Open Peer Review on Qeios

Understanding Research Tendencies of Academic Staffs

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Abstract

Higher educational institutes (HEI, what we call as university in our present context.) play an important role in developing a society. Role of higher education (HE) can be very well compared to the role of functioning of human brain. Higher education plays a vital role in developing a society both intellectually and economically. HEIs are vital in developing higher thinking abilities amongst society members. Oldest higher education institute of Europe was established in Italy (1088), on the other hand one of the oldest HEI was destroyed in India by the invading Islamic force during 1197. It is understood that around nine million books burnt at the site for three months. University of Bolonga (Italy) is still the oldest university in function. Universities of present context started functioning around the end of nineteenth century of which Calcutta (1857), Cape Town (1874), Tianjin (1895), and Makerere (1949) are worth mentioning. The author advocate for a uniform and synchronised HE for the benefit of human society. It is also understood that research activities in HEIs help improving and maintaining quality of education at HEIs. This study engaged in understanding the research interest amongst academics belonging to HEIs in India. This in future could be compared with other developing nations to understand the growth and impact of higher education.

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Introduction

It is observed that a number of countries are undertaking extensive reforms in higher education institutes (HEI's) in order to keep pace with the ever-changing scenario in the field of education (Phan, 2020; Pham, 2021). Education is one of the most dynamic human activities and requires continuous modification over time. Performance quality of teachers

undergoing intense scrutiny in order to keep them synchronized with the changes of the 21st century (Ferreira, Martinsone, and Tali 2020). At the onset of 21st century reforms in HEI's poured out from time to time from different nations like China, - in 2004 (Kang, 2004); Finland, - in 2009 (Aarrevaara, Dobson, & Elander, 2009); Japan, - in 2001 (Doyon, 2001); Vietnam, - in 2010 (Pham & London, 2010) etc. A number of studies have suggested reform for Indian HEI's too (Chakrabarty & Singh, 2023; Tandi, 2021). The need for developing a globally synchronized HEI system is also stressed by scholars (Marginson, 2016). As we are pondering the global scenario, it will be appropriate to have a flash back of present HEI development. While it is recognized that the first university in East Africa was established around 1949 in Uganda (Mushemeza, 2016), the southernmost part of the African continent was already a guiding force in the field of the modern-day higher education system. The first university that took shape in South Africa was the University of Cape Town (1874); next one, the University of Free State, came into effect in the year 1904 (uniRank 123, 2023). In India, the first university in the present context was established in 1857 (Calcutta University). On the other hand, Tianjin University, the oldest university in China, was established in 1895. It thus becomes evident that higher educational institutes of the present century were taking shape in the middle of the nineteenth century around the world. A need for global standards in higher education was further recognized post-World War II (Mundy et. al., 2016). In recent times, universal higher education has also gained the momentum (Mori, 2002; Ching-Pao & Joanne, 2012; Varghese, 2015; Labraña & Brunner, 2022; Ruoxi & Manli, 2022). It needs to understood that universalization requires a balancing role with the quality of the output of the higher education system (Jianghua & Meng, 2007). It is suggested that collaboration between different stakeholder groups and maintaining a regular professional development and training program for academic staff is essential for quality maintenance at HEI's (Asiyai, 2015). Developing a strong institutional culture of sustainability helps an institute improve its quality and image (Salvioni, Franzoni, & Cassano, 2017). Sustainability in universities provides two important guidelines for academic staff: first, what to avoid, and second, what must be done, including actions and processes for the sustainable development of an institution (Salvioni, Franzoni, & Cassano, 2017). It is understood that the quality of HEIs relates to their teaching as well as research and development, which results in knowledge generation and dissemination along with international cooperation (Asiyai, 2015). It is a well-informed fact that research in HEIs helps develop both the institute and academic staff in the quality management of HEIs (van Dijk et al. 2020). A research activity generates new knowledge that is to be disseminated via international cooperation and relationships without compromising the quality of academic work. The dissemination of knowledge could be done through several peer-reviewed journals published around the globe. There are several lists of such internationally recognized journals. The Department of Higher Education (DHE) of South Africa summarizes and publishes these lists at the beginning of every academic year by introducing and omitting journals from the list. This is done to maintain the quality of research work by academic staff members. This also helps the academic staff select journals in their field within the available university budget. On a similar line, the University Grants Commission (UGC) of India also recommends journals for academicians from India. It is agreed that the quality of a HEI is established by its ranking in lists published by recognized bodies (Dai & Li, 2016; Ramasamy et. al., 2016; Nazari-Shirkouhi et. al., 2020). Top most influential HEI rank givers (not in order), widely accepted by stakeholder groups, are Academic Ranking of World Universities (ARWU), Quacquarelli Symonds (QS), and Times Higher Education (THE). While preparing the ranking list, ARWU and THE emphasize academic publications and research activities taking place within a HEI (Lazić, Đorđević, & Gazizulina, 2021).

Research productivities of academic staff were found to depend on information literacy skills, institutional structure, age, gender, academic status, etc. (Okiki & Iyabo, 2012).

The aim of this study is to identify variables contributing to the research outcomes of academic staff in HEIs.

Theoretical Framework

Research activities, conducted at the individual level by academic staff, are influenced by multiple factors. Self-determination theory (SDT) raises three important points about individuals' actions and hence performance at work (Deci et. al., 1994).

They are:

1. There exists inherent motivation within oneself to internalize uninteresting regulation.
2. A process of internalization that happens in two different ways (introjection & integration).
3. Influence of social context in the process of internalization.

While closely observing the process of internalization, we observe introjection and integration as two distinct phenomena (Deci et. al., 1994). Introjection is a process where an individual accepts the conditions but doesn't consider them a part of their own life. This could happen to an academic staff because of multiple factors. The opposite is integration, where an individual accepts and owns the conditions as a part of their self-life process. Both 'introjection' and 'integration' have a qualitative impact on the academic staff's performances. Other than SDT, another theory that also deals with employees' performance is organizational support theory (OST) (Baran, Shanock, & Miller, 2012). According to this theory, perceived organizational support (POS) has an impact on the performance of individual employees (Baran, Shanock, & Miller, 2012). Academic staff are also employees of HEIs; hence, their performances are supposed to be affected by individuals' POS. The autonomous motivation of an individual staff member is the result of better integration with the institutional system. It is reported that autonomous motivation and performance outcomes exhibit a positive correlation (Gillet, Morin, & Reeve, 2017).

Literature review and conceptual framework

Involvement of academic staff in research is influenced by several individual and institutional factors. These elements might either encourage or discourage academic staff members to participate in research activities. A substantial number of individual factors play important role in the research involvement of staff members (Bland et al., 2005; Kwiek, 2016; Teodorescu, 2000). Study suggests that researchers in academic institutes carry on their research mostly for reputational and intrinsic reasons and that of financial rewards play a relatively small part (Lam, 2011). Success of academic staff members who engaged themselves in research activities from HEIs is explained in research motivation scale (RMS) (Zhou, Law, & Lee, 2022).

This is appropriate to say that personal interest and innate motivation plays an important role to favourably influence individuals getting in to research engagement. Confidence in one's own research talents i.e., self-efficacy, and the possession of the requisite research skills can make a staff member more aligned towards academic research. Time management and the ability to strike a healthy balance between work and personal life are other factors that also influence an individual's level of research participation. Research participation can be affected both by an academic's stage in their career and their amount of experience in the field. In some cases, sociodemographic factors such as gender, race or ethnicity might have an impact on research participation by individual staff member. When it comes in determining the level of research participation among academic personnel, institutional variables have a typical influence. In the next paragraph we observe what experts are identifying as instrumental in making research decision by individual HEI employees.

Research culture (Aiston and Jung, 2015) of institute, support (Bland et al., 2005) by the administration, resources and funding (Lee and Bozeman, 2005; Bazeley, 2010; Bentley and Kyvik, 2012) available for conducting studies, existence of performance evaluation and reward systems (Hakala, 2009; Van Arensbergen et al., 2014), chances for collaboration (interdepartmental) (Lee & Bozeman, 2005) found in studies of experts of this field. They influence and determine academic staff members involvement on research activities. Networking and interdisciplinary culture of collaborative research (Borrego & Newswander, 2010), sharing ideas and knowledge between faculties (Rhoten and Pfirman, 2007), and balancing actual teaching work and administrative work (Houston, Meyer, & Paewai, 2007; Shin & Cummings, 2010; Bentley, 2012) increases the probability of effective research output by the academics of HEs.

One important issue comes around social research are different ethical issues. A robust institutional research culture, appropriate mechanism for initiating a research project, and an appropriate friendly atmosphere encourages academic staff members to participate in research activities (Ajjawi, Crampton, & Rees, 2018). It is observed that this supporting atmosphere is missing within many Indian academic institutes. In contrast, South African institutes found to have existing mechanism that encourages even the beginners to take up research activities. It is understood that a healthy research culture fosters a sense of belonging and motivation among staff members by prioritising and celebrating research accomplishments (Aiston & Jung, 2015). When a faculty member realises the importance of research work, within an institution, will voluntarily and happily cooperate other researchers to accomplish their research goal be it within the organisation or outside the organisation. By synthesizing the literature, we propose a conceptual framework that captures the complex interactions between individual, institutional, and external factors affecting research participation amongst academic staff.

Factors that play key role, in determining the level of participation in research among faculty members, are unique to an institution. Institutions can create an environment that encourages research participation and productivity by fostering a culture that is supportive of research, providing the necessary resources and funding, implementing fair performance evaluation and reward systems, promoting collaboration and interdisciplinary research, and managing workload distribution. Policies regarding research have the potential to create an atmosphere that either fosters or discourages participation in research. Access towards research networks and possibilities for collaboration with other researchers can

both have an impact on how actively researchers participates in their field. Partnerships with different stakeholders and the exchange of information also expands the opportunities for research activities. This study was aimed at identifying research environment within Indian HEIs. Mainly attitude towards research activities, and at least one factor that hinders research participation. Attitude of academic staff towards research activities indirectly indicate the level of integration or interjection by the academic staff members.

Methodology

This study adopted a qualitative method of study. A survey tool containing two different types of questions—open-ended and ordinal scale questions—was generated using Google Form. Out of 21 questions, 10 were open-ended and 11 were scaled. Ordinal-scaled questions have 1 - 5 ratings. Where 1 implies least significant and 5 implies most significant factors. Each of the responses received against open-ended and scaled questions was then analyzed, and themes were separated to be analyzed using MS Office's Excel platform.

Data Observation

Demography

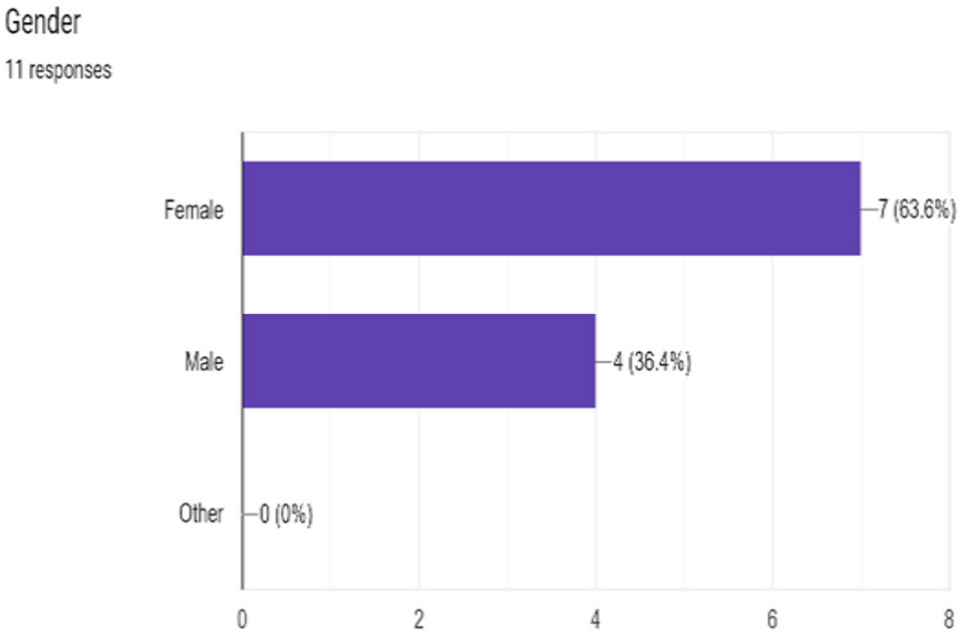

Figure 1. *Graph of Sample's Gender Distribution*

The participation of more female academic staff (63.6%) is observed in the collected data (Figure 1). Responses received, though less than ten percent of the targeted population (150), are widely spread amongst different states of India. A

Google-generated survey from was sent to academic staff members belonging to different states based on available and confirmed email addresses. States covered were Bihar (BR), Delhi (DL), Haryana HR), Jharkhand (JH), Karnataka (KR), Maharashtra (MH), Odissa (OD), and West Bengal (WB). Responses were received from all provinces except Bihar and Karnataka. Two participating provinces could not be determined, hence presented as NA (Table 1). The author suggests two possible reasons for low responses from academic staff members:

- *A snubbing attitude towards fellow as well as unknown academic researchers.*
- *Lack of interest in academic research.*

If any one of the above postulations is correct, it is not good for institutional performance. It is well known to all who born in Bharat:

> "[redacted]
>
> *"vidyāṃ dadāti vinayaṃ, vinayād yāti pātratām| pātratvāt dhanamāpnoti, dhanāt dharmaṃ tataḥ sukham".*

The verse (sloka) clearly indicates that the final aim of education is to create wealth that brings happiness (dhanāt dharmaṃ tataḥ sukham), was written around the 8th century. It means the verse is more than 2500 years old. One important point is to be noted here: not the wealth but the method of generating wealth is given priority. Wealth generated through a righteous path can only bring happiness. It is true for both the individual and society. In academic world, the same is known as an ethical way of functioning. Academic staff of all strata need to work on both disseminating and generating knowledge within their available resources. The lion's share of generating knowledge goes to the shoulders of academic staff from HEIs. It will hence be unethical for HEI staff members not to take part in research activities in any overt or covert form. One of the important goals of today's education is to develop 21st-century survival skills in student communities. One of which should be ethical functioning, i.e., being righteous. Preliminary observation contradicts the basic character of an educator, i.e., being righteous. Here our righteousness is promoting research being a part of HEIs. We are failing to be righteous if out of 150 not even 15 (i.e., 10%) participate in data sharing!

		Year Serv	No. Pub	Qualifi	Prov
1	Proff	15	118	PhD	WB
2	Asso Proff	12	4	PhD	NA
3	Asso Proff	32	9	PhD	JH
4	Assist Pro	10	10	PhD	OD
5	Assist Pro	4	4	St PhD	MH
6	Assist Pro	1.5	0	St PhD	DL
7	Corp Trn	35	0	MBA	HR
8	Assist Pro	5	8	LLM	HR
9	Assist Pro	10	0	LLM	MH
10	Assist Pro	1<	5	LLM	NA
11	Assist Pro	5	8	LLM	HR

Table 1. *Demographic Distribution of Participants*

Out of eleven participants (Table 1), four had completed their doctoral studies. Participants were from all bands of academic fraternities. The study also covered academic staff with varied experience in the field. The range of experience is 35. The lowest is less than one year of work experience and is considered zero. Different themes (factors) were identified after assessing the responses received from the Google Form survey. They are discussed independently in the appropriate section.

Experience

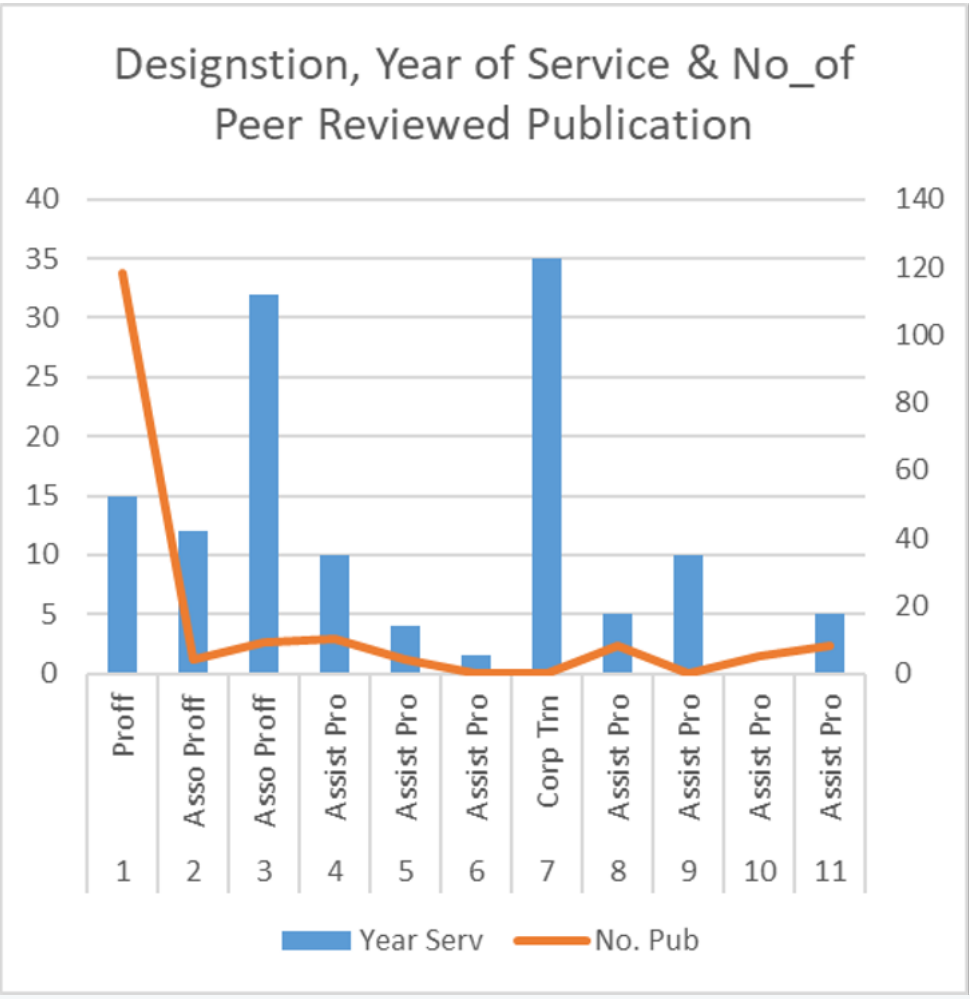

Figure 2. *Experience and Publication Graph*

No correlation is found between the experiences of academic staff and the number of peer-reviewed publications (Figure 2). An academic publication is the result of a research effort taken up by an individual. Effort varies from person to person; rather, effort is a result of the attitude of an individual. This is to be inspected at a later stage of this data analysis.

Open Ended Questions

Themes that were identified from open-ended questions are discussed below. The most reported stumble blocks in academic research are found to be ***finance, time,*** and ***workload***.

Finance

Six of the eleven participants reported finance as a challenge in academic research. It is true that finance is an important issue in conducting activities. Indirect (covert) participation in research by just replying to a mail or questionnaire has no financial implication! Participation indirectly could very well inspire direct involvement in research activities. In spite of challenges, some consider professional development as personal development and work on a strict budget to produce quality work. These types of academics also use funds from their own coffers for academic research.

Workload

Five participants raised the issue of workload as a hindrance to academic research. Academic administration involves multiple activities. The skill of collaboration and cooperation amongst different faculty members or cross-faculty cooperation might help to solve the issue of the workload factor through the distribution of tasks. The two most important 21st century skills are skills of collaboration and communication.

Time

The number of participants blaming a lack of time for conducting academic research is also five. Academic staff, while engaged in teaching, automatically generates several queries from the teaching-learning activities. This should be the starting point of academic research, which is to be churned in mind towards a desirable solution. Mental activities are beyond the boundaries of time. If an event is very close to our hearts, we generate time for that event. Starting the activities at ground level could take a few minutes a day to a few hours a week. The only issue, is conducting research close to our heart? Every academic staff member needs to answer this question. Research is the only way to improve any life process.

Motivation

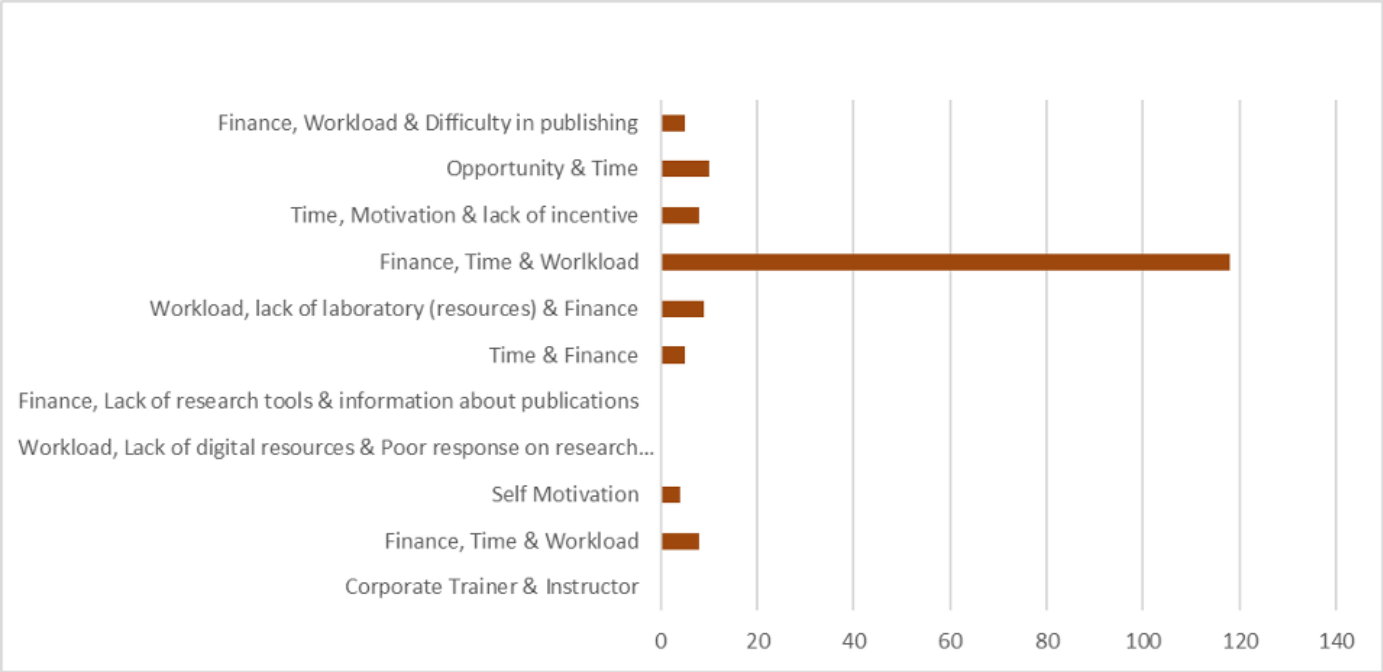

Figure 3. *Reported hindrances by individuals and No. of Peer reviewed papers published*

Figure 3 clearly indicates that academic research is not affected by finance, time, or workload factors but rather by self-motivation, as reported by one participant in the survey. Two different studies have definitely established that students' attitude is the dominant factor in students' performance (Chowdhury et. al., 2020; Chowdhury, & Rankhumise, 2022).

Extrapolation of observations allows us to suggest that attitude could be similarly responsible for outcomes in academic research among academic staff members. This is overcoming the self-efficacy factor and negatively impacting research participation.

Opportunity and Resources

While talking about opportunity, it doesn't come by walking; rather, creating opportunity in adverse situations is a human skill. The same applies to resources; utilizing the available resources to their best uses is creativity. One such example from the literature; a doctoral student reported using an alternate source while failing to get access to SPSS software (Chowdhury, 2021). Resources also include published works in different journals. It is thus important for an academic staff to know and understand the process of digging out information from different digital sites, some of which are free and others are paid for. Information processing is another important twenty-first century skill. Some free sites are mentioned to facilitate researchers in information processing. They are Google Scholar, Research Gate, the ERIC database etc. There are many international journals that are available for free to the researchers. Hence, lack of resources could not hold the ground as a valid reason for not getting involved in academic research.

Difficulty in publishing

This is a genuine reason for getting demotivated. It is very painful to face journal rejection after years of hard work. This also helps a researcher improve the language and other presentation styles within an article. An author can also seek the help of professional English-language editors to make a better presentation. It is always better to publish work in Department of Higher Education (DHE)-recommended journals (for South Africa) or UGC-recommended journals (for Bharat). Writing, re-writing, and re-re-writing is a learning process for a quality journal paper.

Action analysed

Responses on three factors, viz., motivation, priority, and time-spent from the rating scale were arranged to observe their relative relationship with each of the participants (Figure 4).

Figure 4. *Actual Time spared for research, Perception on research and Motivation*

A mismatch is observed between priority (perception) and motivation, except in three cases (Figure 4). In three cases, frequencies of priority, motivation, and time allocated for research match with each other. In one case, time allocated for research is much more than the priority placed on conducting research. In seven other cases, time spared is found to be less than the priority given to academic research. The participant presented in column 16 reported only four publications; on the other hand, the participant presented in column 15 reported 10 publications (Figure 4). It is thus indicative that time is a less dominant factor in academic research outcomes unless synchronized with motivation and perception factors.

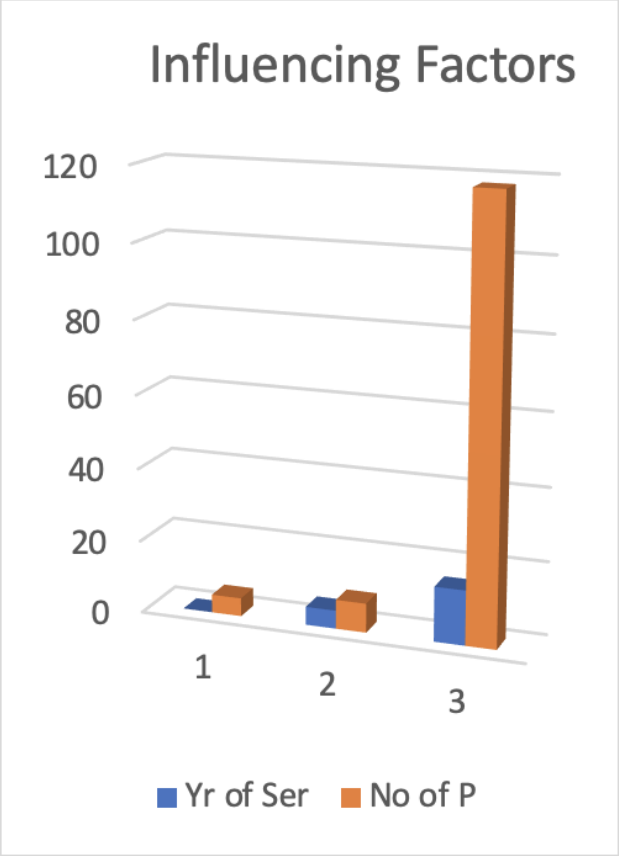

Figure 5. *Understanding Effect of Perception and Motivation*

As we observed in three cases (Figure 4), perception, motivation, and time exhibited the same values. The implications of this synchronization are also reflected in academic research outcomes. All three participants reported more publications in a shorter service period (Figure 5).

Conclusion

In conclusion, three factors—the amount of time spent on a study, the motivation for performing it, and the perception of the research—affect the outcomes of academic research. A shortage of any factor might hamper the research activities in an adverse way.

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