



CORRELATION OF PERSONAL AND INSTITUTIONAL FACTORS WITH RESEARCH PRODUCTIVITY AMONG UNIVERSITY TEACHERS

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Abstract

Purpose of the study: The purpose of the research was to explore the association of teachers' particular and university factors to enhance research production.

Methodology: The design of the research was correlational. It was descriptive and survey research. Teaching personnel of universities participated in this research. Teachers were selected from departments by stratified technique. The self-developed questionnaire related to variables was used for data collection. The relationship was explored by using Pearson r among variables of the study.

Main Findings: It was found that different components of institutional elements research procedure of departments, job and compensation, and assets and helping material have a poor, however positive correlation with research profitability of teaching personnel.

Applications of this study: The findings of the study are applicable in universities. The leadership may take steps for the improvement and promote research culture at a higher level.

Novelty/Originality of this study: Personal and institutional factors of research productivity were explored in this study. This study determines that how both types of elements are crucial and affect the research productivity of teachers.

Keywords: *Research Productivity, Sustainable Development, Job, Teachers, Personal, Institutional Research Factors.*

INTRODUCTION

Research is an energetic activity for teachers to perform better by putting efforts into the academic circle. They can develop skills and learn new things related to the field. It has new subjects and concerns; assembles data or information about issues and makes ends and proposes strong proposals and suggestions. The researchers exactly investigate data, separate data, explain data and affirm the real factors, look at changes in the oversights, and introduce fresh knowledge in the literature and market. Fresh knowledge is produced by establishing research work. It is a process to collect data from subjects in the field. Research is a recognizing desire to amass data, to check the data, and to take a gander at the data. It is an exact exertion to clarify the problematic, eccentric, and probing factors and issues ([Artes, et al., 2017](#); [Rashid, 2001](#)).

The role and importance of universities are more important and special in the 21st era in various zones and particularly in the research discipline. This time requests elevated expectations of the research quality in the universities. Teaching and research in a particular subject both are interrelated. Meanwhile, research improves the teaching abilities of the instructors and teaching standards. It is essential for the redesign of new data, empower the teachers to comprehend their particular area of research, to dissect their capacities and skills, look at also permit the academicians to understand their aptitudes, which is essential for incredible teaching in class and positive attitude towards research ([Cresswell, 2003](#); [Nasser-Abu Alhija & Majdob, 2017](#)).

The fundamental component is research profitability of teaching personnel and instructors of the advanced education system in poor and advanced societies. Research profitability of representatives and instructors implied the dedication of staff in the progress of fresh facts in public meetings everywhere ([Dundar & Levis, 1998](#)). The authentic contextual of the occasion and development of staff research efficiency came back to nineteen when personnel in cutting-edge instruction began to be the convergence of research contemplates. Educating was seen as the essential development and research had less preference. The advancement or promotion arrangement of educators was relied upon well instructing in the class. Research and novelty had less importance. The research for new information drove somewhere specified for research expertise ([Akbaritabar, et al., 2018](#); [Creswell, 2003, 2009](#)).

Published research material intensified noteworthy status in advanced education in society and all around the world. This was invited on considering propelled education needs on a workforce to be productive in research and development in higher education. Research work determined the status and ranking of universities. It is viewed as imperative and essential to evaluate educational institutions. Research profitability turned into a basic standard and ideal for personnel mobilization and willpower in organizations. The poor states are also tracking the advanced nations in the research field. There was confined writing that dissected these assessments in Pakistan ([Albert, et al., 2016](#); [Teodorescu, 2000](#)).

Research effectiveness and improvement are associated with each other. It is about means to conduct research, collect data, analyze it, effectiveness infers making, examining and dissemination of research papers in reputed journals,

research, and books, or giving presentations of findings through interactive media. Research effectiveness encompasses the publication of a research paper in capable and quality journals and in conference reports, getting study grants and assets, finishing research commitments, writing monographs, developing exploratory plans, creating works of amazing or inventive quality and standard, participating in visible open consultations and publications ([Creswell, 1986](#); [Hedjazi & Behaves, 2011](#)).

[Batool \(2018\)](#) stated that productive research adventure is more than an aggregation of information. It incorporates three moves, it requires preparation and a mindset. The researcher may introduce innovative ideas in research to keep in mind the society demands and market trend and get rid of the conventional topic, rarely would you have the option to find a subject just by contemplating the issue. Analyzing this structure integrates the resources, and makes sense of how to see what information is most likely going to be critical to your research or study targets. Academic writing since you may deal with an impressive number of considerations and bits of information, which have from various sources. Hence, paper quality and writing style are also preferred to publish material by quality journals ([Doyle, 2006](#); [Hesli & Lee, 2011](#)).

Profitable research everywhere throughout the globe advanced education foundations particularly university is directed by the number of research papers in generally acknowledged highly standard journals and proceedings, which are the regular methods for the dissipating of inventive research work and improvement exercises among expert researchers. From now, publishing an article implies that accomplishment in new information and data. The studies related to university research productivity have been increasing in the range of the 1970s. The research performance of faculty members is typically described by articles in educational suggested journals. The recurrence of paper presentation in national and global meetings is preferred at the time of selection of candidates or promotion of existing staff, stipends, grants, and accomplishing the awards for advanced education. Considering, educators' accomplishment relates to research productivity. The students appear to recognize instructors who are qualified researchers in particular fields and experts in their controls more than educators who do not focus on research. Teachers who take part in research activities frequently convey addresses in classes adequately and support students to tackle the issues constantly to accomplish the ideal targets and consequences ([Heng, et al., 2020](#); [Williams & Van-Dyke, 2008](#); [Wilson, 2001](#)).

Research is an ideal process to deal with or assess the efficiency and performance of teachers. Diverse types of researches have assessed parts impacting the teachers' research productivity. A couple of elements had been represented to be related to research productivity. In this regard, elements are comprised of two areas; personal and institutional elements of research productivity of teachers ([Ghabban, et al., 2019](#); [Quimbo & Sulabo, 2014](#)). Researchers stated there was an association between research productivity and salary. Significant compensation rates may realize pulling in beneficial workforce and staff, while meanwhile restricting or diminishing the likelihood of losing dynamic faculty to various associations ([Cardona, 2020](#); [Sax, et al., 2002](#)).

Researchers directed a study to explore the teachers' performance in university settings. They explored the employees' performance through their research work that how many they had research papers, papers presented in conferences, writing books, and funded projects availed. They additionally saw that age likewise influences their performance ([North, et al., 2011](#)). It was affirmed from another study that teachers' research efficiency may differ with time. Young teachers have more interest in conducting research and produce new knowledge, they have more time and motivation to achieve desired goals of life. On the other side, the staff who is working for many years have less time due to administrative duties and usually, they follow the traditional routine in life. They are less ambitious despite fresh faculty. It may vary and no hard and fast rule is there ([Batool, et al., 2018](#)).

Teaching-learning was seen as an obstacle in conducting a research study in the local context. Most personnel was committed to teaching but they had insufficient time to take an interest to take part in research work since they have an additional teaching load in instructive organizations. A group of members described that their departments had selective trusts in them to be directed the study concentrates on their subjects. Although, the institutional administration had supportive behavior in teaching and opposite mind of state at time research movements. They discouraged the teachers and did not provide research facilities. The participants clarified that leadership concentrated on teaching. It is critical to develop a research culture and organize activities. A group of members indicated that present systems were progressively useful for teaching nearly to give offices and provide a research environment ([Casci & Adams, 2020](#)). [Iqbal and Mahmood \(2011\)](#) discovered comparable results in a particular context where focus on teaching was the hurdle in the research productivity. They also articulated the various variables which are the deterrents to coordinate the research in a prevalent way.

[Nguyen and Klopper \(2014\)](#) stated that there was an association between leadership and research. Along these lines, teaching is affected by research because research and teaching are compulsory for each other. The teacher may provide fresh knowledge to their students by conducting research and a good researcher always researches to solve the classroom problems and that is called action research ([Batool, 2018](#)). Teaching and learning both are the beneficiaries of research studies because the practical implementation of research findings exists in classes. Research is a source of motivation and inspiration for researchers themselves. [Nguyen and Klopper \(2014\)](#) quoted the research directed by [Lindsay, et al. \(2002\)](#). They explored a solid connection between compensation and research. They additionally found that instructors just direct research since they need to get more pay and the possibility of advancement. They investigated that an analyst

acquires data and proficiency in the scholastic field and this thing support providing guidance and direction to students and younger researchers in papers or these writing and research ventures with no deterrent ([Alrahlah, 2016](#)).

The circumstance of departmental research effectiveness was not unusually encouraging. Currently, very few researches about research production of teaching personnel were there. The fundamental premise of information that began from the training commission was higher institutions. Research productivity was preferred in ranking the institutions. It is used to check the position and status, research work, latest information for universities, what is happening in the institutions, research work, and research production of universities. These highlights were valuable to understand the dimensions and factors that improve the research abilities and efficiency of educators in Pakistan ([HEC, 2013](#)).

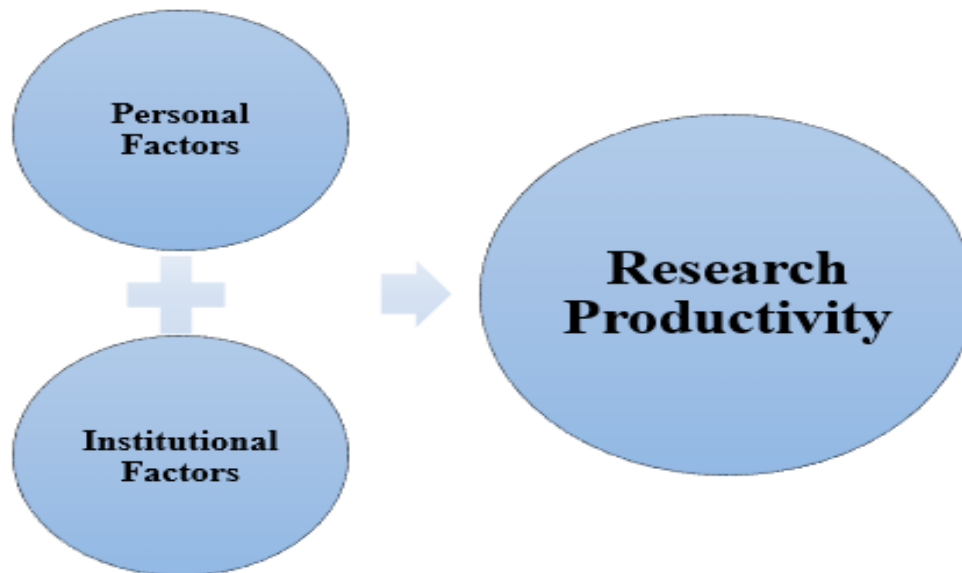


Figure 1: Conceptual diagram of study

Source: Authors

OBJECTIVES

The purpose of the research was to achieve the following targets:

1. To explore the correlation between teachers' elements with their research productivity.
2. To find the relationship of institutional factors and research productivity of teachers.
3. To find the relationship of teachers' personal and institutional research elements of research productivity.

METHODOLOGY

Research Design

This study was directed to determine the association between factors and the research production of teachers. It was a quantitative study. The design of the research was a correlation. It was descriptive and survey research.

Participants and Sampling Procedure

The specific domain of study was university teachers. Teachers from public and private universities (ten from both sectors) located in Punjab province participated in this research. There were different faculties in institutions so that researchers delimited the study and selected social sciences faculty. The five common departments were selected to obtain the sample for research. The sample selection was a difficult process and time-consuming. Teachers were selected from confirmed departments by stratified technique. The sample was 625 teachers.

Research Instrument

The self-developed questionnaire by [Batool \(2018\)](#) related to research factors that enhance the research production of teachers was used for data collection. There were thirty-nine statements to measure individual and institutional factors. The sub-dimensions of individual elements were ability and interest, research attitude, experience and position, skills, and practice. Institutional factors included promotion and inducements, research procedure, job assignments and pay, resources, and substantial. The research productivity scale was developed separately to measure the research performance of teachers and their relationship with factors. The research instrument was pilot tested before data gathering. Field experts validated the scale and then internal consistency was checked among items to ensure the reliability of the questionnaire. The detail of reliability is given in table 1 for explanation and understanding.

Data Collection and Analysis

The reliability was confirmed and after that instrument was used to collect data for university teachers. It was difficult to visit the universities and meet with individuals for data purposes. Despite that researchers visited the departments in universities and approached teachers. Heads of relevant departments gave consent for data collection from teachers. It was done to confirm the ethical deliberations. The relationship was explored by using Pearson r between variables of the study.

RESULTS

Table 1: Reliability of Scales (Factors)

Scale	α -value	Items
Personal	.89	23
Institutional	.87	16

The table shows the internal consistency among items of both scales. The alpha values were personal .89, and institutional .87, which is significant and acceptable in statistics. Therefore, it is concluded that both instruments were reliable to measure the research elements of two domains.

Table 2: Correlation of Personal Elements and its Dimensions with Research Efficiency

Factors	1	2	3	4	5
Ability and interest	1	.44**	.38**	.23**	-.02
Research attitude		1	.64**	.40**	.08*
Experience and position			1	.48**	.08
Skills and exercise				1	.04
Research productivity					1

The table shows the association of individuals' factors and research output by applying Pearson r . There was a poor relationship between sub-dimensions of individual factors of teachers at $p > .05$. In this manner, it is inferred that individual factor of instructors for example capacity and intrigue has a frail negative association with research efficiency. The elements mentality towards directing research, position and research understanding, aptitudes, and practice have a feeble positive relationship with the research efficiency of employees.

Table 3: Relationship between Dimensions of Institutional Elements and Research Productivity

Factors	1	2	3	4	5
Promotion and inducements	1	.36**	.35**	.27**	-.03
Research procedure		1	.59**	.50**	.06
Job assignments and pay			1	.53**	.07
Resources and substantial				1	.08
Research production					1

The table describes the correlation between the extents of departmental factors and research production. A weak association existed between sub-dimensions of institutional; promotion and inducements, research procedure, job assignments and pay, resources, and substantial and research productivity of teachers at $p > .05$. Hence, different components of institutional elements research procedure of departments, job and compensation, and assets and helping material have a poor, however positive correlation with research profitability of teaching personnel.

Table 4: Relationship between Personal and Institutional Research Factors

Elements	r	Sig.
Personal and Institutional Elements of Research	.644**	.01

The table states the connection between individual and institutional factors of research efficiency of teachers. Personal elements were strongly affiliated with institutional elements of teachers' research production $r = .64^{**}$, $p = .01$. It is presumed that there was a solid critical connection among individual and institutional components of instructors' research.

Table 5: Correlation between Personal Factors and Research Output

Factors	r	Sig.
Personal Elements and Research Productivity	.05	.21

The table specifies the association between individual factors and the research output of educators. There was a weak relationship between personal factors and research output of staff $r = .05$, $p = .21$. It seems that there was no relationship between the two variables.

Table 6: Correlation between Institutional Factors and Staff Research Output

Factors	<i>r</i>	<i>Sig.</i>
Institutional Elements and Research Productivity	.06	.14

The table shows the association between departmental factors and the research output of faculty members. There was a weak correlation between institutional elements and research production of teachers $r = .06$, $p = .14$. It seems that there was no relationship between the two variables.

DISCUSSION

The motivation behind the study was to set up the relationship of individual and institutional elements with the research productivity of teachers. It was about research and factors that are essential for teachers and universities. Research findings determined that teachers' position and experience had a significant association with research skills and productivity. Research activities are compulsory to improve the experience and get promotion on a higher scale effectively. These outcomes are predictable with the past researches directed by [Gregorutti \(2007\)](#) and [Teodorescu \(2000\)](#). They explored the positive correlation between teachers' position at the workplace and their proficiency.

It was observed that association of job burden and compensation, asset and helping material and, instructors' research profitability was frail, a constructive connection which showed individual and institutional variables affect their research competence. [Teodorescu \(2000\)](#) explored that cross-national study showed no association among departmental research facilities and relevant material and research output. It was confirmed that directness to facilities and provisions (library and internet facilities, journals access) was positively related to increasingly raised measures of productivity. It was furthermore discovered that higher availability to indicating resources is connected antagonistically with research productivity ([Gregorutti, 2007](#); [Heng, et al., 2020](#)). There was not a strong but positive relationship between job burden and compensation and research efficiency of teaching staff. This result was not supporting the findings of past research led by [Lindsay, et al. \(2002\)](#). They explored there was a correlation between pay and the research productivity of individuals. They said educators just direct research since they need to get more pay and the possibility of advancement in the profession ([Cardona, 2020](#)).

CONCLUSION

Research is a core activity for sustainable development and competition in the market. Universities and teaching personnel need to involve in research. Research has the importance of backbone in universities because their rankings depend upon it. The focus of the Higher Education Commission is to force the institutions towards research and recognize the importance of research. Universities are forcing to provide a research culture to faculty members and force them to busy in research activities. There is no doubt that a research culture does not exist in Pakistani universities as such in advanced western universities. Teachers' performance is also assessed under the shadow of research due to which it is a matter of their survival in the market. It demands quality culture supportive behavior practically. The objective of the study was to find a correlation of personal and institutional factors with the research productivity of staff.

Therefore, research production is affected by two elements; one is related to the personalization of teachers or individuals and the other belongs to the institutional range. Teachers research a lot of reasons. They participate in research activities to get promotions and incentives at the workplace. Some individuals have research passion and due to this, they have more interest in this. It is the beauty of a profession when an individual has a passion for his profession. Simply, it is a blessing for humans they have the same passion and profession. Research is a skill-oriented activity. Therefore, departments provide skills to staff members by organizing the research workshops. In this manner, it is concluded that individual factor of instructors for example capacity and intrigue has a frail negative association with research efficiency. The elements mentality towards directing research, position and research understanding, aptitudes and, practice have a feeble positive relationship with the research efficiency of employees. Subsequently, it is assumed that institutional component headway and inspirations have not strong association with research productivity of workers. Different components of institutional elements research procedure of departments, job and compensation, and assets and helping material have a poor, however positive correlation with research profitability of teaching personnel. It is inferred that there was a solid noteworthy connection among individual and institutional components of teachers' research output.

RECOMMENDATIONS

The following were the suggestion based on research findings.

1. Teachers should manage their responsibilities and pay concentrate on research activities because research is the guarantee of success and advancement.
2. Teachers need to research for the sake of solving facing problems and developing new theory and producing fresh knowledge.



3. Universities may provide research-oriented culture to faculty members so that they can participate and gain something new. Research culture can entice them towards researching in their fields.
4. Leadership may provide resources and financial support to faculty personnel for research. This thing may force them to work hard more by developing interest.
5. Motivation and encouragement should be there in departments for teachers who take part in research activities along their tough and busy academic and administrative schedule.
6. The personal and institutional elements of research are strongly related to each other. Therefore, individuals should focus on their elements that affect research and universities should concentrate on institutional research factors. So that, faculty can get a benefit for research purposes.

LIMITATIONS

The teachers of public sector universities participated more frequently in this study. The personnel of private sectors was reluctant to respond to the questionnaire during data collection.

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AUTHORS' CONTRIBUTION

Dr. Ayesha Batool gave the idea of the study, methodology, conducted analysis, and generated tables during analysis.

Dr. Saghir Ahmad Ch. wrote the abstract, introduction, objectives, discussed findings of the study with past studies, and wrote the conclusion. He generated hyperlinks of citations with references. He also showed his interest in formatting and proofreading paper and finalized paper according to APA Manual 7th edition. He incorporated the comments of the editor and reviewer. He is also playing the role of Correspondence Author in this paper.

Dr. Sadaf Naz wrote a literature review, checked citations, and interpreted the analysis.

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