

Determinants of Research Engagement Among Personnel of Private Higher Education Institution

Reshyl G. Lopez, LPT, MMBM¹, Ruth S. Galamiton, MBA², Vanessa T. Suan, LPT³

^{1,2,3}Research Office, Philippine College Foundation

ABSTRACT: Research is an integral part of higher education institutions (HEIs) in the Philippines, as it is mandated by CHED policies to improve knowledge creation, teaching, policy, and community development. However, research productivity is low, especially in rural private colleges, due to individual and institutional constraints. This study examined the determinants of research engagement among 86 teaching and non-teaching personnel of private higher education institution in Bukidnon, Philippines. Using a quantitative descriptive-correlational design, data were analyzed through descriptive statistics, Pearson correlation, and multiple regression analysis to find out the relationships of the variables of the study. Moreover, an adapted-modified questionnaire was used to gather responses from the respondents to complete the study. The result revealed that respondents have a high level of research competence ($M=3.94$), attitude ($M=3.95$), motivation ($M=3.75$), and institutional support ($M=3.75$), while resources ($M=3.32$) and workload ($M=3.19$) were rated as moderate. Research engagement ($M=3.13$) was also rated at moderate level, with research conduct received the highest ratings and publication output the lowest. Correlation analysis revealed a significant positive relationships between research engagement and competence ($r=.571, p<.001$), attitude ($r = 0.480, p < 0.001$), motivation ($r = 0.343, p = 0.001$), and resources ($r = 0.486, p < 0.001$), while there were no significant correlations of research engagement with perceived support ($r = 0.017, p = 0.876$) and workload ($r = 0.203, p = 0.060$). Regression analysis revealed competence ($\beta = 0.270, p = 0.025$), attitude ($\beta = 0.238, p = 0.050$), resources ($\beta = 0.332, p = 0.001$), and perceived support as a negative predictor ($\beta = -0.198, p = 0.030$). These results indicate that research engagement in rural HEIs requires not only individual capacity and motivation to conduct scientific activity but also institutional support that translates into practical research-enabling conditions to enhance engagement in resource-limited rural HEIs.

KEYWORDS: research engagement, competence, attitude, motivation, research resources, support, workload

INTRODUCTION

Research is a core part of higher education institutions. It drives knowledge creation, improves teaching, shapes policy, and supports community development. In the Philippines, this role has been strengthened by the Commission on Higher Education (CHED), which has made research an official task, along with teaching and extension services (CHED Memorandum Order No. 46, s. 2012; CMO No. 52, s. 2016). These policies show that there is an increasing expectation for higher education institutions to encourage research not just among their teachers but also for staff to maintain academic quality and help achieve national development goals.

Research indicates that research faculty can develop knowledge more aptly to influence teaching and policy (Al-Maamari et al., 2017) and being involved in research offers more than just meeting institutional requirements. For academic staff, it aids not only career development but also expertise development in their areas, as well as enhancing teaching through evidence-based practices. In rural areas like Bukidnon, encouraging research is even more important since local studies can address specific community issues, support innovation that meets local needs, and help institutions align with regional development goals.

However, despite supportive policies and the known importance of research, research output among higher education staff in the Philippines is still low. Research has revealed that there is a lack of research productivity among faculty in institutions (Barrot et al., 2020; Gravoso et al., 2016), and the research output in the country is low when compared to other countries in Southeast Asia (Guido and Orleans, 2020; Sukoco et al., 2023). This problem is especially clear in private institutions outside cities, where building a strong research culture faces ongoing challenges (Rosaroso et al., 2015).

Common barriers include not enough research training, limited funding, weak administrative support, and competing teaching and administrative duties. In the Philippines, heavy workloads and the lack of ways to reduce faculty teaching loads are major reasons why staff do not participate in research (Mahilum, 2010).

Recent studies in rural higher education institutions (HEIs) further demonstrate that research engagement remains uneven due to structural and institutional limitations. In many rural colleges, faculty members experience limited access to scholarly

Determinants of Research Engagement Among Personnel of Private Higher Education Institution

databases, mentoring opportunities, and research funding, which reduces sustained participation in publication and collaborative research. Flores (2024) reported that beginning Filipino teachers often experience research hesitancy because of insufficient institutional guidance and competing professional demands. Similarly, Gutierrez (2024) found that research competencies and positive attitudes improve engagement only when accompanied by continuous institutional capacity-building programs.

Internationally, Li and Xu (2024) revealed that institutional support, self-efficacy, and intrinsic motivation significantly influence research engagement among university teachers in China, while studies in developing academic contexts continue to highlight the importance of mentoring systems, protected research time, and collaborative research cultures.

While many studies have identified obstacles to research productivity, few have examined how both personal and institutional factors together affect research engagement, especially in private colleges in rural areas. Most research focuses on single factors, which leads to incomplete explanations. The reasons are mostly addressed individually, leading to half-baked explanations. Research participation relies on both personal factors, such as skills, motivation, and experience, and institutional factors, such as leadership, resources, workload policies, and recognition systems. Evidence shows that staff are more likely to do research when they have enough time, resources, and support from their institution (Bengo et al., 2012; McArthur, 2024).

Filling this research gap is important for both academic knowledge and practical improvements in institutions. Understanding what affects research engagement can help create targeted programs, such as mentoring, incentives, training workshops, and policy changes to remove barriers. This kind of research also adds to global conversations about making research more inclusive and building capacity in developing areas, as UNESCO (2021) highlights. For leaders and policymakers, including CHED and private institution administrators, evidence-based findings can support more effective strategies to boost research productivity and improve institutional performance.

Given these points, this study examines the factors influencing staff research engagement at a private higher education institution in Bukidnon. Using a quantitative approach, it examined how certain personal and institutional factors affect research involvement, based on survey data and statistical analysis. By studying these factors in a local context, the research aims to add to the literature on research engagement in less-studied areas and offer practical suggestions for improving research culture and participation in private colleges in rural parts of the Philippines.

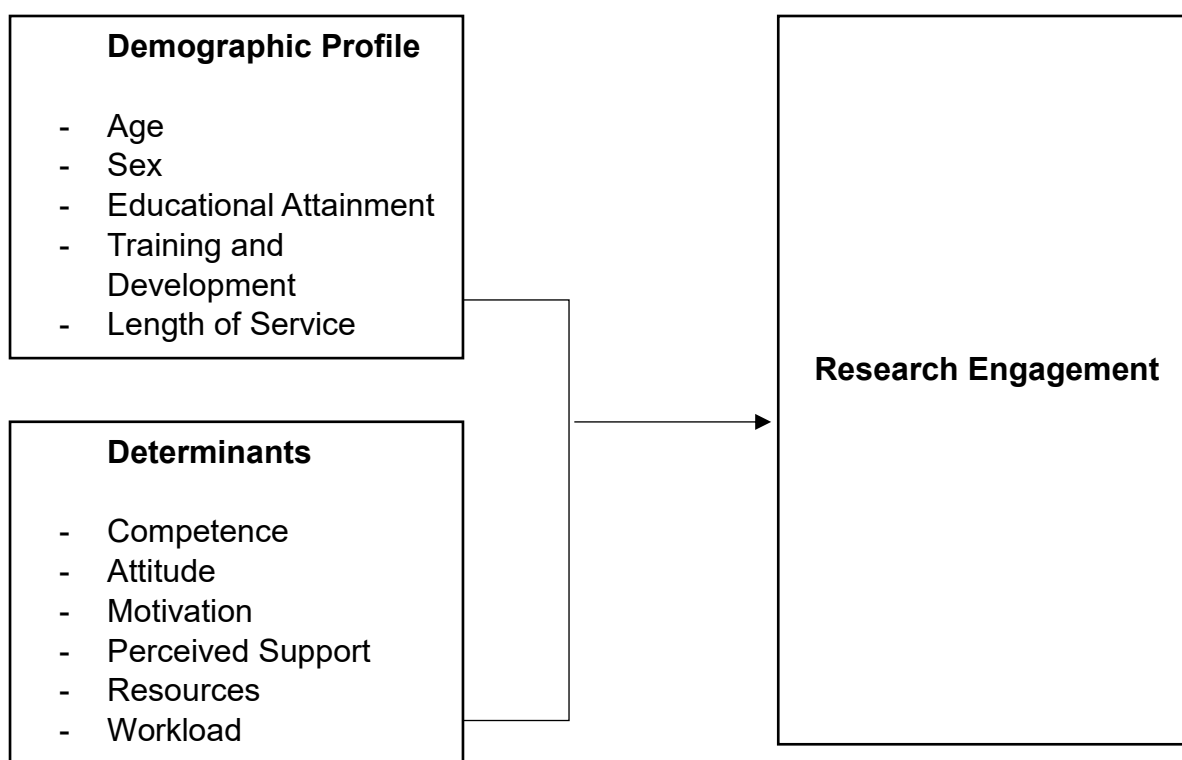


Figure 1: Schematic diagram depicting the interplay between the determinants of research engagement

CONCEPTUAL FRAMEWORK

This paper applied Self-Determination Theory (SDT) by Deci and Ryan (1985), to explore what motivates and engages people in higher education research. SDT focuses on three key psychological needs: competence, autonomy, and relatedness. If these factors are fulfilled, individuals are more likely to start, continue, and value research. Research engagement in higher education relies not only on policies but also on a combination of personal skills and organizational support.

In this study, research engagement refers to the extent to which staff participate in activities such as writing proposals, collecting data, publishing, presenting, and using research findings. SDT suggests that people remain engaged when they feel

Determinants of Research Engagement Among Personnel of Private Higher Education Institution

capable, independent, and supported by their institution. Thus, the study examines both personal and organizational factors related to research engagement.

Research competence at the individual level plays a critical role in promoting research engagement. It encompasses both perceived and actual ability to design, conduct, and share research. According to SDT, competence is a fundamental need that boosts confidence and motivation, driving greater engagement. Staff with advanced research knowledge, skills, and experience are more inclined to participate, while those lacking competence may feel anxious or avoid research. Teachers' research competence contributes to research that supports their career growth (Comon & Corpuz, 2024).

Attitude toward research is also an important factor in research engagement. A positive attitude, with interest and appreciation for research's value, often goes along with greater competence (Rockinson-Szapkiw et al., 2017). This optimism can strongly influence motivation, research quality, and persistence in the face of challenges (Ballesteros et al., 2024). On the other hand, a negative attitude can slow progress and lower motivation (Tabafa & G, 2025). Building strong research skills, like critical thinking and data analysis, is important for effective research and career growth (Borres & Paglinawan, 2025). Whether research feels like a chance to grow or a difficult task depends a lot on attitude. Motivation connects individual competence, organizational factors, and research engagement. As competence, support, and autonomy increase, so do motivation and ongoing engagement.

At the institutional level, perceived support strongly affects research engagement. This means staff believe their institution values and encourages research through leadership, recognition, mentoring, and helpful policies. In SDT, this relates to the need for relatedness. Supportive environments help staff feel they belong and that their work matters, making them more likely to continue and find meaning in research.

Having enough resources at the institutional level is also important for research engagement. Resources include funding, materials, databases, training, and technical or administrative support. While resources are related to support, they differ because they are the practical things needed to conduct research. Enough resources not only remove obstacles but also increase competence and help turn motivation into real research results. Without them, even skilled and motivated staff may take part less. Access to research materials, funding, and research training encourages teachers; however, a lack of resources may hinder their ability to engage with and utilize research in their teaching profession (Mills et al., 2025).

Institutional workload is another major factor that can affect research engagement by influencing autonomy. As mentioned in the study by Wang et al. (2015), excessive workload may lead to the extreme use of teachers' emotional, cognitive, and physical resources, potentially resulting in depletion of their engagement. Workload includes all teaching, administrative, and service tasks staff must handle. If the workload is too high, it leaves less time and energy for research and can lower both autonomy and motivation. In SDT, a heavy workload can reduce the benefits of competence, motivation, and support, and may even cause staff to stop engaging in research.

This study uses demographic characteristics as control variables in its analysis of research engagement. Factors like age, sex, education, training, and experience are not expected to directly predict engagement. However, they may indirectly affect research opportunities, skill development, and staff's perceptions of institutional support. By controlling for these variables, the study can better show how the main factors influence research engagement.

Statement of the Problem

The study aimed to examine the determinants that affect the level of research engagement in a private higher education institution. Specifically, it provided answers to the following questions:

1. What is the demographic profile of respondents in terms of;
 - a. Age;
 - b. Sex;
 - c. Educational attainment;
 - d. Training and development; and
 - e. Length of service?
2. What is the assessment of the determinants of research engagement in terms of;
 - a. Competence;
 - b. Attitude;
 - c. Motivation;
 - d. Perceived support;
 - e. Resources; and
 - f. Workload?
3. What is the level of research engagement of the respondents?
4. Is there a significant difference in the level of research engagement when respondents are grouped according to profiles?
5. Is there a significant relationship between the determinants and research engagement?
6. What factors of the independent variable singly or in combination predict the level of research engagement?

Determinants of Research Engagement Among Personnel of Private Higher Education Institution

METHODOLOGY

This study employed a quantitative research approach, utilizing a descriptive-correlational design, to investigate the factors influencing research engagement. The research also used multiple regression to identify the best predictors of research engagement, combining personal and institutional factors. The design of this research is suitable for both predictive and covariant relationships, as well as for the effects of competence, attitude, motivation, perceived support, resources, and workload on personnel research engagement.

Eighty-six (86) faculty and administrative employees of the Philippine College Foundation were included as respondents in the study. A Purposive sampling was used to select participants to ensure that respondents had been involved in research-related activities. Purposive sampling was used to choose those teaching and non-teaching faculty members of the Philippine College Foundation who participated in research activities. The use of purposive sampling was justifiable since the objective of the research was to collect data from those respondents who would be able to give meaningful information regarding their research competencies, attitudes, motivation, perceived support, resource availability, workload, and participation. Nevertheless, as the respondents belonged to a single private higher education institution and were not chosen randomly, the conclusions derived from the study can be applied only within that particular institution and cannot be generalized for all private HEIs.

Moreover, the researchers utilized adapted and modified research instruments, including: the Survey of Research Attitude from the study of Samosa (2021); the Research Competence and Motivation Survey Questionnaire from Alcazaren et al. (2021); the Survey on Perceived Support from Celesio (2020); the Survey Questionnaire on Teachers' Workload from Qureshi et al. (2012); and the Research Engagement Survey from Vergara and Sublay (2024), and was subjected to validity and reliability testing.

The survey questionnaire of the study comprised three (3) parts—the first aimed to determine the participants' demographic characteristics (age, sex, position type, educational attainment, number of training sessions attended, and length of service). The second part assessed the level of agreement among respondents with the determinants of engagement, including competence, attitude, motivation, perceived support, resources, and workload. The third part examined the level of research engagement. The survey results were tabulated in the data sheet and analyzed using a 5-point Likert scale being 5 is the highest and 1 being the lowest. Likewise, content validity was established through expert review by a researcher in research methodology and educational management. Pilot testing was carried out on 30 respondents in the institution which have the same characteristics of the study's locale to test the clarity of the items. All constructs (competence= 0.772, motivation = 0.785, perceived support = 0.897, resources = 0.849, workload = 0.855, research engagement = 0.937), showing high consistency, which was above 0.70, which is deemed reliable and an acceptable research instrument.

The survey was given in paper format. Participants were informed about the study's purpose, confidentiality, and that their participation was voluntary. The researchers strictly followed the Philippine Data Privacy Act, and all responses were anonymized, stored securely, and used only for research.

Furthermore, SPSS was used to analyze the data. The demographics of the respondents and the extent of their engagement in research were summarized using descriptive statistics (frequencies, means, and standard deviations) and Pearson's *r* correlation was used to evaluate the associations between the determinants and research engagement, while, T-test and ANOVA were used to compare differences in research engagement across demographic characteristics. Finally, multiple regression was used to identify the combination of determinants that best predicts engagement in research.

RESULTS AND DISCUSSION

This section presents the results, analysis, and interpretation of data gathered from the questionnaires distributed to the respondents. This includes interpreting the data findings to address the research questions of the study.

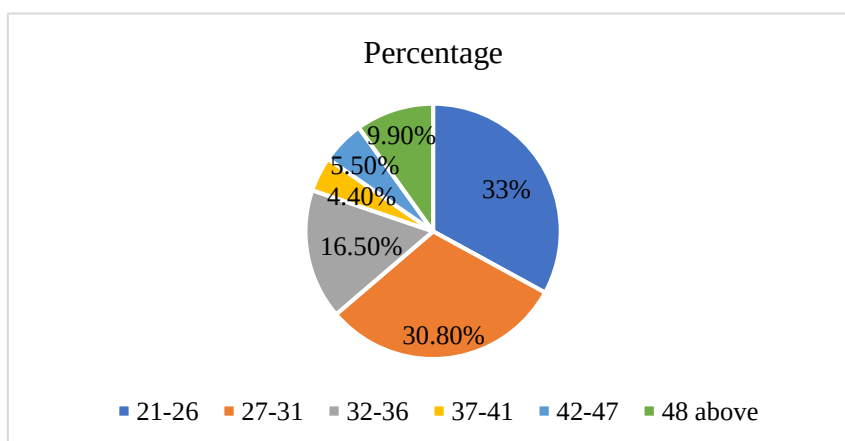


Figure 1.1: Distribution of Respondents in terms of Age

Determinants of Research Engagement Among Personnel of Private Higher Education Institution

Figure 1.1 presents the distribution of respondents according to age. The data shows that the majority of the proportion belongs to the 21-26 age range (29 or 33%), followed by those aged 27-31 (27 or 30.8%). 14 or 16.5% belong to the 32-36 age group, while smaller portions fall within the 37-41 age range (4 or 4.4%), the 42-47 age range (3 or 5.5%), and the 48 years and above age range (9 or 9.9%). The results show that most staff at the institution are young, with over 60% aged 31 or younger. This means that many employees are in the early stages of their academic careers. This stage has been shown to influence research participation, motivation, and productivity.

Accordingly, early career researchers often exhibit strong motivation to build skills yet encounter barriers like limited experience, heavy teaching loads, publishing difficulties, and insufficient mentoring (Jaeger, 2024). In contrast, the smaller proportion of older respondents, particularly those aged 48 and above, likely represents more experienced faculty members who may possess stronger research expertise and institutional knowledge. Jackevicius et al. (2024) asserts that older employees aged 48+ typically bring and lead mentoring, project direction, and research culture building. They guide juniors in grants, networks, and work-life balance. Moreover, it clearly shows that most of the personnel employed in the institution are a combination of both Generation Z and Millennials. Studies have shown that both generations prioritize flexibility, work-life balance, meaningful work, and supportive environments (Baum, 2020 & Waworuntu et al. 2022). Organizations are adapting to these preferences to attract and retain talents.

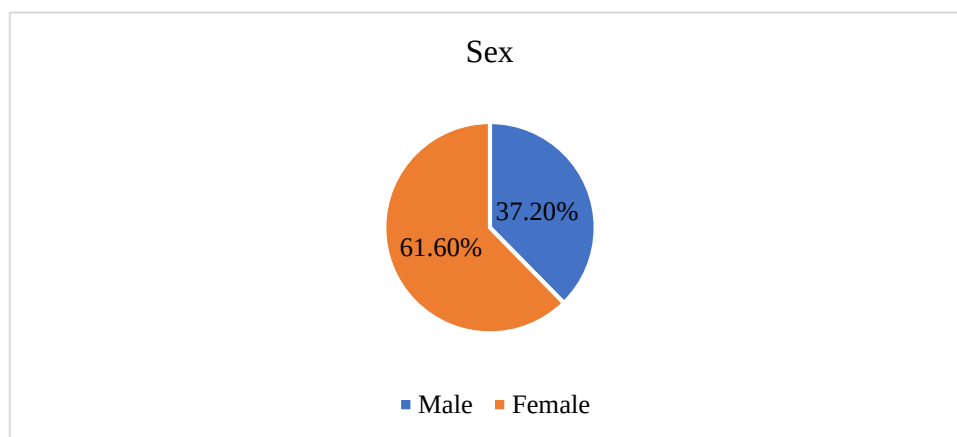


Figure 1.2: Distribution of Respondents According to Sex

Figure 1.2 showed how respondents are distributed by sex. Out of 86 respondents, 54 (61.6%) were female, and 32 (37.2%) were male. This means that most respondents at the private higher education institution were female.

The large proportion of women in this research represents trends in education where teaching is frequently perceived to be a female profession. Past studies attribute this to gender socialization, job stereotypes, and the assumption that teaching is better suited toward caregiving and people-focused skills commonly attributed to women (Jugovic et al., 2022; Mesquita and Lopes, 2018; Dekhtyar et al., 2017). Moreover, the gender distribution identified in this study supports the need to implement gender responsive research policies in the institution. Equitable access to research training, mentoring, and workload adjustments can also be used to counter possible differences in research participation.

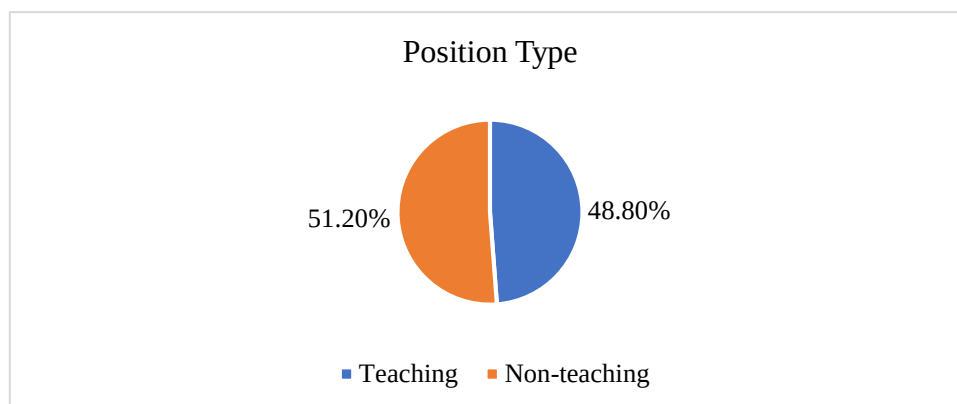


Figure 1.3: Distribution of Respondents According to Position Type

Figure 1.3 shows how the respondents are distributed in relation to position type. In the total number of 86 participants, there were 42 (48.8) teaching personnel and 44 (51.2) non-teaching personnel. The findings revealed that the teaching and non-teaching staff were almost equally represented in the study.

Determinants of Research Engagement Among Personnel of Private Higher Education Institution

Position type is a significant contextual factor in the interpretation of research engagement since there are commonly institutional expectations, role definitions, and access to opportunities related to research between teaching and non-teaching staff. The almost equal representation of the two groups in this research indicates that they are equally engaged in the academic and professional development activities of the institution including the research related activities. Normally, teaching staffs are supposed to have more active participation in research because they are the ones who have direct impacts on teaching, curriculum and academic outputs. The findings of this study however reveal that the non-teaching staff form a similar percentage of the total workforce of an institution that undergoes the research setting. This trend can be explained by the fact that in this institution regular research seminars and training session are conducted, which are open to the faculty and staff.

This finding can also be aligned with the previous research on the Philippine private higher education context, where it is reported that most institutions conduct research seminars and capacity-building programs to their teaching and non-teaching staff, although the extent, frequency, and the depth of the established programs differ significantly across colleges (Refugio et al., 2025; Velasco, 2022; Torrado et al., 2021; Lucero et al., 2021). The availability of common training opportunities can contribute to better competence and confidence in research by non-teaching employees, and this increases the range of potential research contributors in the institution. Another empirical evidence both in local and international context indicates that training in research in education institutions is either inadequately organized, inconsistently conducted, or poorly matched with the actual research task of participants (Dimmock, 2016; Repolito and Maloniso, 2025; Abella et al., 2024; Bilbao et al., 2024). These uncertainties may prevent research involvement, especially for non-teaching personnel who is not really expected to produce research outputs.

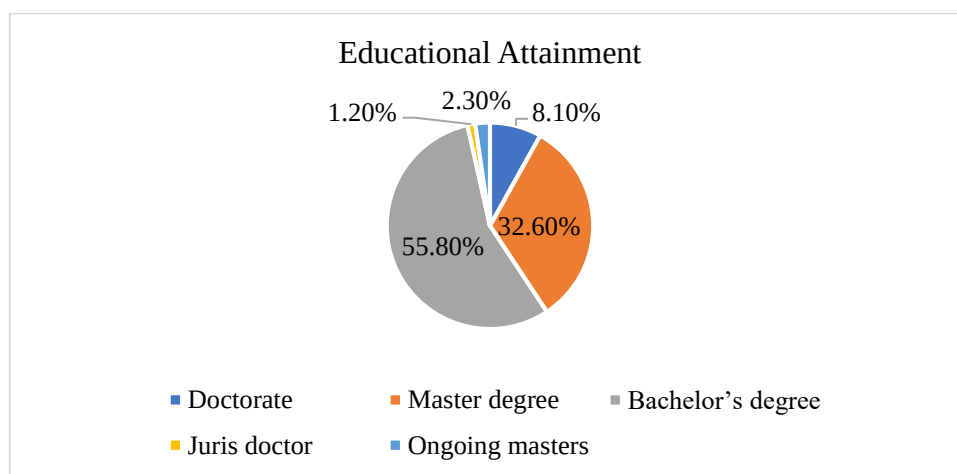


Figure 1.4: Distribution of Respondents According to Educational Attainment

Figure 1.4 presents the distribution of respondents according to educational attainment. The finding revealed that the majority held a bachelor's degree (48, 55.8%), followed by a master's degree (28, 32.6%), and 7 (8.1%) held a doctoral degree. A small percentage reported holding a doctor's degree 1 (1.2%), and the remaining 2 or 2.3% are those currently enrolled in a master's program.

Educational level is one of the most important aspects in the analysis of research engagement, since higher academic qualifications are often associated with greater exposure to research training, methodological competence, and academic expectations. The fact that a majority were at the stages of their academic or professional journey. Personnel with a baccalaureate degree might lack the formal instruction in advanced research procedures, scholarly writing, and publishing practices that would enhance their self-confidence and drive to participate in research projects. However, compared to other master's and doctoral degree holders with higher research skills and experience, this increases their chances of active research engagement. This aligns with the findings of Amenabar and Pontillas (2024), who found that the competencies and perceived challenges of research differ significantly among graduates at different educational levels, with the highest preparedness observed among advanced degree recipients.

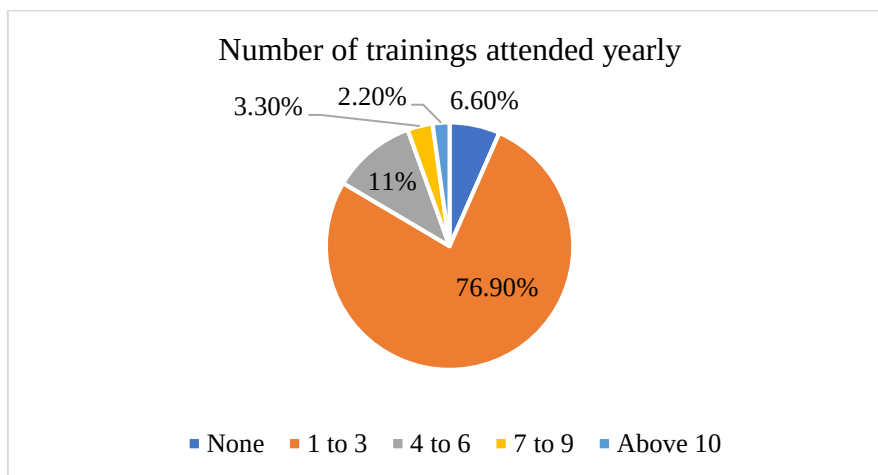


Figure 1.5: Distribution of Respondents According to number of trainings attended yearly.

Figure 1.5 represents the distribution of the respondents in terms of the number of research related trainings per year. Among the 86 respondents, most of them attended one to three trainings annually (65 or 76.9%). This preceded by those who received four to six trainings every year (10 or 11.0%). A lower percentage indicated that they attended seven to nine trainings (3 or 3.3%) or more than ten trainings a year (2 or 2.2%). However, six respondent (6.6%) reported that they had not taken any research related training within a year.

One of the main processes in improving the level of knowledge in research, methodological competence, and confidence in carrying out of scholarly works is participation in research related training programs. The result showed that the majority of the respondents participate in research capacity building activities at least once in a year, and there is a high-level focus on one to three trainings. This implies that the institution offers minimum research development opportunities, whereby the personnel can develop the basic research skills and be exposed to scholarly practices. Nevertheless, the proportion of respondent that participated in more frequent or advanced training is comparatively low, which points to a possible weakness in treating larger proportion of the research population. Although the occasional training can help illustrate the basic research awareness, prolonged engagement and productivity can be supported by the continuous and ever-increasing professional growth. The existence of respondents who have never undergone any type of research training only emphasizes the importance of overcoming barriers like limited access or workload issues or lack of motivation.

The empirical data of international research show that effectively organized and sustained professional development programs have a positive impact on professional competence, self-efficacy, and acquisition of skills (Bamrungsin and Khampirat, 2022; Redjeki et al., 2021; Yusnita et al., 2018). Despite these studies specifically addressing teaching and professional skills, most of the same effects can be anticipated in the research training scenario where the repeated exposure and the scaffold learning is vital in building the advanced research capacity.

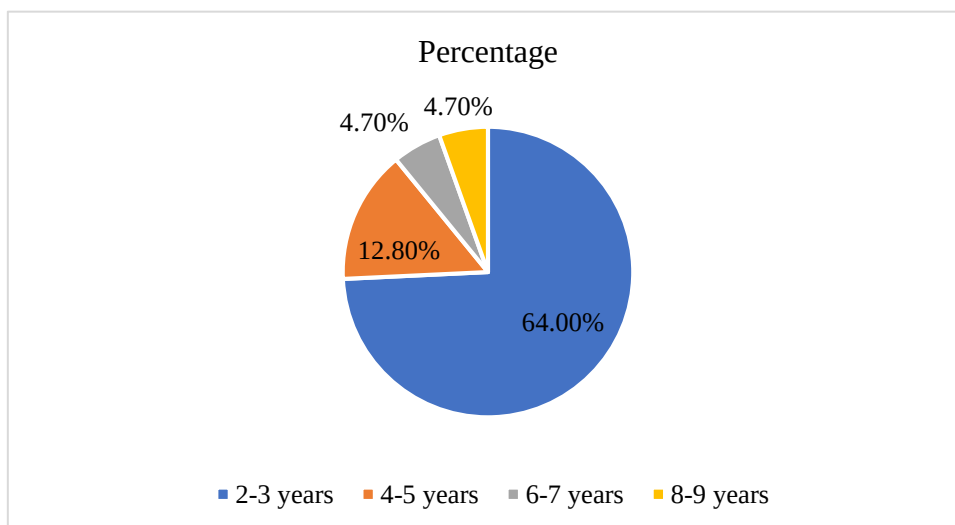


Figure 1.6: Distribution of the Respondents According to Length of Service

Determinants of Research Engagement Among Personnel of Private Higher Education Institution

Figure 1.6 showed the distribution of the respondents based on the length of service in the institution. Most of the respondents served a period ranging between two to three years (58 or 63.7%). These were preceded by four to five years of service (13 or 14.3%), six to seven years of service (12 or 13.2%). A lower percentage of respondents had a service period of between eight to nine years (4 or 4.4%).

The length of service is a significant contextual variable when analyzing research engagement because it indicates how familiar a certain person is with their institutions, the stability of their profession, and the opportunities that are available to them in relation to research. The fact that most of the respondents had two to three years of service indicates that the percentage of respondents is relatively new to the institution. This population group can be significant to the nature and extent of research participation.

The early service employees are usually concerned with adjusting to the institutional systems, completing teaching or administrative duties, and satisfying regularization demands. Such priorities can restrict time and interest in having long term research work. In contrast, the long-term staff members are normally more likely to have a better job security, institutional trust, and gained experience that can enable them to have a higher degree of research engagement and output.

This would be in line with the results of Sahudin et al. (2023) that length of service is a substantial predictor of research engagement, which has an effect on the quantity and quality of scholarly outputs. The more seasoned personnel might have more professional network, be more familiar with institutional research policies, as well as have more access to mentoring and research materials. However, simply having a long service record does not guarantee research engagement. Support from the institution, how work is assigned, and personal motivation all play important roles.

Table 1: Summary of the Determinants of Research Engagement

Determinant		Mean	SD	Descriptive Rating	Qualitative Interpretation
a.	Competence	3.94	0.75	Agree	High
b.	Attitude	3.95	0.86	Agree	High
c.	Motivation	3.75	0.82	Agree	High
d.	Perceived Support	3.84	0.85	Agree	High
e.	Resources	3.32	0.88	Neutral	Moderate
f.	Workload	3.19	0.92	Neutral	Moderate
Overall		3.67	0.05	Agree	High

Legend:	Scale	Range	Descriptive Rating	Qualitative Interpretation
	5	4.51-5.00	Strongly Agree	Very High
	4	3.51-4.50	Agree	High
	3	2.51-3.50	Neutral	Moderate
	2	1.51-2.50	Disagree	Low
	1	1.00-1.50	Strongly disagree	Very Low

The data demonstrates an overall high level of research engagement among respondents, as shown by its overall mean score of 3.67. Individual and intrinsic factors appear as the strongest drivers, led by a highly positive attitude (3.95) and strong self-perceived competence (3.94). These results imply that respondents keep both the foundational capability and the personal value required to participate in research activity. Moreover, high levels of perceived support (3.84) and Motivation (3.75) shows that organizational encouragement effectively reinforces individual drive, especially school leaders administrative support significantly enhances teachers research capability (Caingcoy, 2026).

In contrast, among the factors that obtained the lowest mean scores were resources (3.32) and workload (3.19). A lower mean score for resources implies that the respondents lack adequate access to resources, including scholarly data bases, research journals, mentoring, and other academic resources in increase their research. Research systems, infrastructure, and institutional resources at the school are being developed and enhanced, as the school only started to intensify its research engagement in 2023. The school is a developing research institution and is striving to improve its access to scholarly resources, such as journal subscriptions, licensed academic databases and other scholarly resources, which are essential to supporting the faculty and staff to gain access to a wider range of scholarly publications and references for research writing.

Meanwhile, respondents see the workload as manageable. This finding shows that workload is likely not significant barrier for their research activity at present. A manageable workload helps to make participation in various stages of the research process. According to Conway et al. (2024), positive attitudes toward research are strongly related to previous research training and

Determinants of Research Engagement Among Personnel of Private Higher Education Institution

experience in hands on research, mentor, encouragement, and the useful of research to their profession. However, issues that could be prevent teachers research engagement such as heavy workloads, inadequate supports, limited knowledge, lack of confidence, fear of rejection and insufficient research skills (Vergara et al. 2024)

Table 2: Level of research engagement

	Indicators	Mean	SD	Descriptive rating	Qualitative Interpretation
1	I have conducted research work.	3.65	1.020	Agree	Moderate
2	I have initiated collaborations with peers in conducting research work.	3.49	0.969	Neutral	Moderate
3	I have published research articles in academic journals.	2.83	1.219	Neutral	Moderate
4	I have made time to participate in research seminars and training sessions.	3.48	0.836	Neutral	Moderate
5	I have taken every opportunity to join discussions with peers and supervisors on research work.	3.45	0.903	Neutral	Moderate
6	I actively engage in research activities to support my professional growth and career advancement.	3.51	0.967	Agree	High
7	I integrate findings from my research into my teaching to improve instructional effectiveness.	3.42	1.023	Neutral	Moderate
8	I pursue research opportunities to strengthen my qualifications for promotion.	3.58	0.951	Neutral	Moderate
9	I find participating in research to be an engaging and meaningful part of my role as an educator.	3.67	0.987	Neutral	Moderate
	Overall	3.13	0.935	Neutral	Moderate

Legend:	Scale	Range	Descriptive Rating	Qualitative Interpretation
	5	4.51-5.00	Strongly Agree	Very High
	4	3.51-4.50	Agree	High
	3	2.51-3.50	Neutral	Moderate
	2	1.51-2.50	Disagree	Low
	1	1.00-1.50	Strongly disagree	Very Low

The result of table 2 show that the respondents had moderate level of research engagement with a mean score of 3.13. the result indicates that while the respondents are involved in different research related activities, engagement has not yet been sufficient to ensure a sustained, ongoing research productivity. Among indicators, the following obtained the highest mean score “*I find participating in research to be an engaging and meaningful part of my role as an educator* (3.67), “*I have conducted research work*” (3.65), and “*I actively engage in research activities to support my professional growth and career advancement*” (3.51), which shoes that they generally consider research is significant and their motivation to engage in research activity is largely attributed to the value of research in their professional development and career progression. This supported by Mills et al. (2025) who states that teacher research engagement is a critical aspect of school life and professional practice.

Moreover, construct that gained the lowest mean score was “*I have published research articles in academic journals*” (2.83). The result shows a discrepancy between research participation in research activities. This means that respondents might even be able to start and carry out research, but struggled to finish research into publishable academic articles. While the institution provides incentives, promotion points, and recognition to motivate employees to engage in research, publication rate is low. Which means that recognition alone may not motivate enough to maintain research productivity. This is consistent with the literature that emphasized the importance of incorporating the reward system with a comprehensive research support system (Btham, 2017; Al-Hija & Majdob, 2017).

Determinants of Research Engagement Among Personnel of Private Higher Education Institution

Table 3: Analysis of Variance (ANOVA) of the Respondent's Research Engagement when Grouped According to Demographic Profiles

Respondents Profile	F	P-value	Interpretation
Age	0.706	0.621	Not Significant
Educational Attainment	1.671	0.165	Not Significant
No. of Training Attended in a Year	2.753	0.033	Significant
Length of Service	1.016	0.404	Not Significant

The findings in the analysis of variance in Table 3 show that age, educational background, and years of service exhibited no significant differences in researcher engagement ($p > 0.05$). This is consistent with previous work in the sense that senior faculty members publish at rates comparable to junior colleagues and do not have a simple “rise and fall” career trajectory (Savage & Olejniczak, 2021).

Additionally, the number of training sessions attended per year is the only demographic variable that is significantly lower ($p = 0.033$). This indicates that teachers who take part in higher numbers of professional learning opportunities are more likely to engage in research activities. Importantly, this finding validates other recent studies that recognize training records—measures like publications and citations—as important determinants of the career expansion and productivity of scientists stressing skill acquisition processes and networking in elevating research (Rahmani et al., 2024). Moreover, a study by Fons-Rosen et al. (2023) suggests that productivity may fall after 60 years, but targeted training and development interventions can work to combat this through improved methodological skills and promoting cooperation.

Table 4: Independent Samples T-Test on the Level of Research Engagement Across Demographic Profiles.

Respondents Profile	t	P-value	Interpretation
Sex	1.025	0.308	Not Significant
Position Type	2.782	0.007	Significant

Presented in Table 4 is the t-test results which reveals that there is no difference in research engagement based on sex ($t = 1.025$, $p = 0.308$) this resonates with recent studies that found women and men to be similar in their research output after adjusting for other variables; for instance, a longitudinal study of German psychologists concluded that there were no gender differences in the attainment of tenured positions after adjusting for productivity and other variables (Lutter et al., 2022). In addition, research on faculty productivity during the COVID-19 pandemic found that women faced more barriers to scholarship, although the difference was more closely tied to role-related workload differences than to sex (Carpenter et al., 2021).

However, the type of academic position has a strong positive effect ($t = 2.782$, $p = 0.007$), which suggests that professors in research-intensive or higher rank positions engage more in research activities. This is consistent with the study by Allen et al (2023), which found that men, who are overrepresented in senior or research-intensive positions, spend significantly more time on research than women, who spend more time on teaching and service. Taken together, these findings suggest that institutional role, rather than gender, is the driver of differences in research engagement.

Table 5: Correlation Analysis Between the Determinants and Research Engagement

Independent variable	Pearson's r coefficient	p-value	Interpretation
Competence	0.571**	0.000	Significant
Attitude	0.480**	0.000	Significant
Motivation	0.343**	0.001	Significant
Perceived Support	0.017	0.876	Not Significant
Resources	0.486**	0.000	Significant
Workload	0.203	0.060	Not Significant

**** Correlation is significant at the 0.01 level (2-tailed).**

The correlation result presented in Table 5 indicates that research engagement is positively influenced by feelings of competence, positive attitudes, motivation, and the availability of resources, but it does not seem to be influenced by perceptions of support or workload in this particular study. There is a very positive Pearson r of 0.571 between competence and engagement ($p <$

Determinants of Research Engagement Among Personnel of Private Higher Education Institution

0.001) which indicates that feelings of capability in one's own right encourage the desire to undertake research endeavors, consistent with the view that autonomy-supportive environments, which promote feelings of competence, increase research productivity and happiness (Weinstein et al, 2023).

A correlation analysis of the study by Stupinsky et al. (2023) indicated that attitude also has a strong positive correlation ($r = 0.480$, $p < 0.001$), suggesting that a positive attitude towards research, as a valuable and enjoyable activity, is reflected in increased participation, consistent with studies that found positive affect and enjoyment as strong predictors of productivity. Additionally, motivation also has a positive correlation ($r = 0.343$, $p = 0.001$); autonomous motivation has been identified as a strong motivator for publication rates and citation impact, emphasizing the importance of intrinsic motivation over extrinsic forces (Stupnisky et al., 2023).

For Barsallo et al. (2025), access to resources ($r = 0.486$, $p < 0.001$) further reinforces engagement, consistent with studies that have highlighted technology, funding, and infrastructure as critical drivers of research activity. By contrast, perceived organizational support is effectively a non-starter ($r = 0.017$, $p = 0.876$), perhaps because support alone cannot mitigate a lack of skill or interest—a subtlety also observed in burnout studies, where support helps to alleviate stress but does not directly impact output (van der Ross et al, 2022). Finally, Cadeña-Povea et al (2025) reported that workload correlates modestly but non-significantly ($r = 0.203$, $p = 0.060$); while too much of a workload is known to undermine well-being, the point at which it suppresses research engagement may be variable, as systematic reviews have identified workload as a critical burnout driver but not a predictive outcome measure of productivity.

Table 6: Regression Analysis Showing the Predictors of Research Engagement

Model	Unstandardized coefficients		Standardized coefficients Beta	t	p
	B	SE			
(constant)	0.229	0.598		.384	0.702
Competence	0.333	0.146	0.270	2.280	0.025
Attitude	0.371	0.187	0.238	1.989	0.050
Motivation	0.026	0.127	0.022	0.206	0.838
Perceived Support	-0.241	0.109	-0.198	-.211	0.030
Resources	0.362	0.105	0.332	3.461	0.001
Workload	0.018	0.119	0.014	0.155	0.877

Table 6 regression analysis shows important insights into the variables that influence teacher performance or related outcomes, where competence, attitude, resources, and support are important predictors, and motivation and workload are not.

More specifically, teacher competence ($t = 2.280$, $p = 0.025$) is a positive predictor of the dependent variable, suggesting that teachers who perceive themselves as more competent and capable are more effective—a finding supported by a 2022 study in Indonesia that used multiple regression and path analysis to find that teacher competence directly affects performance (beta equivalent to 0.871 in simple regression terms) and is mediated by motivation and discipline. Teacher competence stands out as a strong positive predictor of performance; meta-analytic evidence reveals that teacher-related characteristics, in particular competence, are generally associated with improved teaching quality (Burger et al., 2026). A study on secondary school teachers in Indonesia also found that competence directly predicted performance and mediated the impact through motivation and discipline (Lopez-Martin et al., 2023).

Attitude ($t = 1.989$, $p = 0.050$) is also a borderline significant predictor, suggesting that a positive attitude towards teaching is a marginal predictor of improved performance, consistent with the empirical literature on teacher efficacy, where attitudes predict teacher engagement and job satisfaction in regression equations. Positive attitude is also associated with improved performance. Integrative literature reviews of teachers' psychological characteristics have identified attitudes and self-efficacy as important antecedents of engagement and job satisfaction, which in turn influence performance. The borderline significance is consistent with evidence that a positive teaching attitude slightly improves performance (Bardach et al., 2022).

Resources emerge as the most influential factor ($t = 3.461$, $p = 0.001$), suggesting that the availability of resources and equipment enables teachers to perform at their best, which has been supported in recent research such as a 2025 study that used regression to establish the relationship between teaching ability and flexibility (proxies for resources) and performance. Resources have the largest standardized effect size. In large-scale meta-analyses, the availability of resources, including teaching materials and flexibility in technology, explains the greatest variance in teaching quality among teacher variables (Burger et al., 2026). Recent regression analyses have supported that more resources predict better teaching (Lopez-Martin et al., 2023).

On the other hand, the perceived support has a negative influence ($t = -2.211$, $p = 0.030$), which can be attributed to the frustration of receiving inappropriate support, as evident in a 2025 PMC study that found the positive relationship between perceived

Determinants of Research Engagement Among Personnel of Private Higher Education Institution

organizational support and teacher performance to be indirect through self-efficacy and job satisfaction in a structural model similar to regression analysis, although direct discrepancies can be counterproductive. Perceived support has a negative coefficient, consistent with findings that inappropriate or mismatched support can impair performance. Research on organizational support has shown that its direct effect can be negative unless mediated by self-efficacy and job satisfaction (Bardach et al., 2022).

Non-significant predictors such as motivation ($t = 0.206$, $p = 0.838$) and workload ($t = 0.155$, $p = 0.877$) indicate that they are correlated but lack predictive capability in this study, as indicated by the findings of research in 2025, which indicated that motivation is related to work engagement but not always significantly directly related to teacher performance regression analysis, often mediated by other variables. Motivation fails to achieve significance, which is consistent with recent meta-analyses of autonomous and controlled teacher motivation, which have found modest or non-significant direct effects on performance outcomes (Gavin et al., 2020; Rothinam et al., 2024).

A study in 2025 on workload also indicated that it affects junior high school teachers but only weakly in a direct linear fashion. Workload also fails to predict in this analysis; although workload is related to burnout, direct linear relationships between workload and teaching quality are often weak or nonsignificant in contemporary studies (Lep et al., 2023; Ntumi, 2025).

These findings, therefore, emphasize the importance of focusing on competence development and support, as indicated by the post-2020 journals that promote multifaceted approaches to teacher success, such as combining self-efficacy (related to competence) and satisfaction in pathways to performance. This approach, with its constant close to zero ($p = 0.702$), emphasizes the context-specific nature of educational environments, encouraging interventions that improve skills and equipment and perceptions of support to improve performance.

CONCLUSION

The findings show that research involvement among faculty and staff of a private institution of higher learning in Bukidnon is moderate, with primary motivations from personal factors such as high research competence and attitude, and resource support, despite supportive policies from CHED. Although the respondents showed high methodological skills ($M=3.98$) and intrinsic motivation ($M=3.72$), there are discrepancies in resource utilization ($M=3.29$), publication output ($M=2.83$), and workload demand ($M=3.23$), which correspond with Self-Determination Theory's focus on fulfilling competence, autonomy, and relatedness needs. Demographics also provide further context: younger personnel (over 60% under 31 years old, 63.7% with 2-3 years of service) and those with bachelor's degrees (55.8%) have potential but are constrained by lack of training (76.9% attend 1-3 sessions per year), while non-teaching personnel participate at the same level as teaching staff due to shared seminars. Regression analysis verifies competence ($\beta=0.270$), attitude ($\beta=0.238$), and resources ($\beta=0.332$) as the primary predictors, with counterintuitive negative support ($\beta=-0.198$) indicating a mismatch in perceptions. Thus, these results emphasize the importance of a strong research culture at PCF, but also point to the need for holistic approaches to close the gap between individual capacities and institutional facilitators in resource-limited rural areas, which is part of the larger Philippine HEI issues, such as the low regional output.

RECOMMENDATIONS

To further promote research engagement, it is recommended that management focus on resource improvement through the creation of specific funds for online database access, publication costs, conference attendance, and other tools such as statistical software, aiming at the resource ratings that are neutral to facilitate the transition from conceptualization to sharing.

May develop multiple levels of intensive training sessions (for example, quarterly workshops with more than 1-3 annual sessions) designed for demographics such as early-generation Gen Z/Millennials, non-academic staff, and bachelor's degree holders, with a focus on advanced knowledge areas such as data analysis, grant proposal, and peer-reviewed publication to improve capacity.

Administrators may also improve support alignment by conducting annual perception audits, promoting recognition (e.g., expanding Bantugan Awards with cash prizes), and incorporating research performance data into School Improvement Plans with CHED-accredited monitoring. Lastly, forge inter-institutional linkages for rural HEIs, such as shared funding sources or co-authoring projects, to address isolated challenges and align with the country's vision of inclusive research capacity building.

REFERENCES

- 1) Abella, J., Cadorna, E., Taban, J., & Ramirez, L. (2024). An Assessment of Filipino Public School Teachers' Research Competence: A Basis for an Enhancement Professional Development Programme. *International Journal of Learning, Teaching and Educational Research*. <https://doi.org/10.26803/ijlter.23.12.14>.
- 2) Alcala-Garcia, N. B., et al. (2025). *Work environment and employee productivity in selected higher education institutions*. International Journal of Research in Social Sciences. <https://rsisinternational.org/journals/ijrsi/view/work-environment-and-employee-productivity-in-selected-higher-education-instit...>
- 3) Alimmudin, A. Muhyani R. & Sunarno, B. (2022). The effect of teacher competence, work discipline and work motivation on teacher performance. *International Journal of Social Science and Human Research* 5(6). <https://doi.org/10.47191/ijsshr/v5-i6-67>

Determinants of Research Engagement Among Personnel of Private Higher Education Institution

- 4) Alhija, F. M. N. A., & Majdob, A. (2017). Predictors of teacher educators' research productivity. *Australian Journal of Teacher Education (Online)*, 42(11), 34-51.
- 5) Allen, T.D., Miller, M.H., French, K.A. (2023). Faculty time expenditure across research, teaching, and service: do gender differences persist? *Occup Health Sci* 7, 805–818 <https://doi.org/10.1007/s41542-023-00156-w>
- 6) Amenabar, A., & Pontillas, P. (2024). Action Research Capabilities and Challenges: Basis for Research Enhancement Plan. *American Journal of Arts and Human Science*. <https://doi.org/10.54536/ajahs.v3i3.3086>.
- 7) Asfahani, A. M. (2024). Nurturing the scientific mind: resilience and job satisfaction among Saudi faculty. *Frontiers in Psychology*, 15, 1341888.
- 8) Ballesteros, M. A. A., Ninaquispe, J. C. M., Garc  a, F. S. M., Enriquez, B. G. A., Ramos-Farro  , E. V., Castillo, J. C. A., ... & Jordan, O. H. (2024). Determinants of Research Engagement: A Sociodemographic Analysis of First-Year University Students in Peru's Northern Macroregion. *Journal of Educational and Social Research*, 14.
- 9) Bamrungsin, P., & Khampirat, B. (2022). Improving Professional Skills of Pre-Service Teachers Using Online Training: Applying Work-Integrated Learning Approaches through a Quasi-Experimental Study. *Sustainability*. <https://doi.org/10.3390/su14074362>.
- 10) Bardach, L., Klassen, R. & Perry, N. (2022) Teachers' psychological characteristics: do they matter for teacher effectiveness, teachers' well-being, retention, and interpersonal relations? An integrative review. *Educational psychology review*. pp. 259-300. ISSN: 1040-726X
- 11) Barradas, J. A., Bernardo L. C. (2023). Assessment Of Attitude, Perceptions And Actual Engagement On Research: Basis For Training Design Development For San Pablo Colleges. *Malaysian Mental Health Journal (MMHJ)* 2(1) (2023) 29-35
- 12) Barsallo, G., Mendoza, E., Arboleda, M., Torreiro-Casal, M. & Ordo  ez, C. (2025). Academics' motivation to research: a study on public universities in Panama. *Front. Educ.* 9:1465824. <https://doi.org/10.3389/feduc.2024.1465824>
- 13) Bilbao, N., Bilbao, R., Mandaya, R., & Asaraji, J. (2024). Needs Assessment on Research Capability of Secondary School Teachers: Basis for an Extension Program. *EduLine: Journal of Education and Learning Innovation*. <https://doi.org/10.35877/454ri.eduline1884>.
- 14) Borres, A. B. H., & Paglinawan, J. L. (2025). Research capability and emotional confidence on learners' academic engagement in science. *International Journal of Research and Innovation in Social Science*, 8(12), 768-774.
- 15) Botham, KA(2017) An analysis of the factors that affect engagement of Higher Education teachers with an institutional professional development scheme. *Innovations in Education and Teaching International*, 55 (2). pp. 176-189. ISSN 1470-3297
- 16) B  rger, N., Engelmann, K., Schultze, L., Schl  melcher, M. & Wecker, C. (2026). The role of teacher characteristics for instructional quality: A meta-analysis. *Learning and Individual Differences*, 127. <https://doi.org/10.1016/j.lindif.2025.102802>
- 17) Cadena-Povea, H., Hern  ndez-Mart  nez, M., Bastidas-Amador, G., & Torres-Andrade, H. (2025). What pushes university professors to burnout? A systematic review of sociodemographic and psychosocial determinants. *International Journal of Environmental Research and Public Health*, 22(8), 1214. <https://doi.org/10.3390/ijerph22081214>
- 18) Carpenter, M., Cotter, D. & Berheide, C. (2021). "I have no time for anything:" differences in faculty research productivity during the covid-19 pandemic. *ADVANCE Journal*, 2. <https://doi.org/10.5399/osu/ADVJRNL.2.3.3>.
- 19) Chen, Y. S., Liao, K. C., & Yau, S. Y. (2025). From hesitation to participation: a narrative review of facilitators and barriers for healthcare professionals' engagement in medical education research. *BMC Medical Education*, 25(1), 302.
- 20) Dailo, R. (2024). School Head's Support System: Catalyst for Teacher's Research Initiatives and Competencies. *International Journal of Research Publications*. <https://doi.org/10.47119/ijrp1001481520246453>.
- 21) Dimmock, C. (2016). Conceptualising the research–practice–professional development nexus: mobilising schools as 'research-engaged' professional learning communities. *Professional Development in Education*, 42, 36 – 53. <https://doi.org/10.1080/19415257.2014.963884>.
- 22) Flores, J. (2024). Unveiling factors influencing research hesitancy and limited research engagement among Filipino beginning teachers. *New Trends in Qualitative Research*. <https://doi.org/10.36367/ntqr.20.4.2024.e1048>
- 23) Fons-Rosen, C., Gaule, P., & Hrendash, T. (2023). Why has science become an old man's game? *IZA Discussion Paper*, 16365. <https://www.iza.org/publications/dp/16365/why-has-science-become-an-old-mans-game>
- 24) Gutierrez, K. (2024). Research engagement, attitudes, and competencies: basis for teachers' research development plan. *Asia Pacific Journal of Management and Sustainable Development*, 12 (2). <https://doi.org/10.70979/KBIG1650>
- 25) H. Rahmani, A. J. Olejniczak & G. R. Weckman. (2025). Age: age-gender effect on faculty career progression in American universities. *IEEE Transactions on Big Data* 11(2), 606-619. <https://doi.org/10.1109/TBDATA.2024.3423726>
- 26) Jaeger, J. A. (2024). *Examining Barriers And Motivation Toward University STEM Faculty Research Success* (Doctoral dissertation, The University of North Dakota).

Determinants of Research Engagement Among Personnel of Private Higher Education Institution

- 27) Jackevicius, C. A., Le, J., Nazer, L., Hess, K., Wang, J., & Law, A. V. (2014). A formal mentorship program for faculty development. *American Journal of Pharmaceutical Education*, 78(5), 100.
- 28) Kowalczyk-Wałędzik, M., Ion, G., & Crespo, S. (2024). Towards a model for success: Exploring the motivations and factors driving research-engaged teachers. *International Journal of Educational Research*. <https://doi.org/10.1016/j.ijer.2024.102386>.
- 29) Lep Ž, Klemenčič Mirazchiyski E and Mirazchiyski PV (2023) The relative effect of job demands, resources, and personal resources on teaching quality and students' engagement during the COVID-19 pandemic. *Front. Psychol.* 14:1282775. doi: 10.3389/fpsyg.2023.1282775
- 30) Li L, Kanchanapoom K, Deeprasert J, Duan N, Qi Z. (2025). Unveiling the factors shaping teacher job performance: exploring the interplay of personality traits, perceived organizational support, self-efficacy, and job satisfaction. *BMC Psychol.* 7;13(1):14. doi: 10.1186/s40359-024-02324-1
- 31) Li, Y & Xu, L. (2024). Exploring the influence of teachers' motivation, self-efficacy, and institutional support on their research engagement: A study of Chinese university EFL teachers. *System*, 121 (103272). <https://doi.org/10.1016/j.system.2024.103272>
- 32) López-Martín, E., Belén Gutiérrez-de-Rozas, B., González-Benito, A. & Expósito-Casas, E. (2023). Why do teachers matter? A meta-analytic review of how teacher characteristics and competencies affect students' academic achievement. *International Journal of Educational Research*, 120. <https://doi.org/10.1016/j.ijer.2023.102199>.
- 33) Lutter, M., Habicht, I. & Schröder, M. (2022). Gender differences in the determinants of becoming a professor in Germany. An event history analysis of academic psychologists from 1980 to 2019. *Research Policy*, 51(6). <https://doi.org/10.1016/j.respol.2022.104506>
- 34) Moreno-Martínez, M., & Sánchez-Martínez, I. (2025). The Associated Factors of Work Engagement, Work Overload, Work Satisfaction, and Emotional Exhaustion and Their Effect on Healthcare Workers: A Cross-Sectional Study. *Healthcare*, 13(2), 162. <https://doi.org/10.3390/healthcare13020162>
- 35) Nair, N. K., Vidhya, N., Mingate, M. D., & Vijayakumar, P. R. A. (2019). Comparison of different classes of oral antidiabetic drugs in combination with metformin on cognitive functions. *Int J Pharm Sci Res*, 10(7), 3455-3460.
- 36) Ntumi, S. (2025). From stress to strategy: a moderated mediation model of teacher workload, burnout, and wellbeing, highlighting the role of assessment competency in promoting teachers' health and wellbeing. Research Square. <https://doi.org/10.21203/rs.3.rs-6794493/v1>
- 37) Phuong, B. H., Chi, D. T. P., Quang, D. M., Quang, B. N., & Dieu, B. T. T. (2022). Factors Influencing Research Productivity among the Academic Staff: A Case Study at the University of Social Sciences and Humanities, Vietnam. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 14(3).
- 38) Piran, M. J., & Tran, N. H. (2024). Enhancing research methodology and academic publishing: A structured framework for quality and integrity. *arXiv preprint arXiv:2412.05683*.
- 39) Postholm, M. (2018). Teachers' professional development in school: A review study. *Cogent Education*, 5. <https://doi.org/10.1080/2331186x.2018.1522781>.
- 40) Redjeki, H., S., & S. (2021). Education and Training Technology Increases Teacher Competence. *Journal of Physics: Conference Series*, 1823. <https://doi.org/10.1088/1742-6596/1823/1/012082>.
- 41) Repolito, M., & Malonisio, M. (2025). Research writing capabilities of master teachers: Basis for capability enhancement plan. *International Journal of Educational Management & Development Studies*. <https://doi.org/10.53378/ijemds.353251>.
- 42) Rockinson-Szapkiw, A., Spaulding, L. S., & Lunde, R. (2017). Women in distance doctoral programs: How they negotiate their identities as mothers, professionals, and academics in order to persist. *International Journal of Doctoral Studies*, 12, 49.
- 43) Rothinam, N., Samikkanu Jabamoney Ishak Samuel & Ramachandran Vengasalem & Sivabala Naidu. (2024). Systematic literature review on factors influencing teacher motivation. *Edelweiss Applied Science and Technology, Learning Gate*, 8(5), 2261-2281. <https://ideas.repec.org/a/ajp/edwast/v8y2024i5p2261-2281id1981.html>
- 44) Sahudin, Z., Mustaffa, A. H., Abdullah, H., Eko Pramono, S., Wijaya, A., & Melati, I. S. (2023). Determinants of academic research productivity in Malaysia: an integration of theory of planned behaviour and social capital theory. *Asian Journal of University Education (AJUE)*, 19(3), 486-505.
- 45) Savage, W.E., Olejniczak, A.J. Do senior faculty members produce fewer research publications than their younger colleagues? Evidence from Ph.D. granting institutions in the United States. *Scientometrics* 126, 4659–4686 (2021). <https://doi.org/10.1007/s11192-021-03957-4>
- 46) Slemp, G., Field, J. & Cho, A. (2020). A meta-analysis of autonomous and controlled forms of teacher motivation. *Journal of Vocational Behavior*, 121. <https://doi.org/10.1016/j.jvb.2020.103459>.
- 47) Stupnisky, R.H., Larivière, V. & Hall, N. (2023). Predicting Research Productivity in STEM Faculty: The Role of Self-determined Motivation. *Res High Educ* 64, 598–621. <https://doi.org/10.1007/s11162-022-09718-3>

Determinants of Research Engagement Among Personnel of Private Higher Education Institution

- 48) Tarrayo, V. N. (2024). *Teacher's workload in relation to burnout and work performance*. eJournals.ph. <https://ejournals.ph/article.php?id=24803>
- 49) Ulla, M., Barrera, K., & Acompañado, M. (2017). Philippine Classroom Teachers as Researchers: Teachers' Perceptions, Motivations, and Challenges. *Australian Journal of Teacher Education*, 42, 52-64. <https://doi.org/10.14221/ajte.2017v42n11.4>.
- 50) Usita, M. (2022). Research Engagement: A Participatory Approach of Learning for Public School Teachers. *International Journal of Educational Research & Social Sciences*. <https://doi.org/10.51601/ijersc.v3i1.279>.
- 51) Yusnita, Y., Eriyanti, F., Engkizar, E., Anwar, F., Putri, N., Arifin, Z., & Syafril, S. (2018). The Effect of Professional Education and Training for Teachers (PLPG) in Improving Pedagogic Competence and Teacher Performance. *Tadris: Jurnal Keguruan dan Ilmu Tarbiyah*. <https://doi.org/10.24042/tadris.v3i2.2701>.
- 52) Van der Ross, M., Olckers, C. & Schaap, P. (2022). Engagement of academic staff amidst covid-19: the role of perceived organisational support, burnout risk, and lack of reciprocity as psychological conditions. *Frontiers of Psychology*. <https://doi.org/10.3389/fpsyg.2022.874599>
- 53) Wang, H., Sun, Y., Wang, W. (2025). Exploring the relationship between teachers' perceived workload, challenge-hindrance stress, and work engagement: a person-centered approach. *BMC Psychol* **13**, 201. <https://doi.org/10.1186/s40359-025-02537-y>
- 54) Weinstein, N., Haddock, G., Chubb, J., Wilsdon, J. & Manville, C. (2022). Supported or stressed while being assessed? How motivational climates in UK University workplaces promote or inhibit researcher well-being. *Higher Education Quarterly*. <https://doi.org/10.1111/hequ.12420>



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non-Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.