making the research question operational. The samples and the sampling method are fully described. The measures, instruments, and materials are reliable and valid. The statistical procedures are enough and are appropriately applied.

Style Aspect. This part refers to editorial and writing styles. Editorial style requires that titles, headings and illustrations are related to the text. Tables and figures can stand alone without captions and convey information clearly. The format of references is standard, preferably using APA. The writing style involves the writing of the abstract with respect to length, accuracy, coherence, readability, and content. Length entails balance among different sections. There must be orderliness and logical flow in the expression of ideas. Precision and clarity in the choice of words are established.

METHODOLOGY

The study used the descriptive-comparative design involving the analysis of referees' judgments containing the quantitative and qualitative dimensions. The study utilized documentary analysis of external referees' evaluation on the researches of Liceo de Cagayan University. The study involved 276 evaluation data made by 26 referees who come from 15 colleges and universities located in Visayas and Mindanao. They evaluated 92 studies from the eight colleges of Liceo de Cagayan University. The referees were external experts tapped during the first semester of school year 2007-2008. Tables 1 and 2 have the data.

Table 1. Distribution of referees by regional origin and school

A. Visayas	No. of Referees
Cebu Normal University	1
Holy Name University	1
University of San Jose Recoletos	1
Total	3
B. Mindanao	
Capitol University	1
Davao Doctors College	3
Fr. Saturnino Urios University	1
Loudes College	4
Mindanao Sanitarium Hospital College of Medical Arts Foundation	1
Mountain View College	1
Notre Dame of Dadiangas University	2
Saint Joseph Institute of Technology	3
Southern Christian College	1
Universidad de Zamboanga	4
University of Mindanao	1
University of the Philippines–Mindanao	1
Total	23
Grand Total	26

Table 2. Distribution of the referees' evaluation forms by college

College	No. of Studies	No. of Specimen Forms
Graduate Studies	24	72
Nursing	29	87
Business Administration	4	12
Education	4	12
Arts and Sciences	6	18

(Table 2 continued)

Information Technology	4	12
Radiologic Technology	15	45
Criminology	6	18
Total	92	276

Table 3. Distribution of faculty and student researches

College	Faculty	Students	Total
Graduate Studies	24	0	24
Nursing	0	29	29
Criminology	0	6	6
Information Technology	0	4	4
Radiologic Technology	0	15	15
Business Administration	4	0	4
Education	4	0	4
Arts and Sciences	6	0	6
Total	38	54	92
Percentage	41	59	100

When the researches were given to the external referees, there was no distinction whether the studies were made by faculty or students. Hence, the referees viewed the studies from a professional research perspective. Out of 92 researches, 38 or 41 percent were made by the faculty while 54 or 59 percent were written by students.

The instrument was adopted from the Research Unit of Davao Association of Colleges and Universities Network (DACUN) for use by the member-institutions of the Philippine Association of Institutions for Research, Inc. For this study, it was tested for reliability using Cronback Alpha with a coefficient of 0.8229 and with standardized item alpha of 0.9837 indicating high reliability. The content validity was established by the 26 referees who are research experts in their field. They considered the instrument as adequate to measure the quality of research for refereed publications.

The referees were given the form for writing the quantitative and qualitative evaluation of the researches. The forms were collected and statistically processed using the SPSS software and employing techniques such as frequency, percentage, weighted mean, Cronbach Alpha, item-total correlation, t-test, and analysis of variance one-way classification. The null hypothesis was tested at .01 level of significance. There are at least three referees for every study. The referee's decision on the publishability of a research takes the following options: (1) the paper is recommended for publication, (2) the paper is accepted but subject to minor amendments, (3) the paper is accepted but subject to major revisions, and (4) the paper is rejected.

RESULTS AND DISCUSSION

A. Quantitative Evaluation

A.1. Quality of Faculty Researches

Table 4 illustrates the evaluation of the faculty researches. The overall quality is 3.29, which is satisfactory. The substantive aspects received satisfactory ratings for the introduction (2.88), discussion and conclusion (2.69), and content and scope (3.29). Also satisfactory were the methodological aspects (3.25) and editorial (3.30) and writing style (3.01) under style aspect. Generally, the external referees found the studies barely adequate to meet the requirements for publication. The introduction, discussion and conclusion got the lowest ratings although satisfactory. The methodological aspects obtained the highest rating (3.25), followed by style (3.15), and last by substantive aspects (2.75).

The findings suggest that the faculty have difficulties in the research conceptualization, particularly in justifying why the study was conducted utilizing the corresponding factual and literature support for the problem. In fact, the brief review of the pertinent literature was rated the least (2.60) among the indicators for introduction, indicating that the researches had limited theoretical background.

Table 4. External referees' evaluation of the quality of researches of the faculty

A. Substantive Aspect	Graduate Studies		CBA		Education		Arts and Sciences		Overall	
	M	VD	M	VD	M	VD	M	VD	M	VD
1. Introduction										
Exposition of the research problem	3.43	S	2.67	S	2.00	F	3.55	VS	2.91	S
Brief review of pertinent literature	2.43	F	2.50	S	2.00	F	3.45	S	2.60	S
Overview of the plan of study	3.36	S	2.67	S	3.00	S	3.55	VS	3.15	S
Presentation of the expected results	3.07	S	2.67	S	2.50	F	3.27	S	2.88	S
Grand Mean	3.07	S	2.63	S	2.38	F	3.45	S	2.88	S
2. Discussion and Conclusion										
Overview of the findings within the context of the problem and expected findings	3.21	S	3	S	2.50	F	3.73	VS	3.11	S
Presentation of supporting documents	2.71	S	3	S	2.50	F	3.73	VS	2.99	S
Interpretation of the results	2.93	S	2.83	S	2.00	F	3.45	S	2.80	S
Implications of the findings	2.93	S	3	S	2.00	F	3.56	VS	2.87	S
Demonstrates how the study helped resolve the original problem	3.00	S	3.17	S	2.50	F	3.73	VS	3.10	S
The data support the conclusion	2.92	S	2.83	S	2.50	F	3.45	S	2.93	S
The conclusion is within the boundaries of the findings	3.15	S	2.67	S	3.00	S	3.45	S	3.07	S
Grand Mean	3.15	S	2.93	S	2.43	F	3.58	VS	2.69	S
B. Methodological Aspects										
Fully defined design for making the research question operational	3.21	S	3.00	S	3.00	S	3.80	VS	3.25	S
Samples and sampling method and technique are fully described	3.14	S	2.50	F	3.50	S	3.00	S	3.04	S
Measures, instruments and! or materials are reliable and valid	3.14	S	2.50	F	3.50	S	3.45	S	3.15	S
Statistical procedures are enough and are appropriately applied	3.50	S	3.00	S	4.00	VS	3.55	VS	3.51	V S
Grand Mean	3.25	S	2.75	S	3.50	S	3.50	S	3.25	S
C. Style Aspects										
1. Editorial Style										
Titles, headings, illustrations, etc. are related to the text	3.21	S	2.67	S	3.00	S	3.27	S	3.04	S
Tables and or figures can stand without captions and portray information clearly	2.85	S	2.67	S	2.50	F	3.50	S	2.88	S
Format of references	2.92	S	2.50	F	5.00	E	2.82	S	3.31	S
Grand Mean	2.95	S	2.61	S	4.33	VS	3.30	S	3.30	S

(Table 4 continued)

2. Writing Style	M	VD	M	VD	M	VD	M	VD	M	V	D
Abstract (length, accuracy, coherence, readability, content)	2.92	S	2.17	F	3.00	S	3.18	S	2.82	S	S
Length (balance in lengths among different sections)	3.21	S	3.00	S	2.50	F	3.09	S	2.95	S	S
Orderliness and flow in the expression of ideas	3.21	S	2.67	S	3.50	S	3.27	S	3.16	S	S
Precision and clarity in the choice of words (skillful communication)	3.21	S	2.83	S	3.00	S	3.55	VS	3.15	S	S
Grand Mean	3.08	S	2.67	S	3.00	S	3.27	S	3.01	S	S
Overall Mean	3.14	S	2.79	S	3.11	S	3.46	S	3.12	S	S
College Rank	2		4		3		1				

Legend: 4.5-5.00 Excellent 3.51-4.50 Very Satisfactory
 2.51-3.50 Satisfactory 1.51-2.50 Fair
 1.0-1.50 Poor

In the discussion and conclusion, the interpretation of results obtained the lowest rating (2.80) along with implications of the findings (2.87), denoting that the analysis of the data lacked depth and connection to the literature and the actual conditions in the research site. The substance of the discussion has direct bearing on the conclusions of the study. The findings show that the data supporting the conclusion were limited (2.93).

In terms of content and scope, the contribution of the studies to the state of knowledge in the field got the lowest rating (3.29). This means that the main purpose of research, which is to generate new knowledge in support for instruction and extension, was accomplished to a limited extent. The theoretical bases of the studies were found to be weak. Hence, the validation and theory generation, which contribute to the body of literature, are constrained.

For the methodological aspects, the statistical procedures got very satisfactory rating (3.51), indicating that the faculty had appropriate statistical treatment of the data. On the other hand, samples, and sampling method and technique obtained the lowest rating (3.04). This finding implies that the faculty was less circumspect in the description of the respondents or subjects of the study.

Along style aspects, the evaluation reveals that the faculty paid least attention to the abstract (2.82) with respect to length, accuracy, coherence, readability, and content. The orderliness and flow of ideas (3.16) was satisfactory along with precision and clarity in the choice of words (3.01). Given the experience of the faculty in technical writing, there remains a deficiency in their writing skills.

On the whole, the faculty of the Arts and Sciences obtained the highest overall mean (3.46) however satisfactory followed by those in the Graduate Studies (2.14), the College of Education (3.11), and Business Administration (2.79). The vertical articulation of the advanced degrees of the Arts and Sciences faculty and their master's degrees (with thesis) partly explain their edge over the other faculty researchers in other colleges. The performance of the Business Administration faculty could be attributed to a limited research experience.

Researches by the faculty of Arts and Sciences obtained very satisfactory ratings for half of the 26 indicators. No other college came close to such ratings. The finding attests that the quality of researches of the Arts and Sciences is generally very satisfactory in the three aspects of the evaluation. In contrast, the researches of the faculty of the College of Education got "fair" rating for 11 out of 26 indicators (46%), denoting research deficiencies.

A.2. Quality of Student Researches

Table 5 shows the quality of student researches.

The level of quality of the student researches is satisfactory (2.59). For substantive aspect, the introduction was rated satisfactory (2.66), but the discussion and conclusion (2.36) and content and scope (2.45) were rated fair. The findings reveal that the students' researches lacked depth and substance. Furthermore, the findings suggest that poor conceptualization, analysis, and interpretation of the data were pervasive, implying that instruction and research guidance are generally deficient. The studies complied with graduation requirements rather than to push the frontiers of knowledge in the disciplines. The variables of the studies were repetitive; that is, there was a frequent use of socio-demographic data as independent variables. By nature, these data yield little causal effect on the dependent variable. The contents indicate

that the studies did not emanate from the theories and concepts taught in the major subjects—a proof that the major subjects failed to nurture the research inclination of the students. The lack of research experience and skills of the faculty partly explains this phenomenon.

However, along the methodological and style aspects, all indicators got satisfactory ratings. The findings suggest that the students have a good grasp of the research process. While they can write their ideas, the substance is deficient, which could be attributed to the faculty advisers' incompetence to mentor topics beyond their field. Also, the faculty teaching research subjects do not specialize in the students' discipline. This finding implies that there is a shortage of advisers in various fields due largely to a number of non-tenured faculty who have not finished their master's degree. The school policy stipulates that only those who hold master's or doctorate degree are allowed to advise researches.

By comparison, studies of the Criminology Department had nine (9) or 35 percent of the indicators obtaining very satisfactory ratings. In contrast, Radiologic Technology got "fair" ratings in all indicators while Information Technology had nine indicators rated "poor" and seven indicators rated "fair." Meanwhile, studies from Nursing got satisfactory ratings in all indicators. The findings reveal that Criminology and Nursing researches generally earned the acceptance of the external referees. Studies from Information Technology and Radiologic Technology had marks of deficiency in most of the aspects being evaluated. The deficiencies could be attributed to inadequate instruction, poor guidance, and students' lack of attention on research.

The acceptance rate (55%) of the faculty researches was higher than that of the student researches (48%). Combined, the researches' overall acceptance rate was 51 percent, which is closer to the ISI standard of 50 percent or lower at 20 percent. The findings support the idea that the teachers have better research skills than their students.

Table 5. External referees' evaluation of the quality of researches of the students

A. Substantive Aspect	Nursing		IT		Rad tech		Criminology		Overall	
	M	VD	M	VD	M	VD	M	VD	M	VD
1. Introduction										
Exposition of the research problem	2.59	S	2.00	F	2.08	F	3.62	VS	2.57	S
Brief review of pertinent literature	2.81	S	2.00	F	1.68	F	3.54	VS	2.51	S
Overview of the plan of study	2.66	S	3.00	F	1.88	F	3.31	S	2.71	S
Presentation of expected results	2.48	S	3.00	F	2.00	F	3.54	VS	2.76	S
Grand Mean	2.63	S	2.50	F	1.91	F	3.50	S	2.64	S
2. Discussion and Conclusion										
Overview of the findings within the context of the problem and expected findings	2.76	S	1.75	F	1.88	F	3.54	VS	2.48	F
Presentation of supporting documents	2.76	S	1.00	P	1.96	F	3.38	S	2.28	F
Interpretation of the results	2.63	S	1.25	P	1.88	F	3.46	S	2.31	F
Implications of the findings	2.56	S	2.25	F	1.84	F	3.23	S	2.47	F
Demonstrates how the study helped resolve the original problem	2.61	S	1.25	P	1.76	F	3.31	S	2.23	F
The data support the conclusion	2.62	S	1.50	P	1.84	F	3.69	VS	2.41	F
The conclusion is within the boundaries of the findings	2.62	S	1.50	P	1.80	F	3.38	S	2.33	F
Grand Mean	2.65	S	1.50	P	1.85	F	3.43	S	2.36	F
3. Content and Scope										
The article is enough to address the research questions effectively	2.71	S	1.00	P	1.84	F	3.54	VS	2.27	F
Identified theoretical and or practical implications that can be drawn from the study	2.76	S	1.00	P	1.80	F	3.62	VS	2.30	F
Contributes to the state of knowledge in the field of study	2.81	S	1.50	P	1.84	F	3.54	VS	2.42	F
Possesses potentials for research utilization	2.87	S	1.13	P	1.88	F	3.58	VS	2.37	F
Grand Mean	2.78	S	1.68	P	1.86	F	3.49	S	2.45	F
C. Style Aspects										
1. Editorial Style										
Titles, headings, illustrations, etc. are related to the text	2.70	S	3.00	S	2.12	F	3.38	S	2.80	S
Tables and or figures can stand without captions and portray information clearly	2.59	S	2.75	S	2.08	F	3.38	S	2.70	S
Format of references	2.67	S	2.50	F	2.04	F	3.31	S	2.63	S
Grand Mean	2.64	S	2.75	S	2.08	F	3.36	S	2.71	S

(Table 5 continued)

2. Writing Style										
Abstract (length, accuracy, coherence, readability, content)	2.74	S	3.00	S	1.84	F	3.15	S	2.68	S
Length (balance in lengths among different sections)	2.70	S	3.00	S	2.16	F	3.31	S	2.79	S
Orderliness and flow in the expression of ideas	2.59	S	3.00	S	1.92	F	3.15	S	2.67	S
Precision and clarity in the choice of words (skillful communication)	2.66	S	3.00	S	1.92	F	2.92	S	2.63	S
Grand Mean	2.66	S	3.00	S	2.01	F	3.23	S	2.73	S
Overall Mean	2.47	S	2.40	F	1.94	F	3.23	S	2.59	S
College Rank	2	3	4	1						

Legend: 4.5-5.00 Excellent 3.51-4.50 Very Satisfactory
 2.51-3.50 Satisfactory 1.51-2.50 Fair
 1.0-1.50 Poor

EXTERNAL REFEREES' DECISION

Table 6 presents the rate of acceptance and rejection of researches as evaluated by the external referees.

Table 6. External referees' evaluation on the quality of faculty and student researches for publication

College	Accepted	%	Rejected	%	Total
A. Faculty Researches					
Graduate Studies	11	46	13	54	24
Business	3	75	1	25	4
Administration	3	75	1	25	4
Education	4	66	2	34	6
Arts and Sciences	4	66	2	34	6
Total	21		17		38
Percentage		55		45	

(Table 6 continued)

B. Student Researches	Accepted	%	Rejected	%	Total
Nursing	12	40	7	60	29
Criminology	6	100	0	0	6
IT	2	50	2	50	4
Radiologic Technology	6	40	9	60	15
Total	26		28		54
Percentage		48		52	
Grand Total	47		45		92
Institutional %		51		49	100

The reasons cited by the referees for the rejection of researches include the **substantive aspect**: lack of compelling reasons for the conduct of the study that weakened the exposition of the research problem, lack of literature to support the problem, weak theoretical support, failure to connect the theory to the results, weak implications of the study, lack of connection between conclusions and findings, and unclear contribution of the study to the state of knowledge in the field; **methodological aspect**: unclear sampling procedures, weak reliability and validity procedures of the instrumentation process, inadequate statistical treatment; and **style aspect**: poor organization of ideas, deficient abstract, and inadequate documentation of sources.

The Criminology studies had 100 percent acceptance rate while Nursing and Radiologic Technology had the lowest acceptance rate at 40 percent. Expert, thorough, and patient advising supported by adequate research instruction was the element for the high acceptance rate of the Criminology studies.

There are significant variations in the external referees' evaluation on the quality of researches of the eight colleges ($F=10.2860$, Prob.0.0000), which means the research competencies of the researchers differ across the eight colleges. This finding implies that capability building interventions should be tailored to the competency needs of the researchers by college. On the basis of the finding, the null hypothesis is rejected.

Table 7. Analysis of variance of the external referees' evaluation on the quality of researches of the eight colleges

Colleges	Mean	VD	F-ratio	Prob.	Interpre-tation	Decision
Graduate Studies	3.14	S				
Nursing	2.47	S				
Arts and Sciences	3.46	S				
Education	3.11	S				
Criminology	3.23	S				
Radiologic Technology	1.94	S	10.2860	.0000	Signifi-cant	Reject Ho
Business Administration	2.79	S				
Information Technology	2.40	S				

Table 8. Test of difference in the external referees' evaluation on the quality of researches of the faculty and students

Groups	Mean	VD	Tstat	Prob.	Interpre-tation	Decision
Faculty	3.49	S	6.60	.000	Signifi-cant	Reject Ho
Students	2.57	S				

The faculty (3.49) and students (2.57) differed significantly in the quality of researches as evaluated by the external referees and as evidenced by the mean difference of 0.92. The faculty rating was significantly higher, indicating satisfactory skills in research. Although the difference is significant, the mean ratings for both the faculty and student researches are satisfactory. This implies that the research competence of the faculty and students do not differ much. On the basis of the finding, the null hypothesis is rejected because there exists a significant difference in the quality of researches of the faculty and students across the eight colleges.

B. Qualitative Evaluation of the Sections of the Scientific Paper

The researcher processed the qualitative evaluation data found on the second page of the referee form. When the referees wrote

their comments, it was with the intention of pinpointing errors, weaknesses, and gaps as guides for the researchers in revising their work. Hence, this section contains the synthesis of deficiencies that the referees have observed in the manuscripts. The referees' comments were forwarded to each researcher for the final revision of the manuscript.

Abstract. Some referees found the abstracts laudable because the contents established accuracy and clarity. There was orderliness; however, the choice of words needed refinement. In some studies, the abstracts were too long. They expected an abstract consisting of 120 to 250 words or following the APA format, which is an integral part of the journal article. They clarified that an abstract restates in narrative form the statement of the problem, the methodology, the type and number of respondents, sampling techniques, procedure, results and discussion, conclusions, implications, and recommendations.

Title. A referee of nursing researches noted that the titles did not catch the attention of the reader. In some instances, the length of the title was more than 15 words. The place where the study was conducted need not be included in the title.

Introduction. The introduction of most researches failed to provide sufficient information that would lead to the exposition of the problem. The organization of ideas was poor, the discussion was inadequate, and the justification of the study was unclear. The conditions prevailing in the research site should have been described to give the *raison d'être* of the study. Hence, the results lacked the connection to the problem and the theory. They opined that since theory is the heart of the paper, it should have been given proper importance. There was a lack of literature support to the problem.

The scope and limitations also were inadequately stated, too brief to clearly state the general purpose of the study, topics studied, the entity to which the data belong, the sample from which the respondents were situated, and the period of the study.

The definition of terms had inconsistencies. Terms that were not variables of the study were defined. In some cases, the verb "refers to" was repeatedly used in the definitions.

The referees observed that the introduction was weak and too

long. There was inadequate discussion of the problem situation and a limited infusion of the perceived gaps observed in the workplace. These weakened the justification for the study.

There is evidence that the studies were inadequately conceptualized and this weakened the rest of the parts of the research. The faculty generally had extensive research involvement in the past but such involvement did not translate into expertise in research. The comments for the faculty studies were similar to the ones given to the student researches.

Framework. The link between the independent and dependent variables was not established well in some cases. Hence, there is evidence that the theories cited were provided as a separate component of the study for compliance rather than as a basis for the investigation of the problem. This is seen further in the lack of connection between the literature, analysis, and interpretation of findings. Thus, there was a need to discern the relationship of the existing variables in the conceptual framework. This is very important since the theoretical framework serves as the backbone of the study. The schema of the studies was not supported by a comprehensive discussion in relation to how the independent and dependent variables are conceptualized. Another deficiency observed was the omission of the discussion of the mediating variables that could have influenced the results of the study. These inadequacies later surfaced in the conclusions of the study. There was no statement on whether the results of the study validated the theory that guided the conduct of the research.

The weaknesses in the theoretical underpinnings of the study could be attributed largely to the inadequate reading of the vast sources of research literature. The researchers used mostly printed sources particularly the studies found in the university library. The extensive use of online journals was not evident. This led some referees to remark that some studies lacked scholarly quality for publication in a refereed journal. Another referee discovered a lack of congruence in the objectives, findings, conclusions, and recommendations.

Literature Review. The literature review was choppy with little attempt to write it in one continuous discussion about the problem, stating the current body of knowledge. This happened because the

introduction was poorly organized and did not discuss the current knowledge about the topic, previous studies were missed, the gaps in the information about the problem were not analyzed, and the purpose of the study was not focused. Some literature presented was not relevant to the study.

The readings presented in the literature were not synthesized at the end, leaving the discussion hanging. There was inadequate discussion of the major theory used. The identified theory is important as basis of the questionnaire item design/formulation.

Methodology. The research methodology was also examined. Some referees observed that the descriptive design lacked specific techniques that would clarify how the study was conducted. The research environment in some studies contained information not helpful in establishing the context of the research. There was a confusion of what constitutes good research topics. Studies on Information Technology used software development. The referees congruently expressed that studies must include test runs to determine the performance of the software. How well the software performs according to its purpose and logic must be established.

In some studies the population and sample were not adequately established. The unclear definition of the respondents of the studies affected the statement of the problem, hypothesis, scope and limitations, and the overall analysis and interpretation of the study. The research instrumentation was mostly made by the researcher with little discussion on reliability and validity procedures. Most researchers modified the standard instruments or created their own. However, without the corresponding tests of reliability and validity, there could be repercussions on the instrumentation process. The value of the data greatly depended on the robustness of the instrument. Hence, the conclusions could not be taken with finality since the studies suffered from low reliability and validity. Distinction of standardized and researcher-made instruments was not discussed well in some studies. Since the questionnaire was not included in some papers, it was difficult for the reader to connect the indicators and the ratings.

The studies made extensive use of perception data and there were little efforts to validate perceptions with triangulated interviews and documentary sources. In one case, the researcher

used perceptions as causal factors of performance in the licensure examinations.

The findings reveal that the methodology lacked depth. Little attempt was done to include interviews, focus group discussion, documentary sources, and on-site inspection. Another item observed by one referee concerned the writing of the level of significance under the hypothesis rather than in the methodology.

Results and Discussion. Some referees found some papers very informative, well-written, and interesting. However, in the presentation of data, tables could have been more useful if placed ahead of the analysis and interpretation.

Format of the tables was found deficient. The tables could not stand without captions. In some cases, the basis of the qualitative descriptions was not presented. In the discussion of the findings, the statistical basis of “majority” was not clear. One referee noted that a relative frequency of more than 50 percent is needed for a “majority” to qualify.

Since some of the discussions were choppy, the flow in the expression of ideas was constrained by inconsistent writing style. There were serious grammatical flaws that weakened the line of argument of the researchers. There was lack of infusion of insights into the findings. Studies similar to or different from other researches were not cited, indicating a lack of dialogue between the literature and the discussion of the results.

In some cases, the discussion of the results was not adequate. Simply providing citations to support the findings was not enough. There was limited attempt to substantiate implications of the data with actual observations and insights. This means the context of the data was not addressed. There is evidence that the discussion of the test of hypothesis failed to support the results obtained whether the hypothesis was accepted or rejected.

In the case of Information Technology studies, the referees found out that while the software analysis design (SAD) was extensively done, the researchers were not able to satisfactorily present the (1) development which includes codes and snippets other than screen shots (methods, functions, database connectivity); (2) testing a good software development would always include documented integration and macro testing; (3) reports critical as one requirement

in the solution addressing the problem; and (4) deployment evidence and document of infrastructure and architectural setup.

There was a lack of in-depth analysis and interpretation. The researchers provided mere agreement to the theories cited. Explanation of the findings was found wanting as to telling the whys based on the real situation observed. Some of the findings were not corroborated by documentary evidences to gain credence and support. On the other hand, the referees noted that some conclusions were precise and the discussions were straight to the point.

Conclusions. Some of the conclusions were not sufficiently supported by the data generated in the study. Erroneous conclusion resulted from faulty test of hypothesis.

Implications. The theoretical and practical implications can hardly be drawn from the studies. There was no confirmation of previous assumptions. There was little discussion on the implications of the findings generated.

Recommendations. The referees noted that some recommendations were not realistic because these were not parallel to the significance of the study. Some recommendations had no data to base on.

Bibliography. There was inadequate documentation of sources. Some sources had no specific dates and were not cited in the bibliography. Some references were not cited in the study. The bibliography generally did not follow the APA format.

IMPLICATIONS

The results of the study generate the following implications:

1. With satisfactory quality of researches, the university adequately meets the research mandate of the Commission on Higher Education. The quality of researches, as evidenced by 51 percent acceptance rate, is almost at par with the 50 percent acceptance rate of ISI journals and even lower. Thus, the reviewing system is effective in screening studies for publication.

2. The quality of research output has been bolstered by the administration's full support and the implementation of quality assurance. Attractive incentive improves research performance

of the faculty as validated in the study of Cagabhion (2006). The university is strengthening its research program to sustain its research culture directed towards becoming robust, quality instruction and extension. This move supports CHED Memorandum 48 series of 1996 that requires Higher Education Institutions to maintain high standards of instruction through dynamic research programs.

3. The deficiencies on the basic structure of research provide avenues for research capability building program necessary to sustain and maintain the quality of research. Quality research is a necessary tool in upgrading teaching competencies, discovering new institutional strategies, and bringing scientific investigations to the classrooms.

CONCLUSIONS

Based on the findings of the study, the following conclusions are drawn:

1. The mechanisms are in place for the development of a research culture. The strict refereeing process that yielded a high rejection rate is a sound mechanism that identifies researches with potential for utilization and publication in a refereed journal and ensures the integrity of the university's publications.

2. The quality of faculty and student researches of SEA University is satisfactory in the substantive, methodological, and style aspects as evaluated by external referees from the Visayas and Mindanao. However, the qualitative evaluation of the external referees reveals that the researches have deficiencies along research conceptualization, analysis, and interpretation of research, indicating that the studies are barely adequate to meet the requirement for refereed publication.

3. The acceptance rate of researches is 51 percent while the rejection rate is 49 percent, suggesting that 1 out of 2 researches by faculty and students may be accepted by the referees.

4. Faculty researches of the Arts and Sciences are better written than those of the Business Administration and Accountancy. Student researches of Criminology are better written than those of Radiologic Technology and Information Technology.

5. The quality of the researches varied significantly across

colleges, indicating that the researchers' competencies differed by disciplines. The quality of faculty researches is far better than that of student researches.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are offered for consideration:

1. The Academic Community of the University

1.1. Institutional Role of Research. The academic community should have a new mindset toward research that from compliance with the requirements for Level III accreditation and CHED to research as an aspiration of SEA University towards becoming a research university. In this case, research shall become a cornerstone of the functions of the top management whose research agenda shall be clearly defined.

1.2. Purpose of Research. There is a need for a paradigm shift in the purpose of research for students and teachers. For students, the shift is from partial fulfillment of the requirements of the degree to acceptance of research by external referees for a refereed publication. For teachers, the shift is from research compensation and points for ranking and promotion to significant contribution to knowledge in the field as evidenced by publication of the research in a refereed journal.

1.3. Instruction. The content and method of instruction should shift from the teaching of basic research to passing the referees' judgment of a research worthy of publication in a refereed journal. The syllabus, teaching materials, and learning resources should serve as enabling mechanisms. The focus of instructions should be the writing of an internationally publishable paper.

2. Vice President for Academic Affairs. A review of the policies is needed particularly in the implementation of quality assurance mechanisms for faculty and student researches to address the issue of high rejection rate of the researches by the referees.

2.1. The research proposal should be evaluated based on the refereeing criteria. A researcher should start right by meeting the referees' expectations.

2.2. For faculty researches, the presence of the editorial board during the review of the proposal is necessary to check the publication worthiness of the study. Thereafter, the editorial board shall review the completed researches to decide which are fit for peer review.

2.3. Student research should be made a collaborative research between a faculty expert in the discipline and the students. The faculty shall serve as team leader. The research output shall be deemed "passed" and credited for subject and degree requirement only after the research is accepted for publication in a refereed journal.

2.4. The final oral examination should be conducted only by published experts of the discipline, mostly invited from outside the university. The evaluation of the research shall be based on the parameters for external refereeing. The research shall be considered "passed" if the panel adjudged the research "accepted with minor revisions." However, another research conference shall be conducted if paper is deemed "accepted with major revisions." The student shall re-enroll the subject and conduct another study if the paper is deemed "rejected for publication."

2.5. Acceptance of the paper by the panel during the research conference shall be for the completion of the course requirement. Acceptance of the paper by the external referees shall be a requirement to get the transcript of records.

2.6. Faculty conducting university-funded researches shall receive 40 percent of the fund upon acceptance of the proposal and 60 percent of the fund upon acceptance of the paper by external referees.

2.7. The thesis and dissertation format should be replaced by a journal format. Editors should correct the manuscripts using standard English and check on the paper's compliance with the referees' expectations.

2.8. A plagiarism detection test shall be required prior to the review of faculty and student research proposals and final oral defenses. This service shall be rendered by the university statistical

center which shall issue the research originality report.

3. The Academic Council. The weaknesses of the researches could be addressed through evaluation. The curricula for research and statistics should be reviewed to determine the capability of the instructional system to produce quality researches worthy of publication. The syllabi for research and statistics must be reviewed for complementation and relevance in the production of a competitive publishable paper. Also, a review on thesis advising, editing, and oral defenses should be done.

A policy be enacted that only researchers with publications in peer reviewed journal should be allowed to teach research and statistics subjects, advise students in their research, participate as panelists in oral defenses and edit the manuscripts.

4. The Deans and Research Coordinators. They need to examine their research program particularly the training of researchers, the utilization of research expertise, and the quality of oral examinations to produce quality and publishable researches. Research training should be anchored on the skills required to do research along the research agenda of the college. Specific researches require specific skills.

5. The Research and Planning Office. There is a need for a cost-benefit analysis of the research funding in view of the researches' high percentage of rejection by the referees. The screening of topics, the presentation of proposals, the coaching and mentoring systems, and the editing of the manuscripts should be made more stringent to upgrade quality. Teachers should be trained for external refereeing, which should serve as a framework for the various activities related to research such as teaching, advising, paneling, editing, and refereeing.

6. Editorial Board and the Peer Review System. The editorial board and the peer review system need to be internationalized by getting members from abroad to complement Filipino published researchers in the lineup.

7. For Further Research. The following topics are suggested for further study:

7.1. Replication of this study after the implementation of the interventions and recommendations to evaluate their impact on the quality of researches.

7.2. Predictors of Research Performance of Faculty and Students

7.3. External Referees' Evaluation of the Quality of Researches
Published in Refereed Journals.

7.4. The Utilization of Researches at Liceo de Cagayan
University for S.Y. 1997-2007

7.5. The Reviewing System and its Effects on the Quality of
Researches in Institutions with Refereed Publications

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