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# Identification and Comparison of Factors Affecting the Enhancement of Educational and Research Productivity of Faculty Members in Islamic Azad Universities of Tehran

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# ABSTRACT

**Purpose:** This study aimed to identify and compare the factors influencing educational and research productivity among faculty members at Islamic Azad Universities in Tehran.

**Methods and Materials:** The research employed a mixed-methods approach, combining quantitative and qualitative data collection. A total of 341 faculty members from Islamic Azad Universities in Tehran participated in the study. Data were collected through a structured questionnaire designed to measure educational and research productivity. The validity and reliability of the questionnaire were confirmed using Cronbach's alpha and expert feedback. The data were analyzed using descriptive statistics, exploratory factor analysis, Friedman's test for ranking priorities, and multiple regression analysis to determine the factors influencing faculty productivity.

**Findings:** The results showed that faculty members prioritize educational productivity over research productivity, with educational activities ranked as the highest priority. Factors such as institutional support, access to resources, professional ethics, and political behavior significantly impacted both educational and research productivity. However, high expectations from university leadership were not found to be a significant influence on productivity. The study also revealed that socio-demographic factors, particularly academic rank, played a role in shaping research output, with senior faculty members demonstrating higher research productivity.

**Conclusion:** Faculty productivity, both educational and research, is influenced by a combination of institutional support, individual motivations, and socio-demographic characteristics. Universities must focus on providing sufficient resources, reducing teaching loads, and fostering an environment of collaboration to enhance faculty performance.

Keywords: productivity, faculty members, educational productivity, research productivity

# 1. Introduction

aculty productivity has been widely recognized as a key factor influencing the academic performance and reputation of universities worldwide (Bahammam et al., 2023; Han, 2021). Productivity, especially in research, teaching, and service, forms the backbone of faculty contributions to institutional goals and objectives, contributing not only to the advancement of knowledge but also to the cultivation of skilled professionals (Alcazaren, 2021; Basbeth et al., 2021). The exploration of faculty productivity, especially in higher education institutions, has gained increasing attention over recent years (Slama & Choukir, 2019). Universities are now more focused on understanding the socio-demographic factors and institutional support systems that influence the productivity of their academic staff (Esmaili et al., 2024; Keramati, 2021; Maarefvand & Shafiabady, 2024; Mahdian et al., 2021; Mohammadi Fomani et al., 2024; Sadat Mousavi & Ebrahimi, 2024). As faculty productivity is multifaceted, research performance, student engagement, curriculum development, and scholarly output are central areas for investigation (Carraher-Wolverton & Zhu, 2021; Meyer, 2011). However, faculty members face a myriad of challenges that can affect their productivity, including workload, job satisfaction, resource availability, and administrative support (Cora-Bramble et al., 2010). The productivity of faculty is further complicated by the evolving demands of online education and the need for increased technological integration (Asiri et al., 2012; Hong, 2015).

Faculty productivity is a vital component of university performance and directly impacts institutional growth and development (Lee & Law, 2011). It encompasses not only research outputs, such as publications and grants but also teaching effectiveness and service to the institution and community (Hedjazi & Behravan, 2011). Research by Alcazaren (2021) highlighted the need for a multifaceted approach to understanding faculty productivity, stressing that universities must evaluate factors such as workload, access to resources, and faculty motivations to foster a conducive environment for academic excellence (Alcazaren, 2021).

Faculty productivity is shaped by numerous internal and external factors. Internally, faculty motivation, engagement in scholarly activities, and time allocation between research, teaching, and service play critical roles (Anderson & Slade, 2015; Nurcholis, 2019). Externally, institutional policies, access to research funding, and administrative support systems heavily influence faculty output (Boamah et al., 2023; Slama & Choukir, 2019). Research by Graeff et al. (2014) found that faculty satisfaction levels, job security, and clear paths for career advancement positively impacted research productivity (Graeff et al., 2014).

Educational productivity, specifically teaching quality, is a significant dimension of faculty performance (Blundell et al., 2020). Faculty members must balance their research activities with the responsibility of educating students, a challenge that requires institutional support and effective resource management (Prasad et al., 2022). Research by Pulumbarit (2020) suggests that transformational leadership, particularly in academic departments, plays a critical role in supporting faculty in their teaching roles, which in turn positively impacts student outcomes (Pulumbarit, 2020).

Blundell et al. (2020) emphasize that faculty satisfaction with teaching often correlates with institutional support, including access to modern teaching technologies, professional development opportunities, and manageable class sizes (Blundell et al., 2020). Similarly, Sondari et al. (2016) stress the need for a supportive institutional culture that values teaching excellence as highly as research output. Universities that fail to provide adequate resources for teaching often witness a decline in both student satisfaction and faculty productivity (Basbeth et al., 2021).

Faculty involvement in curriculum development and innovative teaching methods also contributes to their educational productivity (Hanson et al., 2022). As universities increasingly adopt online learning platforms and blended learning environments, faculty members are required to engage with new pedagogical tools (Blakey et al., 2016). Research by Boamah et al. (2023) found that faculty members who were adequately trained in using learning management systems (LMS) were more likely to engage in innovative teaching methods and achieve higher levels of student satisfaction (Boamah et al., 2023).

While educational productivity is critical, research productivity remains a primary measure of faculty success, particularly in research-intensive institutions (Francois, 2012). The ability to secure research funding, publish scholarly articles, and collaborate with other researchers are key indicators of faculty research productivity (Boamah et al., 2023; Prager et al., 2014). Gilstrap et al. (2011) suggest that sustained research productivity requires a balance between teaching responsibilities and research activities, as well as continuous access to research resources, such as databases, laboratories, and research assistants (Gilstrap et al., 2011).





Faculty members often face significant barriers to research productivity, including lack of time, institutional pressures, and inadequate research funding (Hedjazi & Behravan, 2011; Mobo et al., 2023). Research by White et al. (2012) identified the lack of institutional support and resources as one of the primary challenges faced by business faculty in enhancing their research productivity (White et al., 2012). Similarly, Anderson and Slade (2015) argue that the allocation of time and the demands of teaching often conflict with research activities, leading to a reduction in scholarly output (Anderson & Slade, 2015).

Despite the numerous factors that can enhance faculty productivity, several challenges remain. One of the primary challenges is the increasing workload that faculty members face, which often results in burnout and decreased productivity (Blundell et al., 2020; Conn, 2019). Faculty members are expected to balance teaching, research, and service responsibilities, often without sufficient institutional support (Hedjazi & Behravan, 2011). Research by Gutierrez and Candela (2018) highlights that faculty members in U.S. universities reported feeling overwhelmed by the demands of their roles, particularly in institutions that prioritize research over teaching (Gutierrez & Candela, 2018).

Additionally, the growing pressure to publish in highimpact journals has created a hyper-competitive environment that may discourage collaboration and mentorship among faculty members (Burns et al., 2022). The prevalence of predatory journals has further complicated the academic publishing landscape, with faculty members being targeted by unscrupulous publishers (Burns et al., 2022). This has led to concerns about the quality and integrity of research publications, as well as the long-term impact on faculty careers (Boamah et al., 2023).

In conclusion, faculty productivity is a complex and multifaceted concept that requires a holistic approach to understand and enhance. This study aims to examine the various dimensions of faculty productivity within the Islamic Azad Universities in Tehran, focusing specifically on educational and research productivity. Furthermore, it seeks to identify the factors that influence these dimensions and evaluate how faculty performance can be enhanced.

# 2. Methods and Materials

## 2.1. Study Design and Participants

This research is applied in terms of its research orientation. From the perspective of data collection, it is descriptive-survey research. In terms of the process and method of data collection and analysis, it belongs to the category of mixed research (quantitative and qualitative). Furthermore, the present study is a problem-solving type of research, in which scientific methods are employed to solve a problem or answer the posed questions. From a research strategy perspective, this study is considered a case study. In terms of philosophy, the present study falls under positivist philosophy research. Additionally, this research is a cross-sectional study, conducted during the time span of 2022-2023. Cross-sectional research refers to studies in which data is collected only at one point in time.

The statistical population of this research included 3,026 faculty members of Islamic Azad Universities in Tehran (including North Tehran, Central Tehran, South Tehran, West Tehran, and Science and Research universities). According to the Morgan table, the sample size was estimated at 341 individuals. Given the sample adequacy, which was 0.806, and the fact that the unit of analysis is the individual, the sample size is considered acceptable.

In this study, a non-probability quota sampling method was used. In this method, the population is divided into several categories, and then a share is allocated to each category based on discretion, and samples that are easier to access are selected arbitrarily. The population under study may not be categorized; in that case, samples are selected until the desired sample size is achieved. To test the validity of the questionnaire, Cronbach's alpha coefficient was used. The reliability of the educational productivity questionnaire was 0.793, the research productivity questionnaire was 0.828, and the reliability of the questionnaire for factors affecting faculty productivity was 0.860. The validity of the questionnaires in this research was confirmed through the following methods:

- Referring to the literature and identifying assessment questions for each variable.
- Surveying advisors, consultants, and other experts related to the questionnaire topic (using the Delphi method).
- Revising ambiguous questions during the pilot study phase.

# 2.2. Data Analysis

In this research, the analysis of information was carried out using statistical software based on data extracted from the questionnaires in two sections: descriptive statistics and inferential statistics. First, some demographic characteristics of the respondents, which were asked in the questionnaire,



were described. These characteristics include gender, marital status, age, education level, managerial experience, experience as a faculty member, and academic rank. In the second stage, this research analyzed each of the questions or topics in the questionnaire using descriptive statistical methods such as frequency distribution tables, frequency percentages, and chart plotting.

After data collection, parametric and non-parametric statistical tests, facilitated by computer programs, were used to analyze the data and answer the research questions. For data processing and statistical analysis, SPSS software was employed. Exploratory factor analysis was used to identify the factors influencing faculty productivity, and linear regression was applied to determine the impact of each of the factors affecting productivity.

#### 3. Findings and Results

Research Question 1: What are the dimensions, components, and indicators of faculty productivity at Islamic Azad Universities in Tehran?

Initially, all available written documents were thoroughly collected, analyzed, and categorized. In the second phase, the conceptual model derived from prior studies was shared with experts and the focus group. After several rounds of revisions, the productivity indicators for faculty members were finalized based on the criteria established by the Ministry of Science. The final model categorized and designed productivity indicators in two domains: educational and research productivity.

Focus Group:

To validate the conceptual model of the research, after deriving the initial model from a systematic analysis of the literature, the model was reviewed for any necessary

# changes, such as the removal or addition of variables and relationships. This process was conducted in the following steps:

a) Briefing Session: A session was held with the focus group, consisting of six human resource management experts, to explain the model.

b) Gathering Individual Opinions: After the meeting, the opinions of each focus group member were collected.

c) Integrating Opinions: The researcher then combined the opinions of the group members and categorized the shared and differing views of the experts.

d) Discussion on Influential Variables: In this phase, the researcher presented the summary of literature and expert opinions to the group, resulting in a revised model with updated variables and relationships.

Research Question 2: What is the priority of the individual productivity dimensions of faculty members at Islamic Azad Universities in Tehran?

Friedman Test: The Friedman test was used to prioritize the mean of faculty productivity dimensions, which were divided into two main categories: educational and research productivity. Given that the significance value (sig) is 0.000, it can be concluded that at the 95% confidence level, the Friedman test shows a significant difference in the importance of the functions mentioned regarding the faculty members of Islamic Azad Universities in Tehran ( $\chi^2 =$ 274.63, df = 2, p < .005). A comparison of the mean ranks indicates that educational productivity, with an average rank of 2.84, is the top priority, while research productivity, with an average rank of 1.85, comes next.

Research Question 3: What is the level of individual productivity of faculty members at Islamic Azad Universities in Tehran?

#### Table 1

One-Sample t-Test

Variable	Mean	Std. Deviation	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval
Individual Productivity	0.44	0.19	-3.730	340	.000	-0.05719	[-0.08, -0.02]

As shown in Table 1, since t = -3.730 and p = 0.000, the null hypothesis can be rejected. In other words, the mean score of 0.44 is an estimate of the population mean.

Research Question 4: What are the factors affecting the enhancement of faculty productivity at Islamic Azad Universities in Tehran?

To identify the factors influencing faculty productivity, factor analysis was used. Before applying factor analysis, sample adequacy was confirmed by the KMO index, which was 0.806, indicating a high level of sample adequacy. Another necessary condition for using factor analysis is the non-identity of the correlation matrix between the questions, which was tested using Bartlett's test. The significance value of 0.000 indicates that the null hypothesis, assuming the identity of the correlation matrix, is rejected. To determine the number of factors included in the model, the Eigenvalue



criterion was applied, where only factors with an Eigenvalue greater than one were considered. The explained variance, which is the percentage of total variance explained by each factor, is shown as % of Variance. The larger the value, the more significant the factor. The five identified factors, each with an Eigenvalue greater than one, explained 65.95% of the total variance. After the rotation phase, variables were grouped based on the identified factors, and factor load rotation enabled the emergence of meaningful factors. The rotated matrix was obtained after 23 rotations using the Equamax method.

### Table 2

Rotated Component Matrix for Factors Affecting Faculty Productivity

Variable	1	2	3	4	5
Faculty knowledge of current technology (12 and 14)	.732				
Trust-based cohesion and collaboration (48 and 49)	.731				
Rule of law and fairness (23 and 24)	.581			.461	
Alignment of education with faculty duties (25 and 26)	.522			.421	
F9		.747			
Monitoring of faculty (10, 14, and 15)		.712			
Time management (29 and 31)	.429	.618			
Integrity (37 and 38)	.557	.563			
Job responsibility (4 and 6)		.557			.404
Support (19 and 20)	.454	.485	.412		
Work environment (11 and 46)			.798		
Compensation (2 and 5)		.456	.615		
Resources (17 and 18)			.550		
Work quality (16 and 30)	.479	.488	.516		
Independence in decision-making (8, 41, 45, and 50)			.477		.471
Appointment considerations (1 and 3)				.752	
F32				.679	
Rigid culture and structure (22 and 35)				.677	
Involvement in non-work (environmental) issues (27, 33, 34, and 36)				.645	.442
F28	.483				.563
Sufficiency of salary and benefits (39 and 40)					.810
Career growth (43 and 47)	.433		.489		.530
F7		.427			.436
Eigenvalue	8.678	2.517	1.568	1.305	1.101
Variance (%)	37.730	10.944	6.815	5.675	4.786
Cumulative Variance	37.730	48.674	55.489	61.164	65.950

Research Question 5: What is the structural model for the educational and research productivity of faculty members at Islamic Azad Universities in Tehran?

For multiple regression analysis, certain assumptions were required. First, the normality of the distribution was confirmed using a P-P plot, which showed a normal distribution. Additionally, no significant multicollinearity was detected between the independent variables, as indicating that the variables were independent. The null hypothesis for multivariate regression was tested to determine whether at least one of the independent variables had a linear relationship with the dependent variable. This was assessed using the significance level obtained from the ANOVA analysis.

confirmed by the Durbin-Watson statistic, which was 1.84,

# Table 3

ANOVA

Model	Sig.	F	Mean Square	df	Sum of Squares
Regression	.000	8.145	17417.736	6	104506.414
Residual			2138.391	334	342142.521
Total				340	446648.934



As seen in Table 3, since p = 0.00 and F = 8.145, it can be concluded that there is a linear relationship between the independent and dependent variables.

# Table 4

Regression Coefficients for Educational Productivity

Variable	В	Std. Error	Beta	t	р	Tolerance	VIF
Constant	74.556	13.744		5.425	.000	-	-
Quality of education and educational system	11.397	3.603	.220	3.163	.002	.992	1.008
Accountability and professional ethics	11.248	3.592	.217	3.132	.002	.999	1.002
Political behavior	9.624	3.931	.186	2.448	.015	.833	1.200
Resources and growth opportunities	18.127	3.753	.349	4.830	.000	.914	1.093

As shown in Table 4, the significance level for the independent variables, including quality of education and the educational system, accountability and professional ethics, political behavior, and resources and growth opportunities, is less than 0.05. However, the significance level for motivational factors and the variable "high expectations from the university president" is greater than 0.05. Thus, the

research hypothesis can be rejected for these factors, meaning factors 1, 2, 4, and 5 influence educational performance. Additionally, based on the multicollinearity (VIF) column, no multicollinearity was detected between the independent variables. The linear equation for the impact coefficients is shown below, indicating the influence of each factor on the educational productivity of faculty members.

#### Table 5

#### Regression Coefficients for Research Productivity

Variable	В	Std. Error	Beta	t	р	Tolerance	VIF
Constant	41.742	13.605		3.068	.003	-	-
Quality of education and educational system	9.992	3.566	.181	2.802	.006	.992	1.008
Accountability and professional ethics	10.545	3.556	.191	2.966	.003	.999	1.002
Motivational factors	7.893	3.594	.143	2.196	.030	.977	1.023
Political behavior	7.417	3.892	.134	1.906	.058	.833	1.200
Resources and growth opportunities	27.003	3.715	.489	7.268	.000	.914	1.093
High expectations from university president	-1.271	3.989	024	319	.750	.754	1.326

As shown in Table 5, the significance level for the independent variables, including quality of education and the educational system, accountability and professional ethics, motivational factors. and resources and growth opportunities, is less than 0.05. However, for the variables political behavior and "high expectations from the university president," the significance level is greater than 0.05, so the research hypothesis is rejected for these factors. In other words, factors 1, 2, 3, and 5 influence research performance. Furthermore, the multicollinearity (VIF) column shows no significant multicollinearity between the independent variables. The linear equation for the impact coefficients is shown below, indicating the influence of each factor on the research productivity of faculty members.

#### 4. Discussion and Conclusion

The present study aimed to identify and compare the factors influencing the enhancement of educational and research productivity among faculty members at Islamic Azad Universities in Tehran. The findings of this study revealed several key dimensions of faculty productivity, including the significant impact of institutional support, socio-demographic factors, and individual motivations. By employing both descriptive and inferential statistics, the study provided a comprehensive view of how these factors contribute to the productivity of faculty members in both educational and research domains.

The results of the Friedman test indicated a clear prioritization of educational productivity over research productivity among faculty members, with educational productivity being ranked as the top priority. This finding





aligns with the research conducted by Pulumbarit (2020), who highlighted the importance of faculty members' teaching roles and the strong institutional focus on student outcomes (Pulumbarit, 2020). Similarly, Blundell et al. (2020) emphasized that faculty members who experience institutional support in their teaching roles are more likely to prioritize educational productivity, which subsequently leads to higher student satisfaction. The emphasis on educational productivity in this study can also be understood in light of the increasing demand for quality teaching in higher education, particularly in universities where student engagement and satisfaction are critical measures of success (Blundell et al., 2020).

In terms of research productivity, the study identified several factors that significantly influenced faculty members' scholarly output, including the quality of the educational system, accountability, professional ethics, and access to research resources. These findings resonate with the work of Hedjazi and Behravan (2011), who identified similar factors as critical to research productivity among agriculture faculty members in Iran (Hedjazi & Behravan, 2011). Furthermore, Slama and Choukir (2019)demonstrated that intrinsic motivations, such as accountability and professional ethics, often drive faculty members to maintain high levels of research productivity. The present study further supports these conclusions by demonstrating that when faculty members perceive a high level of institutional accountability and support, their research productivity is likely to increase (Slama & Choukir, 2019).

One of the key findings of this study was the significant influence of resources and growth opportunities on both educational and research productivity. This result is consistent with the research by Lee and Law (2011), who found that access to competitive research grants and strong institutional support contributed to higher research productivity in hospitality and tourism programs (Lee & Law, 2011). Similarly, Gilstrap et al. (2011) noted that faculty members who had access to continuous research funding and collaborative opportunities were more likely to sustain high levels of research output over time (Gilstrap et al., 2011). The present study reinforces these conclusions, suggesting that the provision of adequate resources and opportunities for professional growth is essential for enhancing both teaching and research productivity.

The study also found that faculty members' political behavior, while less influential than other factors, still played a significant role in shaping their productivity. This finding aligns with the work of Gutierrez and Candela (2018), who emphasized the importance of organizational politics in determining faculty members' engagement and output (Gutierrez & Candela, 2018). Faculty members who can effectively navigate the political landscape of their institutions are more likely to secure resources, establish collaborative relationships, and receive institutional recognition, all of which contribute to enhanced productivity. However, as highlighted by Boyer (2017), excessive engagement in institutional politics can also detract from faculty members' research and teaching responsibilities, suggesting the need for a balanced approach (Boyer, 2017).

Moreover, the study revealed that the expectations of university leadership, specifically high expectations from the university president, did not have a statistically significant impact on either educational or research productivity. This result contrasts with the findings of Francois (2012), who demonstrated that clear leadership expectations often lead to higher levels of faculty engagement and output (Francois, 2012). One possible explanation for this discrepancy is the cultural and contextual differences between the studies. While leadership expectations may be a critical driver of faculty performance in some contexts, the present study suggests that in the case of Islamic Azad Universities in Tehran, other factors such as resource availability and professional ethics play a more central role in determining productivity.

In addition to these factors, the study highlighted the role of socio-demographic characteristics, such as academic rank, in shaping faculty productivity. Faculty members with higher academic ranks were more likely to report higher levels of research productivity, a finding consistent with Ambong et al. (2022) and Alcazaren (2021). Senior faculty members often have more established research networks, greater access to resources, and fewer teaching responsibilities, all of which contribute to their increased research output (Alcazaren, 2021; Ambong et al., 2022). On the other hand, junior faculty members, who are often more engaged in teaching, may find it more challenging to balance their research and educational responsibilities, leading to lower overall productivity (Blundell et al., 2020).

The findings regarding educational productivity suggest that faculty members prioritize teaching due to the strong institutional focus on student outcomes. Universities that emphasize the importance of teaching quality often create environments where faculty members feel compelled to allocate more time and effort to their teaching



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responsibilities. This is supported by the work of Blundell et al. (2020), who found that faculty members who receive institutional recognition for their teaching efforts are more likely to prioritize educational productivity over research output (Blundell et al., 2020). However, this emphasis on teaching can also limit the time available for research, particularly for faculty members who are expected to teach large classes or multiple courses each semester (Anderson & Slade, 2015).

In terms of research productivity, the study's findings indicate that institutional support, particularly in the form of access to resources and growth opportunities, is crucial for faculty members to maintain high levels of scholarly output. This conclusion aligns with the research by Prager et al. (2014), who found that time and resource allocation are critical determinants of faculty research productivity. Faculty members who have access to research funding, collaborative opportunities, and professional development programs are more likely to publish in high-impact journals, secure research grants, and engage in interdisciplinary research (Prager et al., 2014). However, as noted by Graeff et al. (2014), institutional support must be consistent and sustained over time to ensure that faculty members can continue to be productive (Graeff et al., 2014).

Despite the positive impact of institutional support, the study also highlights the potential challenges that faculty members face in maintaining a balance between their educational and research responsibilities. Faculty members who are heavily involved in teaching may find it difficult to allocate sufficient time for research, leading to lower research productivity. This finding is consistent with the work of Conn (2019), who highlighted the issue of midcareer malaise, where faculty members experience burnout and decreased productivity due to the overwhelming demands of their roles. Universities must therefore find ways to reduce the teaching load for faculty members who are actively engaged in research, allowing them to allocate more time to scholarly activities.

While the present study provides valuable insights into the factors influencing faculty productivity, several limitations must be acknowledged. First, the study was conducted within the context of Islamic Azad Universities in Tehran, which may limit the generalizability of the findings to other institutions or regions. The specific cultural and organizational context of these universities may have influenced the results, and future studies should aim to replicate this research in other settings to determine whether the findings hold across different types of universities and geographical locations. Additionally, the study relied on self-reported data from faculty members, which may be subject to biases such as social desirability or recall bias. Faculty members may have overreported their productivity or underreported the challenges they face in maintaining productivity. Future studies should consider using objective measures of productivity, such as publication records or grant acquisition data, to validate the findings.

Given the limitations of the present study, several directions for future research can be proposed. First, future studies should aim to explore the impact of institutional policies on faculty productivity in a more diverse range of universities, including private and public institutions. Comparative studies that examine the differences in faculty productivity between research-intensive and teachingfocused institutions could provide valuable insights into how institutional missions shape faculty roles and responsibilities. Additionally, future research could investigate the long-term effects of institutional support on faculty productivity, particularly in terms of career development and job satisfaction. Longitudinal studies that track faculty productivity over time would help to determine how institutional support and resource availability influence productivity throughout a faculty member's career. Finally, future research could examine the role of faculty collaboration and interdisciplinary research in enhancing productivity, as collaborative efforts often lead to higher levels of research output and innovation.

To enhance faculty productivity, universities should prioritize creating supportive environments that address both the educational and research needs of faculty members. One key recommendation is to provide faculty with greater access to resources, such as research funding, professional development programs, and collaborative opportunities. Universities should also consider reducing the teaching load for faculty members who are actively engaged in research, allowing them to allocate more time to scholarly activities without compromising their teaching responsibilities. Additionally, institutions should implement mentorship programs that help junior faculty navigate the complexities of research funding and publication processes, fostering a culture of collaboration and support. Finally, university leadership should ensure that faculty members receive clear and consistent expectations regarding their roles and responsibilities, with a balanced emphasis on both teaching and research excellence. By addressing these areas, universities can create environments where faculty members



are empowered to achieve their full potential in both educational and research domains.

# Authors' Contributions

All authors significantly contributed to this study.

# Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

#### **Transparency Statement**

Data are available for research purposes upon reasonable request to the corresponding author.

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#### **Declaration of Interest**

The authors report no conflict of interest.

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#### **Ethical Considerations**

In this study, to observe ethical considerations, participants were informed about the goals and importance of the research before the start of the interview and participated in the research with informed consent.

#### References

- Alcazaren, H. K. G. (2021). A Systematic Review of Philippine Research Productivity: A Bourdieusian Perspective. *Philippine Social Science Journal*, 4(4), 113-124. https://doi.org/10.52006/main.v4i4.428
- Ambong, R. M. A., Dagos, R. A. T., Lumbo, S. G., Roldan, A. E., & Ferrer, V. C. (2022). Socio-Demographic Determinants of Faculty Research Productivity in a Level-Iii Philippine State College. Journal of Social Sciences Transformations & Transitions. https://doi.org/10.52459/josstt25220822
- Anderson, D. M., & Slade, C. P. (2015). Managing Institutional Research Advancement: Implications From a University Faculty Time Allocation Study. *Research in Higher Education*, 57(1), 99-121. https://doi.org/10.1007/s11162-015-9376-9
- Asiri, M. J. S., Mahmud, R., Bakar, K. A., & Ahmad Fauzi Bin Mohd, A. (2012). Factors Influencing the Use of Learning

Management System in Saudi Arabian Higher Education: A Theoretical Framework. *Higher Education Studies*, 2(2). https://doi.org/10.5539/hes.v2n2p125

- Bahammam, L., El-Deek, B., & Lineberry, M. (2023). Refining the Measurement of Factors Predicting Faculty Research Publications. https://doi.org/10.21203/rs.3.rs-2479240/v1
- Basbeth, F., Saufi, R. A., & Sudharmin, K. B. (2021). E-Teaching Satisfaction in a Black Swan Moment: The Effect of Student Engagement and Institutional Support. *Quality Assurance in Education*, 29(4), 445-462. https://doi.org/10.1108/qae-03-2021-0039
- Blakey, J. M., Theriot, S., Cazzell, M., & Sattler, M. L. (2016). Is Service-Learning Worth It?: A Mixed-Methods Study of Faculty's Service-Learning Experiences. *International Journal of Research on Service-Learning and Community Engagement*, 3(1). https://doi.org/10.37333/001c.21572
- Blundell, G. E., Castañeda, D. A., & Lee, J. (2020). A Multi-Institutional Study of Factors Influencing Faculty Satisfaction With Online Teaching and Learning. *Online Learning*, 24(4). https://doi.org/10.24059/olj.v24i4.2175
- Boamah, S. A., Kalu, M. E., Havaei, F., McMillan, K., & Belita, E. (2023). Predictors of Nursing Faculty Job and Career Satisfaction, Turnover Intentions, and Professional Outlook: A National Survey. *Healthcare*, *11*(14), 2099. https://doi.org/10.3390/healthcare11142099
- Boyer, P. G. (2017). How Do Junior Faculty Compete for Research Dollars? Advancing Women in Leadership Journal. https://doi.org/10.21423/awlj-v16.a184
- Burns, H. R., Ferry, A. M., Dibbs, R. P., Smerica, A. M., & Buchanan, E. P. (2022). Predatory Journals: How Plastic Surgeons Avoid Becoming the Prey. *Plastic & Reconstructive Surgery*, 149(3), 602e-603e. https://doi.org/10.1097/prs.00000000008841
- Carraher-Wolverton, C., & Zhu, Z. (2021). Faculty Engagement in Online Education: Applying the Perceived Characteristics of Innovation to Explain Online Teaching Intention. *The Electronic Journal of E-Learning*, 19(5), pp388-400. https://doi.org/10.34190/ejel.19.5.2472
- Conn, V. S. (2019). Midcareer Malaise. Western Journal of Nursing Research, 41(5), 647-649. https://doi.org/10.1177/0193945918825445
- Cora-Bramble, D., Zhang, K., & Castillo-Page, L. (2010). Minority Faculty Members' Resilience and Academic Productivity: Are They Related? *Academic Medicine*, 85(9), 1492-1498. https://doi.org/10.1097/acm.0b013e3181df12a9
- Esmaili, L., Jamali, A., & Ghorchian, N. (2024). Identifying and Analyzing the Dimensions and Components of Improving Social Intelligence among the Faculty Members of Farhangian University of Tehran. *Sociology of Education*, 10(1), 204-213. https://doi.org/10.22034/ijes.2024.2009561.1454
- Francois, E. J. (2012). Development of a Scale to Assess Faculty Motivation for Internationalising Their Curriculum. *Journal* of Further and Higher Education, 38(5), 641-655. https://doi.org/10.1080/0309877x.2012.706801
- Gilstrap, J. B., Harvey, J., Novičević, M. M., & Buckley, M. R. (2011). Research Vitality as Sustained Excellence: What Keeps the Plates Spinning? *Career Development International*, 16(6), 616-644. https://doi.org/10.1108/13620431111178353
- Graeff, E., Leafman, J., Wallace, L., & Stewart, G. (2014). Job Satisfaction Levels of Physician Assistant Faculty in the United States. *The Journal of Physician Assistant Education*, 25(2), 15-20. https://doi.org/10.1097/01367895-201425020-00004
- Gutierrez, A. P., & Candela, L. (2018). Perceptions of Teaching, Research, and Service Expertise, Workload, Organizational





Support, and Satisfaction Among U.S. Faculty Members' Intent to Stay in Tier 1 or Tier 2 Organizations: a Structural Equation Model. International Journal of Learning Teaching and Educational Research, 17(4), 1-27.https://doi.org/10.26803/ijlter.17.4.1

- Han, H.-C. (2021). Quantitative Evaluation of Faculty Research Productivity. The Department Chair, 32(1), 20-21. https://doi.org/10.1002/dch.30399
- Hanson, E., Gantwerker, E., Chang, D. A., & Nagpal, A. S. (2022). To Teach or Not to Teach? Assessing Medical School Faculty Motivation to Teach in the Era of Curriculum Reform. BMC Medical Education, 22(1). https://doi.org/10.1186/s12909-022-03416-5
- Hedjazi, Y., & Behravan, J. (2011). Study of Factors Influencing Research Productivity of Agriculture Faculty Members in Education, Iran. Higher 62(5), 635-647. https://doi.org/10.1007/s10734-011-9410-6
- Hong, X. (2015). Factors Affecting Faculty Use of Learning Object Repositories. The Electronic Library, 33(6), 1065-1078. https://doi.org/10.1108/el-07-2014-0108
- Keramati, M. R. (2021). A Comparison of Health-Related Quality of Life and Job Satisfaction in Physically Active and Sedentary Faculty Members. International Journal of Education and Cognitive Sciences, 2(3), 23-32 https://doi.org/10.22034/injoeas.2021.160725
- Lee, H., & Law, R. (2011). Research Productivity and Institutional Characteristics of Hospitality and Tourism Programs. Journal of Travel & Tourism Marketing, 28(4), 432-450. https://doi.org/10.1080/10548408.2011.571580
- Maarefvand, A., & Shafiabady, A. (2024). Effectiveness of Shafie-Abadi's Multidimensional Model Training on Enhancing Occupational Well-being and Quality of Work Life among Teachers in Qom City. International Journal of Education and Cognitive Sciences, 4(4), 21 - 30https://doi.org/10.61838/kman.ijecs.4.4.3
- Mahdian, H., Tanhaye Reshvanloo, F., Zahmatkesh, Z., & Javidi, D. (2021). General health, psychological and social wellbeing The role of personal and occupational factors. International Journal of Education and Cognitive Sciences, 2(3), 44-50. https://doi.org/10.22034/injoeas.2021.161048
- Meyer, K. A. (2011). The Influence of Online Teaching on Faculty Productivity. Innovative Higher Education, 37(1), 37-52. https://doi.org/10.1007/s10755-011-9183-y
- Mobo, F. D., Siahaan, S., Saadoon, A., & Panigrahi, R. R. (2023). Involvement of Faculty in Research and Community Extension. Jurnal Ilmu Sosial Mamangan, 12(1), 272-277. https://doi.org/10.22202/mamangan.v12i1.6447
- Mohammadi Fomani, M., Sharifi, A., & Etemad Ahari, A. a. (2024). Development, Validity, and Reliability Assessment of the Professional Ethics Scale for Faculty Members of Farhangian University [Research Article]. Iranian Journal of Educational Sociology, 7(2), 8-15. https://doi.org/10.61838/kman.ijes.7.2.2
- Nurcholis, G. (2019). Motivational Analysis in Carrying Out Research: A Study of Medical Faculty Lecturer at Hang Tuah University. https://doi.org/10.2991/acpch-18.2019.75
- Prager, D., Foltz, J. D., & Barham, B. L. (2014). Making Time for Agricultural and Life Science Research: Technical Change and Productivity Gains. American Journal of Agricultural 97(3). 743-761. Economics. https://doi.org/10.1093/ajae/aau089
- Prasad, K. D. V., Vaidya, R., & Chitta, S. (2022). Occupational Stress and Psychological Wellbeing Is a Function of Virtual Teaching and Faculty Performance During COVID-19 Pandemic: An Empirical Study With Reference to Higher Academic Faculty in Around Hyderabad City. International

journal ofhealth sciences, 47402-47412. https://doi.org/10.53730/ijhs.v6ns7.13253

Pulumbarit, J. P. (2020). Transformational Behavior of Department Heads and ICT Integration: Their Impact on the Research Productivity of Faculty Members. International Journal of Advanced Trends in Computer Science and Engineering, 9(1.2), 84-89.

https://doi.org/10.30534/ijatcse/2020/1491.22020

- Sadat Mousavi, S., & Ebrahimi, A. (2024). Structural Model of the Effect of Psychological Capital on Innovative Behavior in Teaching: The Mediating Role of Conscientiousness Personality Trait. International Journal of Education and Cognitive Sciences, 4(4), 1-10. https://doi.org/10.61838/kman.ijecs.4.4.1
- Slama, R. B., & Choukir, J. (2019). Faculty Members' Productivity and Research Funding: Intrinsic and/or Extrinsic Motivations. International Journal of Advanced and Applied Sciences, 6(4), 130-142. https://doi.org/10.21833/ijaas.2019.04.015
- White, C. C., James, K., Burke, L. A., & Allen, R. S. (2012). What Makes a "Research Star"? Factors Influencing the Research Productivity of Business Faculty. International Journal of Productivity and Performance Management, 61(6), 584-602. https://doi.org/10.1108/17410401211249175

