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Research Productivity of Faculty Members in Selected Private Colleges in the Province of Albay: Basis for Enhancing Research Culture

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ABSTRACT

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The study aimed to assess the research productivity of the faculty members in five private colleges in the province of Albay. This study used a multi-method approach in determining the research productivity, factors affecting the research productivity of respondents, and significant agreement on the factors affecting the research productivity of respondents among the private colleges in the province of Albay. A survey questionnaire, document analysis, statistical analysis, and literature review were incorporated. The study found varying levels of research productivity across the institutions. Researchership, institutional support, motivation, leadership practices, and research orientation all notably impact research productivity. The top areas

influencing research productivity are time management, research-related development opportunities, and alignment of research agenda with institutional strengths. There is a statistically significant agreement on the factors affecting the research productivity of the respondents. Specific areas for interventions could aim to strengthen leadership practices that provide professional development opportunities, effective time management, research funding, faculty research writing aptitude, and a clear research agenda. A Research Development Program was designed based on the findings of the study. The components of this program are mentorship pairs and collaboration, internal research funding, seminar series, research facilities and resources, and research excellence recognition.

INTRODUCTION

Higher Educational Institutions continue to be under pressure to increase research productivity, and challenges continue to arise. These difficulties are experienced in other countries as well. Private higher education in India faces challenges in conducting research, such as a lack of funding, infrastructure, and faculty support. Due to these limitations, the research productivity and innovation output of private institutions lag behind public/government-funded colleges and universities in India (Srivastava, 2023). In addition to this, Thailand's Higher Education Ministry attempted to end the 'publish at all costs' culture due to the current overemphasis on publications, which is fueling misconduct, such as claims that Thai academics are paying others to do research/writing for them (Seneviratne, 2023).

In the Philippines, Roman (2021) also found out that among the 135 faculty from 8 public and private HEIs in the Philippines, only half of the respondents were able to complete research projects, with a decrease in frequency, indicating not all faculty are actively presenting or publishing research papers. There was also a decline in the rankings of some Philippine universities in the 2024 Times Higher Education (THE) World University Rankings, where Commission on Higher Education [CHED] Chairperson J. Prospero de Vera III responded that rankings dropped due to factors such as research, faculty development, and facilities. CHED aims to support universities in determining where more work is needed to boost their rankings and compete globally, like research where they may lag behind global competitors (Sevillano, 2023).

Challenges in HEIs are also best expressed in CHED Memorandum Order No. 52, series of 2016, which states that Philippine higher education institutions, in general, continue to face pressing challenges at various stages of research enterprise such as (a) improving the research capabilities of faculty, research

staff, and students; (b) instilling a research culture and research vocation among faculty and students; (c) building, retraining and retaining a sustainable stream of a new generation of researchers; among others. In addition to these challenges are the ramifications of the COVID-19 pandemic on the research productivity in HEIs, such as financial constraints, mental health and stress, and teaching and administrative duties. However, despite the many challenges in the education sector brought by the effects of the COVID-19 pandemic, CHED is specifically pushing colleges and universities to increase the research output among their faculty members, where this research productivity is viewed as important for making the country's HEIs more competitive globally (Mendoza, 2023).

Enhancing quality assurance in Philippine Higher Education is imperative. The CHED 2019 Guidelines for Granting Autonomous Status to Private Higher Education Institutions stated that for colleges, at least 20% of faculty members over the last five (5) years must be engaged in research and extension services that contribute to instruction or community development. This is also reiterated in the CMO No. 6, series of 2023, where it states that the percentage of faculty members engaged in scholarly work or research activities should be from a minimum of 5% to above 19% to maintain integrity and reputation.

However, despite this mandate, a study by Janer et al. (2022) revealed that private higher education institutions (PHEIs) in the province of Sorsogon have low research capability. The study found that a small number of research projects have been produced over the previous three years. During the interviews, the PHEIs clarified that while research is emphasized within their schools, the main issue lies in the faculty's capability to do research. They highlighted that their expertise is limited compared to those in State Universities and Colleges (SUCs) where research is obligatory.

Given these problems, the study will be able to provide an understanding of the circumstances and challenges faced by faculty members with low research productivity, inform institutional policies and practices, and ultimately support the professional development and research productivity of these individuals in a local setting.

FRAMEWORK

This study is aligned with the Human Capital Theory by Gary Becker in 1964, the Transformational Leadership Theory expanded by Bernard M. Bass in 1985, and the Expectancy Theory by Victor Vroom in 1964.

These theories suggest an integrated framework for maximizing human capital. For Human Capital Theory, organizations should invest in employee

training, mentoring, and educational opportunities to build capabilities and skills (Bouchard, 2008). Transformational leaders should tie development to a compelling vision that gives purpose and meaning to employees' work (Bass, 1999). They should also empower employees and recognize their abilities and needs. To further drive performance, leaders must ensure employees believe their efforts will be rewarded based on clear outcomes (Expectancy Theory; Boström & Palm, 2020). Rewards should be matched to employee preferences to have optimal motivational value.

Based on these established ideas, organizations should invest in developing their employees through training, education, and skill-building programs. The more competent and skilled the workforce, the higher the potential for enhanced productivity. Leadership skills also affect employee productivity. Employees will not seek to perform better without proper motivation, such as rewards and recognition for their efforts. Therefore, this puts employee development at the core of competitive advantage.

OBJECTIVES OF THE STUDY

The study determines the research productivity of the faculty members and the factors affecting their research productivity in private colleges in the province of Albay. It uses this as a basis to strengthen its research productivity. This study seeks to understand the following: (1) the status of research productivity of the faculty members in selected private colleges in terms of publications, utilizations, grants or awards received by the faculty, research-related training programs, and research presented in conferences; (2) the factors affecting the research productivity of the respondents along researchership, institutional support, motivation, leadership practices, and research orientation; (3) the significant agreement on the factors affecting the research productivity among faculty members of private colleges in the province of Albay; and (4) create a research development program to strengthen the research productivity of the faculty members.

METHODOLOGY

Research Design

This study used a multi-method approach to determine the research productivity, factors affecting the research productivity of respondents, and significant agreement on the factors affecting the research productivity among faculty members of private colleges in the province of Albay. This means that a survey questionnaire, interviews, statistical analysis, and literature review were

incorporated to determine the research productivity of faculty members, identify the factors affecting the research productivity, identify the significant agreement on the factors affecting the research productivity among the five private colleges, and design a research development program. Therefore, this approach has the strengths of various methods, namely interviews, surveys, inferential statistics, and literature reviews, resulting in a more comprehensive understanding of the research productivity of faculty members.

Research Site

The research was conducted in the 1st, 2nd, and 3rd District of Albay. Five (5) private colleges (PCs) responded to the request and were part of the study. For confidentiality and ethical reasons, these five PCs will be named PC1, PC2, PC3, PC4, and PC5. PC1 is from the 1st district of Albay; (2) PC2, PC3, and PC4 are from the 2nd district of Albay; and PC5 is from the 3rd district of Albay. Four PCs were established more than 70 years ago, while one PC was established 49 years ago. While four out of the five PCs offer graduate-level programs in addition to undergraduate studies, the fifth college focuses solely on providing quality undergraduate education. However, private institutions represent an essential sector of the provincial education landscape distinct from public colleges and universities, where they offer criminology and maritime programs.

Participants

The respondents of the study were the persons in charge of faculty research and faculty members from all departments/programs of private colleges across the three districts in the province of Albay. There were a total of five (5) people in charge of the faculty research (1 Research Director, 2 Vice President for Academic Affairs (VPAA), and 2 Deans of Graduate School) who were interviewed, and 126 faculty members from the five private colleges who responded to the survey questionnaire.

Instrumentation

This study utilized semi-structured interview questions to determine the status of research productivity of the faculty members regarding research publications, utilizations, grants or awards received, research-related training programs, and research presented at conferences. On the other hand, a structured survey questionnaire was formed for the faculty members and composed of two parts. Part I contained statements about factors affecting research productivity regarding researchership, institutional support, motivation, leadership practices, and research orientation. Respondents were asked to rate their level of agreement with these statements using a 4-point Likert scale. Part II, on the other hand,

contained open-ended questions about the research productivity of respondents, which were the same questions asked during the interview with the person in charge of faculty research for triangulation. The instrument used a 4-point Likert Scale for Part I with the following ratings: (4) 3.25-4.00 = Strongly Agree; (3) 2.50-3.24 = Agree; (2) 1.75-2.49 = Disagree; (1) 1.00-1.74 = Strongly Disagree.

The research instrument employed in this study was thoroughly reviewed and validated by a panel of experts comprising the research adviser and several panelists holding doctoral degrees in education and management. Their expertise and insights ensured the validity and reliability of the data collection tool, thereby enhancing the credibility and rigor of the research findings. The comments and recommendations of the experts were applied to the tool. After the content validation, the research instrument underwent a dry run with a sample of 10 respondents to assess its clarity and comprehensibility. The participants were encouraged to provide feedback and comments on the questionnaire items during this process. The majority of the respondents indicated that the statements were easily understandable. Their valuable insights were carefully considered, and relevant comments were incorporated into the final version of the questionnaire.

Data Gathering Procedures

Data for this study was gathered through interviews and surveys at the five institutions. Before commencing the data collection, the researcher delivered a formal letter to each participating institution, requesting permission to interview the research director and distribute surveys to faculty members. The person in charge of faculty research was interviewed without a research director. The data-gathering process spanned a period of more than one month, from October 24, 2023, to November 29, 2023. During this time, the researcher visited each institution to conduct interviews and distribute the survey questionnaires. The survey questionnaires were collected back from the faculty members after they had been given sufficient time to complete them.

Additionally, an online survey was created using Google Forms to maximize the number of responses. The link was sent to faculty members who were absent during the onsite survey distribution at the participating institutions. The online survey remained open, and responses were gathered throughout the one-month data collection period. The data collection protocols differed between institutions. In some cases, the researcher could retrieve the completed survey questionnaires once the participants had finished responding. Other institutions, on the other hand, required that the researcher provide the survey instrument to the administrative assistant for each department and then establish a later date to return and gather the completed surveys.

Research Ethics Protocol

Written informed consent was obtained from the respondents who were interviewed. Furthermore, the interviews were recorded with explicit permission, ensuring transparency and enabling accurate data collection and analysis. They knew that the interview would only include questions about the research productivity of the faculty members and the institution. This paper did not include the respondents' personal information, such as their names.

Data Analysis

All data was systematically transferred and encoded into Google Sheets. The transcribed interviews were encoded verbatim in one sheet. For the survey data, a separate sheet was created with columns representing each question, and rows were filled with the individual responses from each faculty member for both the physical surveys and the online Google Forms survey. Google Sheets was the central place for seamlessly compiling, organizing, and analyzing the full dataset.

The status of research productivity was interpreted based on interviews with the research director or the person in charge of the institution's faculty research. As much as possible, the researcher tried to gather data from reports or documents available at the time of the survey that could be used to verify further details provided during interviews. Furthermore, triangulation was employed, including identical questions on both the interview and survey protocols. This duplication allowed participant responses to be cross-checked across different data collection formats. Using multiple approaches to capture the same information increased the confidence in the findings. The factors affecting the research productivity were analyzed using a weighted mean. At the same time, Kendall's coefficient of concordance was applied to determine the significant agreement on the factors affecting the research productivity among the respondents across the five private colleges.

RESULTS AND DISCUSSION

Status of Research Productivity of Faculty Members. There are varying levels of research publication across the five private colleges (PCs). PC3 and PC4 focused on institutional journal publications as the main faculty output channel, a base outlet supporting productivity, while PC1, PC2, and PC5 have minimal to zero faculty publications.

It was also found that faculty research is rarely utilized to inform institutional policies, extension activities, products, processes, and curricula. Most

respondents imply that research is rarely being applied in impactful ways. There are good intentions but lagging applications, and while research aims to inform institutional policies and practices across schools, very few studies actually get utilized in decisions or programming.

While institutions aim for their research to assist decision-making and activities, widespread barriers prevent faculty research from being adopted into meaningful applications. A study by Čebohin et al. (2021) identified that insufficient time on the job is a major obstacle to research utilization (78.2%). Support systems facilitating the transition from inquiry to real-world change appear underdeveloped, but developing a culture and systems to put research into practice could significantly increase the real-world impacts.

There is also a range of research funding support available across private colleges in the province of Albay. Although few faculty have received research funding, the interviews revealed that PC1, PC3, and PC4 have promising funding mechanisms, such as internal research council grants and funding from emerging external partnerships and internal funding opportunities to complete stand-alone and tandem projects that cover publication costs. PC2 and PC5, on the other hand, reveal no research funding for faculty. PC2 unfortunately reports no current faculty funding awards, which suggests limited internal and external funding options for faculty research. PC5 also reveals a lack of effort in pursuing external funding, given demanding requirements. Some provincial and internal funding options exist, but focus on graduate scholars.

Internal funding is the strength of the majority of these institutions. In contrast, external funding pursuits are still a challenge that few private colleges have figured out how to attract consistently. Research by Brokjøb et al. (2022) demonstrates that grant application success rates are typically low, from 8% to 11%. The low funding approval odds documented by Brokjøb et al. (2022) reveal how the difficulty of securing grants can shift attention away from high-quality research in higher education institutions. Overall, research funding fueling faculty productivity varies widely. Where present, internal grants seem easiest to secure.

Participation in research-related training varies across the institutions. Faculty members from PC3 and PC4 demonstrate frequent participation in trainings and seminars. It was revealed that these institutions conduct regular internal faculty training, grab opportunities for external seminars, and even provide funds, which shows strong existing infrastructure to build capabilities. Faculty members from PC1 and PC2 have minimal activity currently, with an upcoming external training program planned. This reveals narrow training opportunities. PC5, on the other hand, had activities pre-pandemic and some student training, but institutional training was absent post-COVID at the time

of data gathering. The training frequency of these private colleges in the province of Albay ranges from annual programs to a single upcoming event to irregular external participation. Most notably, however, make some effort.

Faculty members who engage in career and professional development activities do not experience a decrease in efficiency or productivity in terms of time to degree or manuscript output (Prado, 2019). Some institutions even demonstrate a positive correlation between participation in these activities and productivity (Monsura et al., 2022).

In terms of presentation at conferences, it revealed a range of activity levels related to research presentations across institutions. PC2 held an internal research forum in 2022 and 2023 for eight faculty researchers, indicating an institutional sharing of work, while PC3 demonstrates a productive presentation culture—yearly colloquiums that moved online during COVID, international and US conferences, and an internal event. PC4 recently hosted a research colloquium in 2023 for 12 faculty projects, building local visibility. This shows that these institutions amplify research visibility, which could further increase sharing and exposure. PC1 details external presentation activity, while PC5 currently reports no internal or external faculty presentations, signaling possible barriers to sharing and circulation. This shows that conference presentations are valued across institutions, but participation and activity levels vary. Participation in conference presentations can positively impact the research productivity of faculty members. Transforming conference papers into peer-reviewed articles leads to higher productivity, increasing a researcher's confidence, motivation, and capacity for further research (MacDonald, 2022).

Factors Affecting the Research Productivity of Respondents. The data shown in Table 1 presents the discussion of the findings about the factors affecting the research productivity of respondents, which were analyzed and summarized through the use of weighted mean. There are four factors: researchership, institutional support, motivation, leadership practices, and research orientation. For the context of this study, researchership is those skills, knowledge, and qualities that enable a faculty member to conduct rigorous, ethical, and impactful research.

Table 1

Factors Affecting the Research Productivity of Respondents

Variables	Average Weighted Mean	Interpretation
Researchership	3.36	Strongly Agree
Institutional support	3.27	Strongly Agree
Motivation	3.28	Strongly Agree
Leadership practices	3.40	Strongly Agree
Research orientation	3.42	Strongly Agree
Average	3.35	Strongly Agree

Although all variables are significant importance, it should be noted that the highest rank is research orientation (3.42), which in this study pertains to the strategic alignment of the research agenda, mentorship culture, and ethics standards. This suggests that faculty research productivity is more likely to rise in a purpose-inspired, mentoring-driven, integrity-based climate rather than outcome-pressured settings. The study by Ramkumar (2022) suggests that having a research agenda can help align research efforts with the strengths of each discipline.

Leadership practices (3.40) also hold almost equal significance, as the respondents strongly agree that leadership influence scope lies in providing development training opportunities, celebrating achievements to maintain morale, and setting realistic timelines and demands. A study by Kazai Ónodi and Répáczki (2020) highlights the importance of management skills and leadership qualities in improving corporate efficiency. Both the individual qualities of the leader and the characteristics of the leadership practice are found to be decisive for the efficiency and results of the organization. Researchership (3.36) is also valued significantly. This study pertains to the ability to manage time effectively, understand research integrity issues, communication skills, collaborative tendencies, literature review ability, and research methods and data analysis skills. Specifically, time management is perceived as the most vital skill for balancing responsibilities and enabling research productivity, directly impacting the amount and quality of research output.

Although the last two variables, motivation (3.28) and institutional support (3.27), are the lowest in rank, they still hold significance in factors affecting

research productivity. As perceived by the respondents, the results under motivation highlight that extrinsic factors act as more effective motivational triggers than intrinsic motivations. The study by Natividad-Franco and Dela Cruz (2023) proved that pay as a motivator does, in fact, influence research productivity. Therefore, financial incentives are often used to motivate behaviors and enhance performance. On the other hand, institutional support highlights that a functional and supportive research policy is crucial for harmonizing various aspects such as infrastructure, funding, management, and human resources to support faculty research activities. This is further supported by a study by Nguyen (2022) that the availability of research resources, external research funding, sufficient work time for research, research training, and mentoring are important aspects of a research culture that should be improved to enhance academics' research productivity.

Agreement on the Factors Affecting the Research Productivity among Faculty Members of Private Colleges in the Province of Albay. Kendall's coefficient of concordance was utilized to determine whether there is a significant agreement on the factors affecting the research productivity among respondents of the five private colleges. The result of the analysis is shown in Table 2.

Table 2

Coefficient of Concordance on the Factors Affecting the Research Productivity of the Respondents among the 5 Private Colleges

Indicator	Coeff. of Concordance (*W*)	Computed *t*-value	Tabulated *t*-value at 1% level	Decision
Factors affecting the research productivity of respondents among the five private colleges	0.42	8.4	2.58	H_o = rejected

The *W* value of 0.42 indicates moderate agreement in how the respondents ranked the items. This moderate agreement (*W* = 0.42) suggests that while the respondents generally agree on the factors affecting their research productivity, there is still some variation or disagreement among them regarding the relative importance or ranking of these factors. In other words, the respondents share a moderate consensus on the general factors affecting research productivity. Still they may have differing opinions or perceptions about the degree of influence or the order of importance of these factors.

On the other hand, since the computed *t*-value (8.4) is greater than the tabulated *t*-value (2.58 at 1% level), it indicates that the agreement among the respondents, as measured by the Kendall's *W* (0.42), is statistically significant

at the 1% level of significance. In other words, while the agreement among respondents is moderate (W = 0.42), the large computed t-value suggests that this level of agreement is unlikely to have occurred by chance alone and can be considered a reliable finding despite not being a strong or very good agreement. Therefore, these factors genuinely impact research productivity, even if their relative importance may vary. In summary, this means there is significant agreement on the factors affecting the research productivity among faculty members of private colleges in the province of Albay.

This is perhaps true in the context of the shifting nature of academic work at higher education institutions, leading to different priorities. However, there is still common ground about factors affecting research productivity. The research development program proposed in this study can help the institutions, but perhaps the research-related training depends on each institution's specific context and priorities.

Research Development Program to Strengthen the Research Productivity of the Faculty Members. Research capability, institutional support, personal motivation, leadership practices, and research orientation contribute to the overall research conditions of the selected private colleges in the province of Albay. Therefore, a Research Development Program is proposed to establish an institutional program to enhance an institution's research culture. This program (Table 3) will be a set of initiatives and resources designed to strengthen research productivity, innovation, and overall research performance.

Table 3
Research Development Program

Objectives	Activity	Timeframe
• Strengthen research productivity and output of faculty members • Provide support systems and resources to facilitate research activities • Cultivate a culture that values and rewards high-quality research	Mentorship Pairs & Collaboration Initiative • Overview of the mentorship program • Identifying personal and professional goals • Mentor-mentee matching based on research interests	1 week
	Seminar Series • Foundations of Research (i.e., research design, methodology, conducting literature reviews, Institutional Review Board (IRB) training, data analysis, grant writing, scholarly publishing) • Data Analysis Methods & Statistics (i.e., qualitative data analysis software (NVivo, Dedoose) and quantitative tools (SPSS, R, MATLAB) with the help of IT personnel and statisticians/data analysts) • Responsible Conduct of Research (research ethics, ethics of AI, discussions of ethical scenarios and dilemmas) • Research Presentation and Publishing (effective presentation skills, navigating the publication process, submission, and peer review process)	6-12 months (at least once a month)
	Research Funding • Information dissemination and orientation about available research funds or grants	1 day
	Faculty Research Excellence Awards • Annual research awards • Showcase faculty research accomplishments	1-2 days

The program focuses on providing mentoring, funding, skill development, collaborative opportunities, and rewards and recognition to ensure faculty have support to produce innovative, impactful research contributions. Assessing research output and faculty satisfaction metrics will allow for continuous program improvement.

Several studies have proven that these interventions can significantly contribute to strengthening faculty research productivity. One approach is to provide grant support to early-career faculty members, which has been shown to positively influence their career trajectory and enhance academic success and retention (Al-Hussami et al., 2021; Virdi et al., 2022). Another effective program is offering seminars and workshops on research, which can increase

research productivity among faculty members (Virdi et al., 2022). Additionally, implementing a research faculty development program that enhances research skills, such as writing research proposals, can efficiently improve research productivity (Gurat, 2018). Furthermore, consultation services and resources on team building can help junior faculty members build and maintain their research teams, increasing productivity (Bragg et al., 2021). These programs and interventions can be valuable in promoting research productivity among faculty members and should be considered by higher education institutions.

CONCLUSION

There are varying levels of research publication and participation in conference presentations across the institutions. There also appears to be little practical application of faculty research to guide institutional policies, extension activities, technological developments, products, processes, and so on. Regarding research funding, internal grants/funds seem easiest to secure for some colleges and few external funding. The training frequency ranges from annual programs to a single upcoming event to irregular external participation, but, notably, most make some effort. In the areas concerning the factors affecting the research productivity of the respondents, researchership, institutional support, motivation, leadership practices, and research orientation all have a notable impact. Specific areas for interventions could aim to strengthen leadership practices that provide professional development opportunities, effective time management, research funding/rewards, faculty research writing aptitude, and a clear research agenda. Statistical analysis shows significant agreement on the factors affecting the research productivity of respondents among the private colleges in the province of Albay, meaning the respondents share a moderate consensus on the general set of factors that affect research productivity. However, they may have differing opinions or perceptions about the degree of influence or the order of importance of these factors. A Research Development Program was designed based on the findings of the study. The components of this program are mentorship pairs and collaboration, internal research funding, seminar series, research facilities and resources, and research excellence recognition.

TRANSLATIONAL RESEARCH

The findings of this study will directly inform the design and implementation of a tailored research development program that empowers faculty members. This program will equip faculty with the necessary skills, knowledge, and supportive

environment to enhance their research capacity, productivity, and impact. By translating the research insights into practical interventions, the study can serve as a model for other institutions seeking to strengthen their research capacity and productivity.

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