FACTORS INFLUENCING RESEARCH PRODUCTIVITY OF RIZAL TECHNOLOGICAL UNIVERSITY: INPUT TO RESEARCH CAPABILITY DEVELOPMENT PROGRAM

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Abstract

Research has been part of the trifocal functions of every teacher nowadays. Notwithstanding its professional benefits, it also help teachers in developing their full potentials as the outputs brings beneficial effects to the society. It is for this reason that this study has been undertaken to identify the different intrinsic and extrinsic factors that influence the research productivity of Rizal Technological University. Specifically, the study identifies the level of productivity/performance of the institution in terms of research undertaken and the number of unpublished and published researches. Also, it dealt with the identification of factors that significantly influence the research productivity/performance according to the factors cited. To put the study's purpose into realization and objectives into attainment, the mixed-method of research was utilized. While samples were selected through purposive sampling which main goal is to focus on the particular characteristics of a population that are of interest and will enable them to answer research questions? Multiple Regression Correlation was used to make predictions on the research productivity of the faculty members of the Rizal Technological University. The researchers considered the Intrinsic and Extrinsic factors as predictors in terms of research productivity. Findings suggest that the Intrinsic Factors (Faculty) such as knowledge, skills and Attitude/Interest were rated by the faculty respondents are at moderate extent that affects research productivity. Likewise, the prevalence of Extrinsic Factors like the Policies and Guidelines, Budget for Research, Benefits and Incentives, Infrastructure and Publication were also rated in moderate extent. This indicates that the research productivity of the faculty members can be associated with external and internal factors.

Keywords: Research Productivity, Research Capability, Development Program, Faculty Research, Institutional Research

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Introduction

Research as required by the Commission on Higher Education (CHED) in the Philippines is among the three primary functions of all Higher Education Institutions (HEIs) (Nuqui and Cruz, 2012). Thus, administrators need to have a holistic understanding of how research should become integrated in their academic functions towards collaborative and reflective interventions.

With the new typology mandated by CHED, particularly putting research as agent towards human and social development, research productivity among educational institutions has significantly become an important element. It is used as a criterion for university status, center of excellence, autonomous/deregulated status, institutional quality, and opening of graduate programs (CHED Memorandum Order No. 25, Series of 1998, Priority Research Areas). Therefore, universities and colleges that are serious in transforming themselves into research institutions have to look at the elements of research culture that contribute to research productivity (Clemeña & Acosta, 2008).

In 2009, a study by Wichian, Wongwanich, and Bowarnkitiwong found that research productivity was affected by direct correlation with the researchers' characteristics, research competence and institutional research-promoting characteristics. This implies that instructors who possess research skills and technique, funding, research management and research communication skills and networking and team-work would likely produce high research productivity. Since research activities or the popularity of research activities boost up university reputation (Idem, Berezi & Akuegwu, 2012), any Higher Education Institution must ensure that it has a well-defined research institutional program which serves as basis of developing its human resources to be ready and equipped with knowledge and skills to undergo research work (Alim & Diocolano, 2011).

As a University aiming at improving quality education through research and development, the researchers as faculty members of Rizal Technological University would like to assess whether the faculty and institutional factors in writing research are predictors of Institution's research productivity. As the initial step, it is indispensable to describe their confidence in writing the research paper to be able to identify what specific section in research writing needs retooling or enhancement. Likewise, it is important to assess the support given by the organization toward research programs and activities in order to motivate faculty members to conduct research.

Conceptual Framework

Research as one of the primary functions of Higher Education Institution helps the institution establish its reputation and integrity in spearheading academic excellence. The capability of institution to produce quality researches is reflective of how much quality the faculty could give to its students. Thus, the need to continuously upgrade the wheels of an institution to seek new information and provide quality education anchors to the continuous improvement of the capability of its pool of experts to mine further advancement. The role

and purpose of capacity development, is an underlying agreement that capacity development is about change – making things better, adding value, developing new assets or talents. It is about how best to develop new capabilities (i.e. institutional assets or collective skills) and new competencies (i.e. individual skills and energy or new personal behaviors). These can take place at many different levels (micro, meso and macro) with different elements or target groups. Capacity is in essence about the ability to do something.

In addition, capacity development in this understanding is therefore also about closing the gap between the actual performance and the desired performance or according to Corpuz et. al. (2008), bridging the gap between theory and practice. This may concern individuals working in a situation where a particular performance is needed and where these individuals lack certain competencies (knowledge, skills, attitudes), which means that they do not yet perform according to expectations. A new policy development in an organization might, for example, require capacity development of the whole organization like in the case of the introduction of a gender policy where the organization as a whole and its individual staff members need to develop new knowledge, skills, and attitudes. A gender policy requires new systems, structures, and a change in culture to be able to realize the new policy.
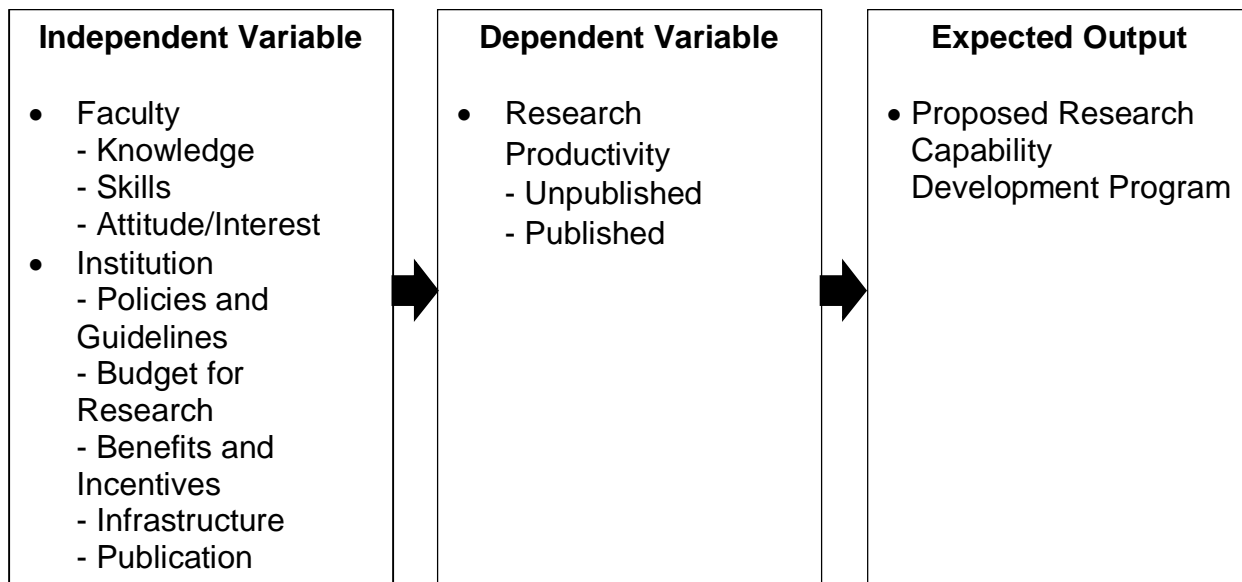
Independent Variable	Dependent Variable	Expected Output
• Faculty 　- Knowledge 　- Skills 　- Attitude/Interest • Institution 　- Policies and Guidelines 　- Budget for Research 　- Benefits and Incentives 　- Infrastructure 　- Publication	• Research Productivity 　- Unpublished 　- Published	• Proposed Research Capability Development Program

Figure 3: Research Paradigm

The research paradigm shows the possible factors as variables that influence or affect the Research Productivity of the Rizal Technological University leading to a proposed Research capability Development Program to continuously harness and equip faculty members of the institution towards attainment of its vision and mission.

Statements of the Problem

The main objective of this research is to study the different intrinsic and extrinsic factors that influence the research productivity of Rizal Technological University. Specifically, the study sought answers to the following questions:

1. What is the present status of the following factors in terms of research:

    1.1 Faculty
          1.1.1 Knowledge
          1.1.2 Skills
          1.1.3 Attitude/Interest
    1.2 Institution
          1.2.1 Policies and Guidelines
          1.2.2 Budget for Research
          1.2.3 Benefits and Incentives
          1.2.4 Infrastructure
          1.2.5 Publication?

2. What is the level of productivity/performance of the institution in terms of research undertaken;
    2.1 Number of unpublished researches; and
    2.2 Number of published researches?

3. Do the following factors significantly influence the research productivity/performance of Rizal Technological University in terms of:
    3.1 Unpublished Researches; and
    3.2 Published Researches?

Hypothesis

1. The faculty and institutional factors do significantly influence the research productivity/performance of Rizal Technological University in terms of Unpublished and Published Researches.

Significance of the Study

This study will be of great help to the following:

Faculty Members. The study will help faculty members through its output, Capability Development Program to enable them elevate their capability to perform research activities and undertakings better.

RTU Administrator. The study will help those who spearhead the institution to identify whether there is a need to uplift or maintain the kind of service that they render for their students. The results may serve as their guiding post to keep track of the weaknesses and strength of the institution in performing research and other relevant activities.

Students. This will benefit students to receive continuous advancement and refinement of knowledge, skills and quality of instruction given by the faculty members through research.

Researchers. This study may serve as reference for individuals who want to conduct relevant researches.

Scope and Delimitation of the Study

    This study is delimited to designing of capability development program for Faculty members of Rizal Technological University which focuses on the analyzed status of the research capability of the faculty members and research productivity of the institution. The study likewise, has given emphasis in the identification of possible controls or predictors such as intrinsic and extrinsic of the research productivity of the faculty members. Thus, the strategy developed was based from the assessed weaknesses, strengths and identified predictors of current research productivity of Rizal Technological University, Boni Avenue, Mandaluyong City.

Definition of Terms

Institutional Factors are variables set which are externally controlling the faculty members' capability to perform research activities and relevant undertakings. These factors are commonly uncontrollable by the researcher himself in his/her environment. They are also set as measure of research productivity of the institution and the faculty member as well.

Faculty Factors are variables set which are internally controlling the faculty members' capability to perform research activities and relevant undertakings. These factors are commonly controllable by the researcher within him. They are also set as measure of research productivity of the institution and the faculty member as well.

Research Capability Development Program as used in this study is a systematic and well organized framework and structure of collections of activities, programs, and trainings from the identified weakness, strength and predictors of the faculty members in terms of research. This is to set the enhancement of the grounds and cornerstones of their capabilities to process the holistic development of the faculty members of Rizal Technological University.

Research Productivity refers as the number of publications per researcher, distinguishing it from impact.

Published Researches are finished researches which are published in a refereed journal publication either local or international.

Unpublished Researches are finished researches which are not published in a refereed journal publication either local or international.

REVIEW OF RELATED LITERATURE AND STUDIES

Research Productivity

According to Musiige and Maassen (2007), the interpretations of what constitutes research productivity and how it can be measured varies between authors and universities. Perhaps the most widely- used definition is that provided by Cresswell (1985: 24), who describes research productivity as comprising research publications in scientific journals, academic books and conference proceedings; gathering and analyzing original evidence; obtaining competitive research grants; carrying out editorial duties; obtaining patents and licenses; and producing monographs and papers presented at professional meetings. While some universities measure research productivity in terms of a wide array of outputs (such as text books, book chapters, research reports, conference proceedings and graduate student supervision).

It can often be difficult to gauge researcher productivity and impact, but these measures of effectiveness are important for academic institutions and funding sources to consider in allocating limited scientific resources and funding. Much as in the lab, where it is important for the results to be repeatable, developing an algorithm or an impartial process to appraise individual faculty research performance over multiple disciplines can deliver valuable insights for long-term strategic planning. Unfortunately, the development of such evaluation practices remains at an embryonic stage. (Neill, et.al. 2015)

Research Productivity is highly utilized and widespread in universities or in the field of academe. Altbach (2014) said that for research-intensive universities and the academics working in them, the measurement of academic productivity is neither straightforward nor easy. Research universities focus mainly on research accomplishment: this is their core mission and what is key to the rankings and the achievement of high global status. Research productivity is easier to measure than other kinds of academic work – teaching has been mentioned, and community engagement and such important functions as university-industry linkages are also difficult to define and quantify.

Thus, research is not only the gold standard, but almost the only semi-reliable variable. He also added that measuring research productivity is problematical. The problems are clear, although usually ignored by those eager to 'measure' and 'reward' research productivity, but solutions are not. One size certainly does not fit all when it comes to assessing research productivity in particular and academic work in general. Measures necessarily vary by discipline. Some things are easier to measure than others – articles published in mainstream scientific journals are easier to evaluate than books or various kinds of online and 'open access' publications. That is assessing in the discipline of academe.

Productivity

Productivity for most of any academic system should be the measurement of effective teaching and a careful understanding of what students learn, as well as ensuring that students who enter higher education complete their studies (Altbach, 2014). There are different factors that influence and impact on Research Productivity. These factors affect the productivity in a way that they cover the entirety of the research. According to Musiige and Maassen (2004), these factors include individual factors, organizational factors, funding and research culture. The individual's role with respect to the research function cannot be overstated in the university setting. Various individual attributes have been found to be instrumental in stimulating the research behavior of academics. A number of these, including a passion for or interest in the discipline, ambitions, self-esteem, age, career rank, academic qualifications, and a desire to collaborate with others, are related to academics' level of intrinsic motivation. One of the factors is organizational factors. A number of studies have argued that organizational factors have an important influence on research productivity. Different institutional components ranging from financial incentives (allowances, salaries), to non- financial incentives (improved research management, modern infrastructure, promotions) have been employed by different universities to stimulate the research productivity of their academic staff members (Ubogu & Van den Heever 2014: 212). In the African context in particular, studies have examined the weak research management structure and the prevalence of a consultancy culture as impediments to research capacity in African universities. Drawing from the organizational factors highlighted above, this study focused on institutional incentives for research (financial and non- financial); the availability of doctoral mentorship programs; the level of institutional clarity on research; the use of refereed journals in research dissemination; and research leadership and management.

Approaches

Some conventional approaches are worth mentioning when it comes to Research Productivity. One is to appoint people who are or will become top researchers. This includes appointing proven performers, often at senior levels, and appointing promising new researchers, usually at junior levels. Choosing the best candidate for a post, or headhunting a research star, is an everyday occurrence around the world. Often it is not done in the most effective fashion, for example due to biases based on familiarity, sex, ethnicity and age. However, there's a more fundamental issue: recruiting better researchers can improve productivity for the hiring organization, but it removes those researchers from their previous workplaces. There is only a net improvement in output, overall, if the researchers are more productive in their new jobs. Sometimes, successful researchers are hired into administrative roles with a detrimental impact on their research (Martin, 2009). A well-known indicator of research is the number of publications in peer-reviewed journals that facilitate dissemination of knowledge among management scholars and practitioners. In fact, academic institutions are nowadays adjudged by their publications in reputed journals, and there has been an increasing proliferation of the rankings, listings, and productivity indicators of schools and universities in recent years (Sahoo, et.al. 2015).

Benefits of Researchers

Many researchers work long and hard because of the satisfaction of doing research, including developing and exercising high-level skills, discovering or developing knowledge, and being part of a socially worthwhile enterprise. For long-term productivity, intrinsic motivation is far more powerful than external rewards, because rewards have a declining impact: people adapt to new circumstances such as a higher salary, rank or prize, and soon treat them as the norm. Furthermore, external incentives can actually undermine intrinsic motivation (Martin, 2009).

Extracting and separating Productivity from Research and defining it solely will further make Research Productivity understood. Tangen (2002) stated that the concept of productivity, generally defined as the relation between output and input, has been available for over two centuries and applied in many different circumstances on various levels of aggregation in the economic system. It is argued that productivity is one of the basic variables governing economic production activities, perhaps the most important one.

If productivity is the relation between input and output, Research productivity revolves around quality and number of publications that a given scholar produces (Wieczorek, 2014).

Despite the increasing importance of publications and citations as a measure of research productivity, surprisingly little about the determinants of individual and organizational research productivity. Understanding productivity determinants can be of critical importance for administrators of universities and research laboratories, public or private. Being able to estimate expected productivity of researchers, taking into account individual characteristics, past history, and institutional variables, can help design policies to enhance productivity, or can plan for a balance in groups to compensate for the potential existence of age, cohort or other effects. It can be particularly relevant for policy makers in countries where most of the research system is financed with public funds, helping to design policies that enhance individual and institutional productivity (Gonzales-Brambila & Veloso, 2007).

Relation to Academe

Research productivity in academic institutions is reflected in the number and quality of articles published by the affiliated faculty. Research productivity evaluation has a significant impact on tenure decisions and promotions in general, salary raises, and mobility, especially in research-oriented schools. Given the importance of research productivity in academic institutions, a number of studies, in almost all major business disciplines, have addressed the issue. These studies can be classified into two broad categories. Studies in the first category evaluate research outlets in terms of their quality. The second category deals with studies that classify either individual researchers or departments in terms of their research productivity. Research productivity in these studies is usually de- fined as the number of articles published in a list of journals that usually emerges from the first category of studies mentioned above (Hadjinicola & Soteriou, 2005). The identification of factors promoting or impeding research productivity has been the focus of few studies in other disciplines. Most areas of management1 analyze research productivity in terms of either the reputation of an author or the quality of the journal in which an article was published (Sahoo, et.al. 2015).

One of the most important studies is Levin and Stephan (1991). They develop a model of scientific productivity that considers that scientists engage in research not only because of the future financial rewards associated with it, but also for the satisfaction of "solving the puzzle". Using longitudinal data of American scientists, they find that life cycles effects are present in five of the six areas of physics and earth sciences studied. In their model B, which considers straight publication counts, the solid state and condensed matter physicists increase their publication rate until reaching a peak of 2 papers per year at age 8 45, declining after that. However, there are important variations across areas; the atomic and molecular physicists reach a peak at age 39 and geophysicists at 59. Adjusting for co-authorship, journal quality, or both generally causes the age peak to be reduced by 1 to 5 years. It is important to mention that they do not find strong evidence that the latest educated are the most productive (Gonzales-Brambila & Veloso, 2007).

However, despite widespread concern with the subject of productivity in general, the subject of research productivity is one that has not received adequate attention. The subject of research productivity is especially important when one considers that research, particularly governmental and university-based research is part of the service economy that comprises 70% to 75% of all jobs in the United States (Offermann & Growing, 1990; Quinn, Doorley & Paquette, 1990; Roach, 1991).

While several articles have addressed the subject of productivity in a research environment, most fall short of suggesting a methodology for measuring it. For instance, Drucker (1974; 1991) emphasizes the need to raise the productivity of what he calls "knowledge workers" - persons in the service economy who utilize in a work setting the skills and ideas that they have learned in a systematic education. In a university environment, knowledge workers would include faculty, researchers, and support staff. However, while Drucker discusses the fact that increasing the productivity of knowledge workers requires measuring their output in a systematic manner, he does not propose a method for performing this measurement (Zamarripa, 1993).

In addition to Zamarripa (1993), he stated that what research administrators need is a better and more comprehensive way to report on the research productivity of their institutions. We need a way of ranking individuals and institutions that includes more than the amount of grant funds generated in a given year, and we need to include a full array of activities that would more accurately portray research productivity. The problem is defining research productivity in terms that are acceptable to a diverse constituency. Once we have reached general agreement on what constitutes research productivity, we can develop methods to measure our scientists' and researchers' productivity levels and understand how productive these individuals and their institutions are.

Limitations of Research Productivity

Research productivity has previously been judged along multiple criteria as well. There are two obvious shortcomings with such studies. First, research productivity judged from single indicator, when there are multiple overlapping indicators, might be misleading. Second, there is a growing trend of publishing an article with multiple authors (Sahoo, 2015). The observed differences in productivity behavior across areas could suggest that knowledge in Exact Sciences, Biology and Chemistry, and Health Sciences is more easily codified, making its transmission through published papers easier. Thus, researchers can 22 publish more, for more years, and from a younger age. Another possibility is that researchers in Social and Humanities, Agricultural Sciences and Biotechnology, and Engineering work in research topics that are mostly of local interest (regional or country level), and their results tend to be diffused in local journals that are not part of the ISI databases, or in other media. On the other hand, knowledge in Exact Sciences, Biology and Chemistry, and Health Sciences tends to be more universal and, therefore, more easily captured in our measure of productivity (Gonzales-Brambila & Veloso, 2007).

Research productivity has been defined as the relationship between the outputs generated by a system and the inputs provided to create those output (Lertputtrak, 2008). Taking a slightly wider view, research productivity can include research publication in professional journals and in conference proceedings, writing a book or chapter, gathering and analyzing original evidence, working with post-graduate students on dissertations and class projects, obtaining research grants, carrying out editorial duties, obtaining patents and licenses, writing monographs, developing experimental designs, producing works of an artistic or creative nature, engaging in public debates and commentaries (Creswell 1986). Several measures of faculty research productivity that have been mentioned in the literature relating to higher education will be discussed here, together with some of the issues that have caused wide concern. The most pervasive issue regarding the measurement of research productivity is the confusion of quantity of publications with quality of publications, either in the publication itself or the publication outlet (Lawrence & Green 1980).

Furthermore, whilst research productivity can be measured at the individual level, there is also a need to develop hierarchical measures at the sub-department, department and university levels. Discussion of the measurement of quantity and quality follows (Lertputtrak, 2008).

This literature review has presented a number of views on the meaning of research productivity, which is the relationship between the outputs generated by a system and the inputs provided to create those outputs. As discussed, while research productivity can be measured by both quantity and quality, the most frequently used method is to count research productivity based on a weighting system. The literature review indicates that there have been numerous studies investigating academic research productivity, and these have used a range of different theories. From reports of previous studies, it appears that several factors were found to be associated with research productivity. These factors can be classified into four main groupings which are demographic factors, environment factors, institutional factors and personal career development factors.

RESEARCH METHODOLOGY

Research Method Used

To put the study's purpose into realization and objectives into attainment, the mixed-method of research was utilized. Further, the mixed-approach was employed to address primary data gathered via survey and document retrieval techniques. The mixed-method as used in this study is the descriptive-correlational.

The descriptive method is clearly the most appropriate tactic for this study. Employing this method deals with collecting data to gather information about present existing conditions without analyzing relationship among variables and also explores the factors that cause a phenomenon (2011 Colombo Plan Staff College for Technician Education).

Document or content retrieval was also used in this study, since it dealt with retrieval of documents that cannot be provided by the respondents but by other reliable and valid primary sources.

In treating the collected data, quantitative approach is significantly helpful in this study in which the researcher attempted to clarify phenomena through carefully designed and controlled data collection and analysis. Correlational approach was also employed to find out if any relationship exists between variables, that is how variables varies with one another (Calderon & Gonzales, 2008). It is also designed to help in determining the extent to which variables are related to each other in the population of interest (Sevilla et al., 1984). Thus, such may be used for the purpose of prediction. As affirmed, "You use measures of correlation to determine the magnitude and direction of the relationships. A high magnitude of correlation (revealed by the correlation coefficient) will show that a strong relationship exists between variables under study. However, a high correlation coefficient does not signify a cause and effect relationship." (CPSC, 1984).

Population Frame

The population of the Rizal Technological University has a total count of 315. However, not all the Faculty members met the qualification to be respondent and subject of the study because some of them are still taking the subject their master's degree and some faculty members have not published any research yet. Hence, the researcher used sampling technique to select the qualified faculty member respondents.

Sampling Technique

The researcher used purposive sampling which main goal is to focus on the particular characteristics of a population that are of interest and will enable them to answer research questions very well. The sample being studied is not representative of the population, but for researchers pursuing qualitative or mixed methods research designs, this is not considered to be a weakness. Rather, it is a choice, the purpose of which varies depending on the type of purposing sampling technique that is used (http://dissertation.laerd.com/purposive-sampling.php). Below is the table showing the number of qualified pre-service teachers to answer the questionnaire.

Table 1
Frequency and Percentage Distribution of the RTU Faculty Member with respect to their college origin

College	Frequency	Percentage
Education	45	23.81
Arts and Sciences	36	19.05
Engineering and Industrial Technology	60	31.75
Business and Entrepreneurial Technology	48	25.39
Total	**189**	**100%**

As gleaned from the table above, majority of the faculty members were from College of Engineering and Industrial Technology with frequency count of 60 and representing the 31.75 percent of the total sample while the least respondents were from the College of Arts and Sciences with frequency count of 36 representing the 19.05 percent of the total sample size.

Description of the Respondents

The study's focus group was composed of Faculty members of Rizal Technological University situated at Barangay Malamig, Boni Avenue, Mandaluyong City. Consequently, the Faculty Members represent the different colleges of the university namely: College of Education, College of Arts and Sciences, College of Engineering and Industrial Technology, and College of Business and Entrepreneurial Technology. The respondents are faculty members who have already conducted researches either published or not.

Instrument Used

In order to develop a research capability development program, a determination of faculty members and institutional capability was made. Prior to the said activity, the researchers have conducted a survey among the faculty members of RTU who have already conducted research. The researchers used the researcher-made questionnaire to assess the Intrinsic factors like faculty members' acquired knowledge, skills and attitude/interest in research, and Extrinsic factors like Policies and Guidelines, Budget for Research, Benefits and Incentives, Infrastructure, and Publication.

Validation of Instruments

　　　　The study has undergone the expert and content validation to ensure that general and important details are given attention. The response validity and reliability of the researcher-made questionnaire was thoroughly check and determined to continuously improve the questionnaire before the final administration of the questionnaire.

Data Gathering Procedure

　　　　The researcher has administered the questionnaire in four different colleges. A letter of request for survey to the faculty members was made and given during the survey activity. A total of 189 sets of questionnaires were distributed to the faculty members.

Statistical Treatment and Analysis

　　　　The following statistical tools were used in the analysis, presentation, and interpretation of data.

Frequency was used in counting of the gathered demographic data.

Percentage was used to determine the relative distribution of the categorical responses and frequency of gathered data.

Weighted Mean was used as a numerical index denoting the level of prevalence of the Intrinsic and Extrinsic factors influencing research productivity of the Rizal Technological University.

Multiple Regression Correlation was used to make predictions of the productivity of the faculty members of the Rizal Technological University. The researchers considered the Intrinsic and Extrinsic factors as predictors.

Likert Scale in 5 point level arbitrary range was used and its corresponding verbal interpretation to describe the status of I. For the purpose of providing qualitative description of the computed values and results the following scales for interpretation were used:

Range		*Verbal Interpretation*
1.00	1.80	None at all
1.81	2.60	Little Extent
2.61	3.40	Moderate Extent
3.41	4.20	Great Extent
4.21	5.00	Very Great Extent

　　　　A statistical package/program for social science was used to assist the researchers in computation of the data.

RESULTS AND DISCUSSIONS

Problem No. 1:
What is the present status of the following factors in terms of research:
1.1 Faculty
     1.1.1 Knowledge

Table 2

Faculty Members' Knowledge towards Research

Statement	Mean	Std. Deviation	Verbal Interpretation
1. Conduct research in his/her discipline and other related areas.	3.10	0.98	Moderate Extent
2. Different strategies/techniques in problem identification and analysis.	3.02	0.93	Moderate Extent
3. Different types of variables.	3.09	0.99	Moderate Extent
4. Different research approaches, methods, design and techniques.	3.08	0.99	Moderate Extent
5. Different data gathering procedures.	3.08	1.05	Moderate Extent
6. Different statistical tools/formulas.	2.94	1.02	Moderate Extent
7. Different styles/ways of presenting the analyzed data.	3.00	1.00	Moderate Extent
8. Proper citation of sources	3.08	1.06	Moderate Extent
9. Interpretation of data	3.09	1.08	Moderate Extent
10. Presentation and analysis of data	2.38	0.78	Little Extent
Overall Mean	**2.98**	**0.99**	**Moderate Extent**

Table 2 shows the mean rating of faculty knowledge towards research. As depicted in the table, statement "Conduct research in his/her discipline and other related areas." was rated highest with mean value of 3.10 followed by statements indicating knowledge about "Different types of variables." and "Interpretation of data" with same mean rating of 3.09. While statements indicating knowledge in "Different data gathering procedures.", "Proper citation of sources" and "Different research approaches, methods, designs and techniques." rated with same mean value of 3.08 statement "Different strategies/techniques in problem identification and analysis." follows with 3.02 mean value. Faculty members are knowledgeable in the "Different styles/ways of presenting the analysed data." with 3.00 mean value. Likewise, in the "Different statistical tools/formulas." With 2.94 mean rating. All statements were verbally interpreted as "Moderate Extent" except the last statement "Presentation and analysis of data." With 2.38 mean value and verbal interpretation of "Little Extent". This means that faculty members had been struggling in analyzing the data that they have whenever research is being conducted. This is evident in terms of the research being produced by majority of the faculty researchers wherein it is mainly composed of groups having two or more members in a research.

In totality, the faculty knowledge towards research obtained an overall mean rating of 2.98 and verbally interpreted as "Moderate Extent." These results could be related to the research made by Gonzales-Brambila & Veloso, 2007, which stressed that understanding productivity determinants can be of critical importance for administrators of universities and research laboratories, public or private. Being able to estimate expected productivity of researchers, taking

into account individual characteristics, past history, and institutional variables, can help design policies to enhance productivity, or can plan for a balance in groups to compensate for the potential existence of age, cohort or other effects. It can be particularly relevant for policy makers in countries where most of the research system is financed with public funds, helping to design policies that enhance individual and institutional productivity.

1.1.2. Skills

Table 3

Faculty Members' Skills towards Research

Statement	Mean	Std. Deviation	Verbal Interpretation
1. Construct sound statements of the problem which are free from logical errors.	3.05	0.95	Moderate Extent
2. Formulate assumption and hypothesis.	2.92	0.94	Moderate Extent
3. Select appropriate research design, methods, approaches and techniques.	2.85	0.99	Moderate Extent
4. Get relevant literature/studies to support the present study.	2.95	0.97	Moderate Extent
5. Develop a research survey questionnaire.	2.98	0.97	Moderate Extent
6. Collect data using different procedures.	2.85	1.02	Moderate Extent
7. Apply and perform statistical computation either manually or using statistical packages/programs.	2.77	0.95	Moderate Extent
8. Drawing out of conclusions and generalizations.	3.10	0.97	Moderate Extent
9. Drawing out of recommendations.	3.05	0.99	Moderate Extent
10. Presentation of research outputs.	3.12	1.02	Moderate Extent
Overall Mean	**2.97**	**0.98**	**Moderate Extent**

Table 3 presents the mean rating of the faculty member skills towards research. As evident in the table, skill in "Presentation of research outputs."   was the highest rated statement with mean value of 3.12 succeeded by "Drawing out of conclusions and generalizations." as rated with 3.1 mean value. Statements "Construct sound statements of the problem which are free from logical errors." and "Drawing out of recommendations." Were rated with same mean value of 3.05 while statement "Develop a research survey questionnaire." was rated with 2.98 mean value. Also, faculty members rate the statement "Get relevant literature/studies to support the present study." with 2.95 mean value followed by statement "Formulate assumption and hypothesis." with 2.92 mean value. On the other hand, "Select appropriate research design, methods, approaches and techniques." and "Collect data using different procedures." were rated with 2.85 mean value. Statement "Apply and perform statistical computation either manually or using statistical packages/programs." has obtained 2.77 mean rating. All statements were verbally interpreted as "Moderate Extent".

Thus, the Faculty members' skills towards research obtained an overall mean of 2.97 and a verbal interpretation of "Moderate Extent". This means that necessary trainings must be continually

provided to the faculty members as this is an important factor in increasing the skills of the faculty members that may lead to the increase of their research productivity.

As mentioned by Musiige and Maassen (2004) in their study, there are factors that affect the research productivity of the faculty members and that include individual factors in including knowledge and skills, organizational factors, funding and research culture.

1.1.3. Attitude and Interest

Table 4

Faculty Members' Attitude and Interest towards Research

Statement	Mean	Std. Deviation	Verbal Interpretation
1. Possess positive outlook towards conducting research.	3.41	0.96	Moderate Extent
2. Schedule research and related activities thrice or twice a week.	3.26	0.93	Moderate Extent
3. Conduct research and related activities thrice or twice a week.	3.37	0.93	Moderate Extent
4. Find satisfaction after the conduct of the study.	3.31	0.91	Moderate Extent
5. Enjoy every time each research has been published.	3.29	0.95	Moderate Extent
6. Believe that research/conducting research helps improve professional reputation.	3.24	0.94	Moderate Extent
7. Believe that research/conducting research further develop to be better academician/teacher.	3.27	0.93	Moderate Extent
8. Encourage others to conduct research and collaborate with other researchers.	3.23	0.90	Moderate Extent
Overall Mean	**3.30**	**0.93**	**Moderate Extent**

Table 4 shows the mean rating of the Faculty members' attitude and interest towards research. As shown in the table faculty members gave the statement "Possess positive outlook towards conducting research." the highest mean rating of 3.41 followed by the statement "Conduct research and related activities thrice or twice a week." with mean rating of 3.37. Statement "Find satisfaction after the conduct of the study." was given a mean rating of 3.31 followed by statement " Enjoy every time each research has been published." With mean rating of 3.29. Subsequently, statement "Believe that research/conducting research further develop to be better academician/teacher." was rated with 3.27 mean value and "Schedule research and related activities thrice or twice a week." with 3.26 mean value. While statement "Believe that research/conducting research helps improve professional reputation." was rated with 3.24 mean value, statement "Encourage others to conduct research and collaborate with other researchers." Obtained a rating of 3.23 mean value. Thus, all statement were verbally interpreted as "Moderate Extent".

Overall, the faculty members' Attitude and Interest towards research has obtained an overall mean of 3.30 with a verbal interpretation of "Moderate Extent. This may be due to the number of teaching loads being given to the faculty members wherein they are being paid higher

rather than conducting a research where it must be first published in order to have a greater incentive. This confirms with the study made by Ubogu & Van den Heever 2014: 212 which states that a number of studies have argued that organizational factors have an important influence on research productivity. Different institutional components ranging from financial incentives (allowances, salaries), to non- financial incentives (improved research management, modern infrastructure, promotions) have been employed by different universities to stimulate the research productivity of their academic staff members

1.2. Institution

1.2.1. Policies and Guidelines

Table 5

Institution Policies and Guidelines in Research

Statement	Mean	Std. Deviation	Verbal Interpretation
1. The University has clear-cut policies and guidelines for the conduct of research and other related activities.	3.44	0.95	Great Extent
2. The University research policies and guidelines are explicitly stated and defined in research manual or other pertinent documents of the institution.	3.52	0.91	Great Extent
3. The University research policies and guidelines are focused towards the enhancement and achievement of the institution's research agenda.	3.50	0.94	Great Extent
4. The University utilizes research policies and guidelines towards research production.	3.41	0.97	Moderate Extent
5. Each policy is well delineated in scope and focus to address different types/kinds of researches and outputs.	3.20	0.98	Moderate Extent
6. There are mechanisms to check, monitor and evaluate the proposals, on-going researches, finished studies and outputs.	3.21	0.97	Moderate Extent
7. The University enforces sanctions/agreements for researchers who do not follow research policies.	3.15	0.98	Moderate Extent
8. The University regularly revisits its research policies and guidelines to continuously develop and adapt to the institution's research needs.	3.20	1.00	Moderate Extent
Overall Mean	**3.33**	**0.96**	**Moderate Extent**

Table 5 depicts the mean rating of institutions policies and guidelines in research. As depicted in the table "The University research policies and guidelines are explicitly stated and defined in research manual or other pertinent documents of the institution." is the highest rated statement with 3.52 mean value and verbally interpreted as "Great Extent" and as associated, statement "The University research policies and guidelines are focused towards the enhancement and achievement of the institution's research agenda." has obtained almost similar mean value of 3.5 and verbally interpreted as "Great Extent" followed by "The University has clear-cut policies and guidelines for the conduct of research and other related activities." Which obtained a mean rating of 3.44 and similar verbal interpretation of "Great Extent". Subsequently, statement "The University utilizes research policies and guidelines towards research production." was given a rating of 3.41 mean value. Followed by the statement "There are mechanisms to check, monitor and evaluate the proposals, on-going researches, finished studies and outputs." which gained a mean value of 3.21. Also, faculty members rated the statements "Each policy is well delineated in scope and focus to address different types/kinds of researches and outputs." and "The University regularly revisits its research policies and guidelines to continuously develop and adapt to the institution's research needs." which have obtained a similar mean values of 3.2. Statement "The University enforces sanctions/agreements for researchers who do not follow research policies." was rated with lowest mean value of 3.15. The rest of statements and indicators were verbally interpreted as "Moderate Extent"

In totality, the institutions policies and guidelines in research obtained an overall mean value of 3.33 and verbally interpreted as "Moderate Extent". This only means that the university research policies has a greater impact in the attainment in the research productivity of each of the faculty members. The climate in the working area is a very important drive to positive productivity. The positive atmosphere that faculty members get from immediate colleagues on their campus, scholars and lecturers can sustain and develop new ideas. Faculty members can obtain reinforcement from their colleagues to continue their work. Good colleagues are sources of ideas, criticism and also provide pressure to do good work in the form of strong motivation to succeed (Blackburn & Lawrence 1995).

1.2.2. Budget for Research

Table 6

Institution Budget for Research

Statement	Mean	Std. Deviation	Verbal Interpretation
1. The University has sufficient budget allocation for any research activity.	3.39	0.81	Moderate Extent
2. The University utilizes fund from the national government.	3.30	0.82	Moderate Extent
3. The University utilizes funds from local government (LGU).	3.13	0.84	Moderate Extent
4. The University utilizes funds from private resources.	3.01	0.81	Moderate Extent
5. The University utilizes funds from International agencies.	3.00	0.84	Moderate Extent
6. The University utilizes from profitable organization.	2.92	0.87	Moderate Extent
7. The university utilizes funds from non-profit organization.	1.81	0.77	No Extent at all
Overall Mean	**2.94**	**0.82**	**Moderate Extent**

Table 6 presents the mean rating of institution Budget in Research. AS gleaned on the table "The University has sufficient budget allocation for any research activity." was rated highest with 3.39 mean value succeeded by the statement "The University utilizes fund from the national government." with a mean value of 3.3. Next is the statements "The University utilizes funds from local government (LGU)." with a rating of 3.13 and "The University utilizes funds from private resources." with mean rating of   3.01. On the other hand, statements "The University utilizes funds from International agencies." and "The University utilizes from profitable organization." have obtained mean values of 3.00 and 2.92 respectively. All statements and indicators were verbally interpreted as "Moderate Extent" except to the statement "The University utilizes funds from non-profit organization." which was rated with 1.81 mean and verbally interpreted as "No Extent at all"

Thus the institution budget for research was rated with an overall mean value of 2.94 and verbally interpreted as "Moderate Extent". While budgetary requirement has a major impact in research productivity, faculty members are not fully aware if budget there are budget that is coming from any non-profit organization or the university was able to get a funding from non-profit organization. Based on the annual reports, only few faculty members were given a chance to utilize the budget from the university research funds and that majority were given to those who have published their researches in a refereed journals.

1.2.3. Benefits and Incentives;

Table 7

Institution Benefits and Incentives in Research

Statement	Mean	Std. Deviation	Verbal Interpretation
1. The University provides appropriate benefits and incentives to the researcher for an approved research undertaking.	3.19	1.06	Moderate Extent
2. The University gives professional recognition for completed research undertakings.	3.17	1.00	Moderate Extent
3. The university reduces teaching loads for faculty who is engaged in research.	1.29	0.51	No Extent at all
4. Royalties from income generating projects/outputs are provided.	1.84	0.85	Little Extent
5. The University gives additional honorarium to those who undertake research.	3.67	1.09	Great Extent
6. The University provides financial assistance to faculty researchers.	2.97	1.13	Moderate Extent
7. Benefits and incentives are implemented and given on time.	3.30	1.02	Moderate Extent
8. Benefits and Incentives are enough to encourage faculty to conduct research.	3.25	1.03	Moderate Extent
Overall Mean	**2.84**	**0.96**	**Moderate Extent**

Table 7 shows the mean rating of institution benefits and incentives in research. As depicted in the table, statement "The University gives additional honorarium to those who undertake research." was rated highest with mean value of 3.67 and verbally interpreted as "Great Extent" followed by indicator stating "Benefits and incentives are implemented and given on time." and "Benefits and Incentives are enough to encourage faculty to conduct research." have obtained the mean rating of 3.3 and 3.25 respectively with a "Moderate Extent" verbal interpretation. While statements indicating knowledge in "The University provides appropriate benefits and incentives to the researcher for an approved research undertaking.", "The University gives professional recognition for completed research undertakings." and "The University provides financial assistance to faculty researchers." were rated with mean values of 3.19, 3.17 and 2.97 respectively and verbally interpreted as "Moderate extent". On the other hand, while "Royalties from income generating projects/outputs are provided." with 1.84 mean value was verbally interpreted as "Little Extent" statement "The university reduces teaching loads for faculty who is engaged in research." with 1.29 mean rating showed a verbal interpretation of "No Extent at All.

Overall, the institution benefits and incentives in research has obtained an overall mean of 2.84 and verbally interpreted as "Moderate Extent". This implies that incentives are present in the university policies and are being enjoyed by the faculty members. However, there were few reports on the royalties from the income generating projects while research is being conducted regardless of the faculty members have a maximum teaching assignments. This is similar to the study made by Zhang (2014) in which he mentioned that heavy teaching load has been frequently mentioned by the interviewees as a major obstacle in being able to accommodate research and other demands being placed increasingly on academic staff. Most of his respondents from his study reported that they could not protect the periods of uninterrupted research time and that the time spent on research was approximately one-third of the time spent on teaching. The same findings were drawn by Yining et al.'s research (2006), where a number of journal articles published or accepted within the past 24 months were significantly related to the percentage of work time that the faculty member spent on research. Faculty may increase the percentage of work time devoted to research by working additional hours and dedicating those additional hours to research. Thus, increased publications may come purely from additional efforts. However, faculty members could also increase the percentage of their time devoted to research by decreasing their teaching and service hours and substituting these additional hours to research. Therefore, that a heavy teaching load most impeded their research productivity was also considered as a major issue for all university academic staff. This finding was supported by a number of other researchers. (Toews &Yazedjian, 2007, Bland et al., 2005, Ma & Runyon, 2004).

1.2.4. Infrastructure; and

Table 8

Institution Infrastructure in Research

Statement	Mean	Std. Deviation	Verbal Interpretation
1. Research and Development center/site/location is accessible.	3.23	1.02	Moderate Extent
2. Offices/Units/Programs under Research and Development center are available.	3.12	1.09	Moderate Extent
3. Laboratory, testing facilities are available and accessible.	1.98	0.67	Little Extent
4. Internet facilities and libraries are available and accessible.	1.82	0.70	Little Extent
5. Statistical Packages/Programs and other technological resources are available and accessible.	1.47	0.50	No Extent at all
6. Research technical personnel are available.	1.84	0.75	Little Extent
7. Trainings in research skills upgrading are provided.	3.04	1.11	Moderate Extent
Overall Mean	**2.36**	**0.83**	**Little Extent**

Table 8 presents the mean rating of institution infrastructure in research. As evident in the table, statement "Research and Development center/site/location is accessible." was the highest rated statement with mean value of 3.23 succeeded by "Offices/Units/Programs under Research and Development center are available." as rated with 3.12 mean value and both verbally interpreted as "Moderate Extent". Statement "Trainings in research skills upgrading are provided." follows with 3.04 mean rating and same verbal interpretation of "Moderate extent". Subsequently, statements "Laboratory, testing facilities are available and accessible.", "Research technical personnel are available." and "Internet facilities and libraries are available and accessible." were rated with 1.98, 184 and 1.82 mean values and same verbal interpretation of "Little Extent". Also, faculty members rate the statement "Statistical Packages/Programs and other technological resources are available and accessible." as the lowest with 1.47 mean value and verbally interpreted as "No Extent at All"

Thus, the Institution Infrastructure in research obtained an overall mean of 2.36 and a verbal interpretation of "Little Extent". This implies that research infrastructure is a key factor in research productivity and that there is a need to have a responsive and functional infrastructure to support the research needs of faculty members.

This finding is similar to the studies by Bland et al., (2002) which reported that the environmental features of the workplace are the most powerful productivity factors. The more that the environment facilitates productivity, the more productive the faculty member will be. Fogg (2006) surveyed 4,500 tenure-track faculty members and found that professors place a higher value on work-related climate and culture than on workload and compensation. Collegiality and mentoring by senior faculty members are an essential part of a productive academic culture. In this research, the participants who support this view at professor level are more than the participants at the other levels.

Research support (including research funding and library facilities) was also considered as an important research productivity factor. Availability of funds as one of the research support components is also identified as an important factor influencing research productivity. In particular, the study showed that some academics experience major restrictions in carrying out research due to the inadequacy of funding. These include being forced to undertake simpler, less challenging and more short-term projects; demoralization because of the need to use outdated equipment; and difficulties in retaining trained support staff. This view was supported by Santo et al., (2009) who indicated that the higher research funding at the division level, the higher the level of research productivity. The better library facilities, as another research support component, received the same focus in this research. The same result was also drawn by Hadjinicola & Soteriou's research (2005) which suggested better library facilities also promote the research productivity of researchers in terms of the number of articles and their quality. Their research also indicated that having high expectations for getting outside of their own division as part of the faculty members' support network resulted in more publications. This translates into a need for the faculty to become more active on regional and national levels, which can be accomplished by connecting new faculty members to colleagues in their discipline at the beginning of their careers. Therefore, the factors "faculty size and social network" are both regarded as driving forces behind research which is also evident in research study made by Borokhovich et al. (1995) that showed that as faculty size increases, both the total number of publication and per-faculty number of publication increase.

1.2.5. Publication.

Table 9

Institution Publication in Research

Statement	Mean	Std. Deviation	Verbal Interpretation
1. Completed research outputs are published in refereed international journals.	3.40	1.00	Moderate Extent
2. Completed research outputs are published in locally accredited refereed journals	3.27	1.02	Moderate Extent
3. Received awards from published researches in International community.	3.24	1.03	Moderate Extent
4. Received awards from published researches in local community.	3.25	1.01	Moderate Extent
5. Established linkages with local agencies through published researches.	2.76	1.04	Moderate Extent
6. Established linkages with foreign agencies through published researches.	2.69	1.11	Moderate Extent
7. Joined research with other local University faculty through published researches.	2.53	1.24	Little Extent
8. Joined research with foreign University faculty through published researches.	2.15	1.11	Little Extent
Overall Mean	**2.91**	**1.07**	**Moderate Extent**

Table 9 shows the mean rating of Institution Publication in research. As shown in the table faculty members gave the statement "Completed research outputs are published in refereed international journals." the highest mean rating of 3.4 followed by the statement "Completed research outputs are published in locally accredited refereed journals." with mean rating of 3.27 and both verbally interpreted as "Moderate Extent". Statement "Received awards from published researches in local community." was given a mean rating of 3.25 followed by the statement " Received awards from published researches in International community." with mean rating of 3.24 have obtained same verbal interpretation of "Moderate Extent". Subsequently, statements "Established linkages with local agencies through published researches." With 2.76 mean value and "Established linkages with foreign agencies through published researches." with 3.26 mean value have obtained the same verbal interpretation of "Moderate Extent. While statement "Joined research with other local University faculty through published researches." was rated with 2.53 mean value and verbally interpreted as "Little Extent", statement "Joined research with foreign University faculty through published researches." has obtained a rating of 2.15 mean value but with the verbal interpretation of "Little Extent.

Overall, the Institution Publication in research has obtained an overall mean of 2.91 with a verbal interpretation of "Moderate Extent".   This implies that few faculty researchers are collaborating in other universities either foreign or local in publishing their research outputs.

In the study made by Lertputtarak (2008), he concluded that in a higher education institutions, faculty members' research productivity that is produced each year and is publishable is not only criteria for academic promotion, but can also enhance a university's reputation and raise a university's rank. Whenever a university has higher prestige and recognition, the number of students can be shown to increase and the institution could receive a higher income for development.

Problem No. 2:
What is the productivity level of the institution in terms of research undertaken:
2.1. Number of Unpublished Researches; and

Table 10

Productivity level of the Institution in terms of Unpublished Researches

No. of Unpublished Researches	Frequency	Percentage	Mean	Std. Deviation	Verbal Interpretation
0-3	149	80.1			
4-6	26	14.0	1.26	.558	Very Low
7-9	11	5.9			
Total	**186**	**100.0**			

Table 10 show the productivity level of the institution in terms of unpublished researches. Unpublished researches ranges from 0-3 has the highest frequency count of 149 with a percentage of 80.1 followed by ranges 4-6 with frequency count of 26 and percentage of 14.0. The lowest count of frequency of 11 and percentage of 5.9 were on the unpublished researches ranges from 7-9.

Also, table shows the mean rating of productivity level of 1.26 and verbally interpreted as "Very Low". This can be attributed to the previous finding that there are few linkages that has been

established either local or international organizations that could cater articles or researches being produced by the faculty researchers.

2.2. Number of Published Researches?

Table 11

Productivity level of the Institution in terms of Published Researches

No. of Published Researches	Frequency	Percentage	Mean	Std. Deviation	Verbal Interpretation
0-3	167	89.8			
4-6	19	10.2	1.11	.311	Very Low
Total	**186**	**100.0**			

The productivity level of the institution in terms of published researches is depicted in table 11. As shown, published researches ranges from 0-3 has the highest frequency count of 167with a percentage of 89.8 followed by ranges 4-6 with a frequency count of 19 and percentage of 10.2.

Also, this table shows the mean rating of productivity level of 1.11 with verbal interpretation of "Very Low". This implies with the findings that there is little extent in terms of accessing internet and library facilities that play vital role in the research process up to publication. Also as revealed by the respondents, there were no trainings that were provided as far as publications of articles are concerned.

Problem No. 3:
Do the faculty and institutional variables significantly influence the research productivity/performance of Rizal Technological University in terms of the following:
3.1 Unpublished Researches; and

Table 12
Predictor of Research Productivity in terms of Unpublished Researches

Predictor	Standardized Beta Coefficient	t	Sig.
Infrastructure	0.144	1.974	0.05

Adjusted R^2 = 0.015
F Value   = 3.896
Sig.   = 0.05

Table 12 shows the regression analysis between the independent variable and research productivity in terms of unpublished researches. The F value is 3.896 which means that there is a strong evidence that the beta value is not equal to zero when the probability of observing a value greater than or equal to 3.896 is 0.01. One out of eight variables namely infrastructure implied

weak association to research productivity in terms of unpublished researches based on its beta value.

Thus, it also implied that infrastructure is significant predictor of institution research productivity in terms of unpublished researches. This means that infrastructure affects the research productivity of the faculty members.

3.2. Published Researches?

Table 13

Predictor of Research Productivity in terms of Published Researches

Predictor	Standardized Beta Coefficient	t	Sig.
Knowledge	0.167	2.304	0.022
Benefits and Incentives	0.156	2.155	0.032

Adjusted R^2 = 0.038
F Value   = 4.651
Sig.   = 0.011

Table 13 depicts the regression analysis between the independent variables and research productivity in terms of published researches. The F value is 4.651 which mean that there is strong evidence that the beta value is not equal to zero when the probability of observing a value greater than or equal to 4.651 is 0.01. Two out of eight variables namely knowledge, and benefits and incentives implied weak association to research productivity in terms of published researches based on their beta value.

Thus, it also implied that knowledge and Benefits and incentives are significant predictor of institution research productivity in terms of published researches. Factors that inhibited productivity included not being taught needed research knowledge and skills while in graduate school (Bensimon et al., 2000), conflicting priorities such as heavy amounts of teaching and service, and lack of organizational support. Other researchers (Buchheit, 2001; Cargle & Bublitz, 2004; Chow & Harrison,1998) have identified the following factors as influencing research productivity: 1, Self-efficacy; 2. Research support; 3.the allocation of working time to research activities; 4. Departmental Size ; and 5.Culture

SUMMARY OF FINDINGS

After data gathering and data analysis the following summary of findings are hereby presented in consonance with the research problems:

1. **Present status of the following factors in terms of research:**
   1.1. Faculty
   - **1.1.1. Knowledge.** The faculty members of Rizal Technological University rated their knowledge towards research as "Moderate Extent" obtaining the mean values ranges from 3.10 as the highest and 2.38 as the lowest.
   - **1.1.2. Skills.** The faculty members of Rizal Technological University rated their skills towards research as "Moderate Extent" obtaining the mean values ranges from 3.12 as the highest and 2.77 as the lowest.
   - **3.2.1 Attitude/Interest.** The faculty members of Rizal Technological University rated their Attitude and Interest towards research as "Moderate Extent" obtaining the mean values ranges from 3.41 as the highest and 3.23 as the lowest.

   1.2. Institution
   - **1.2.1. Policies and Guidelines.** The faculty members of Rizal Technological University rated the institution's policies and guidelines in research as "Moderate Extent" obtaining the mean values ranges from 3.52 as the highest and 2.15 as the lowest.
   - **1.2.2. Budget for Research.** The faculty members of Rizal Technological University rated the institution's budget for research as "Moderate Extent" obtaining the mean values ranges from 3.39 as the highest and 1.81 as the lowest.
   - **1.2.3. Benefits and Incentives.** The faculty members of Rizal Technological University rated the institution's benefits and incentives in research as "Moderate Extent" obtaining the mean values ranges from 3.67 as the highest and 1.29 as the lowest.
   - **1.2.4. Infrastructure.** The faculty members of Rizal Technological University rated the institution's infrastructure in research as "Little Extent" obtaining the mean values ranges from 3.23 as the highest and 1.47 as the lowest.
   - **1.2.5. Publication.** The faculty members of Rizal Technological University rated the institution's publication in research as "Moderate Extent" obtaining the mean values ranges from 3.4 as the highest and 2.15 as the lowest.

2. **Productivity level of the institution in terms of research undertaken;**
   - **2.1. Number of unpublished researches.** The Rizal Technological University has produced unpublished researches ranges from 1 to 9 and its productivity was rated "Very Low" with 1.26 mean value.
   - **2.2. Number of published researches.** The Rizal Technological University has produced published researches ranges from 1 to 6. Its productivity was rated "Very Low" at 1.11 mean value.

3. **Factors influencing the research productivity of Rizal Technological University in terms of the following:**
   - **3.1. Unpublished Researches.** The productivity level of Rizal Technological University in terms of unpublished researches increases by 3.896 for a unit increases in infrastructure. Thus, Infrastructure factor was found to be significant predictor of research productivity of Rizal Technological University.
   - **3.2. Published Research.** The productivity level of Rizal Technological University in terms of published researches increases by 0.067 for a unit increases in Faculty Member's knowledge. This also increases by 0.062 for a unit increase in Benefits and Incentives. Both were determined as significant predictors of research productivity of Rizal Technological University.

Hence, the hypothesis stating that the faculty and institutional factors do significantly influence the research productivity/performance of Rizal Technological University in terms of Unpublished and Published Researches is accepted.

Conclusions:
1. The status of the prevalence of the Intrinsic Factors (Faculty) indicators along knowledge, skills and Attitude/Interest were rated by the faculty respondents as Moderate Extent. Likewise, the prevalence of Extrinsic Factors (Institution) indicators along Policies and Guidelines, Budget for Research, Benefits and Incentives, Infrastructure and Publication were rated Moderate Extent.
2. The productivity level of the Rizal Technological University in terms of research undertaken, both unpublished and published researches was rated very low.
3. The Faculty members' knowledge, institutions infrastructure and benefits and incentives as factors were determined as significant predictors and that can influence the research productivity of Rizal Technological University as revealed by the beta value.

Recommendations:
1. The Rizal technological University Administrator should provide in an intervention plans and program to harness faculty members to engage in the different research activities and undertakings. Also, provide an inventory other than this research to assess the Institutional factors which are found needing attention and improvement.
2. In connection to the previous recommendation, Administrator should also look into consideration and prepare programs to improve research productivity level of the institution. Provide variety of opportunities to enable faculty members engage further in research.
3. A strategic capability development program must be made with highest consideration in the Faculty members' knowledge, institutions infrastructure and benefits and incentives as factors that affect and predict the research productivity level of the institution.

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