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Perceived Attitudes, Perceptions and Barriers towards Scholarly Publication: A Case Study of Indian Researchers

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ABSTRACT

The purpose of this study is to investigate researchers' attitudes, perceptions, and barriers toward scholarly publication. The current research can be a foundation for conversations on removing obstacles to scholarly publication. A total of 284 researchers participated in the present study. This quantitative analysis is based on a structured questionnaire through convenient sampling. For gathering data, a self-administered questionnaire was developed. The author used descriptive statistics to examine the data. Half (50 %) of the respondents had 1-2 years of research experience. Most of the participants (71.8 %) had participated in a session on research methods, and nearly half (48.9 %) had attended a session on article writing. Additionally, close to one-third (29.2 %) had written 1-2 articles, and more than half (59.5 %) had published research articles in a journal. The scholarly publication contributes to the academic growth of the institution, research enhances professional development and lack of research skills was the most prominent item considering attitudes, perceptions and barriers towards scholarly publication respectively. Across the tested analysis, gender has no significant difference, while age has a substantial difference in participating in conducting research. Gender has no significant difference, while age significantly correlates with article publication. Experience impact in conducting meaningful research, whereas attending research methodology training correlates with publishing articles and attending an article-writing workshop correlates with published articles. Incessant and collective consideration is imperative to overcome barriers to publishing scholarly articles. Moreover, training in research methodology, article writing, mentorship, facilities and funding are prerequisites for conducting research.

Keywords: Attitudes; Perceptions; Barriers; Scholarly publication; Indian researchers

1. INTRODUCTION

Knowledge acquisition requires research because it enables the integration of the strongest available research evidence. Additionally, research encourages collaboration among colleagues, keeps academics up to date on changes in their fields of study, and advances their knowledge. Therefore, research is the pursuit of facts to advance knowledge. It involves systematic data collection, analysis, interpretation, and evaluation procedures to solve a problem. The publication of scholarly articles is one of the indicators of a country's scientific progress and for establishing status. Scholars in developing nations face substantial challenges in publishing their work in high-grade scholarly journals.¹ For that reason, the feat of Indian researchers publishing in a top-ranked journal cannot be easily forgotten and overlooked hastily, with many factors, such as economic conditions, institutional infrastructure, administrative support, and language barriers preventing them from doing so. According to Lund², language barriers, article-processing charge and absence of partnership significantly handicap researchers and

dishearten young researchers who might have expected an identical playing ground in the Internet age. Therefore, this study aims to inspect the attitudes, perceptions and barriers to publishing scholarly publications. The current research can be used as a foundation for conversations on how to remove these obstacles.

2. LITERATURE REVIEW

Proper research knowledge, strong writing abilities, and an optimistic outlook enhance researchers' scholarly outputs. An attitude can be defined as an established means of discerning or sensing something; the system in which something is viewed, unstated, or construed is a perception; barriers indicate something immaterial that obstructs or separates and publishing of research outcomes denotes scholarly publication. Knowledge acquisition requires research because it enables the integration of the strongest available research evidence. Additionally, research encourages contact among colleagues, keeps academics up to date on changes in their fields of study, and advances their knowledge. Researchers in developed nations, predominantly those where English is a primary language, have a significant advantage because of the

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long account of extraordinary research values.³ Researcher from developing nations like India is left playing catchup, making an effort to publish their works in foreign language.² Research output in developing countries is widely acknowledged to lag behind developed countries.⁴ Thirty-one of the world's 191 nations held 98 per cent of scholarly citations, amongst which India, China, and Iran were developing nations.³ English-speaking nations represent 17 % of the global populace², yet over 80 % of the world's scientific communication is published in English journals⁵ likewise 92.64 % of the Scopus-indexed documents are written in English, similarly 95.37 % of Web of Science documents are printed in English.⁶ As a result, language limitations prevent researchers whose native language is not English from explaining the significant findings⁷ and are consequently subjected to predacious publishing.⁸ Major concerns for publication include funding, institutional support, administrative assistance⁴, lack of time, lack of skills, lack of self-confidence, fear of rejection by editors9, absence of motivation, absence of infrastructure¹⁰, inadequate scientific writing skills and limited submission skills.¹¹

For many Indian researchers, English is one of the languages but not a primary language. Therefore, the writing style of languages and grammar often differs considerably from the primary English-speaking nations. Indeed, there are language and grammar editing services, but these facilities are not free. It is common for many researchers from India are undoubtedly no budget left for proofreading facilities. Further, open-access publishing is becoming more expensive. Article Processing Charge (APC) could be a barrier because India does not fall under the waiver category for most journals.¹² Because of the APC, researchers face a substantial financial burden, making it challenging to publish scientific works in toprated journals. To overcome this issue, funding should be provided; workshops and symposia must be organised to enrich writing skills.13 This study makes the case that institutions must provide meaningful support to establish a legitimate foothold in the global research arena. As a result, an investigation is required to recommend the findings to implement a plan of action.

3. METHODOLOGY

The survey questionnaire was administered to Ph.D. scholars at Babasaheb Bhimrao Ambedkar University (A Central University), Lucknow, India. Along with the cover letter, an informed approval letter was sent to the respondents, elucidating the purpose and nature of the study and guaranteeing them their privacy and anonymity. A convenient sampling method was employed to collect data from different departments. The data was collected from 16 August, 2022, to 16 September, 2022. The respondents were reached out through numerous means comprising personal contact, visiting the department and laboratory, emailing and via social media platforms like WhatsApp and Facebook. Before full-scale data collection, a pilot study was directed with a sample of 50

respondents.¹⁴ After data cleaning, only 284 respondents were selected for analysis. Therefore, yielding a response rate of 33.81 %. The study size was determined using Yamane¹⁵ formula and the minimum required sample size is 270.97.

3.1 Questionnaire Design and Measurement

The data was gathered using a standardised questionnaire. The questions were in English, and participants were asked to respond in accordance with their ideas and opinions. Two components made up the questionnaire: (1) Demographic data about the participants; and (2) Attitudes, perceptions, and barriers to scholarly publication among the participants. The structured questionnaire consists of 36 statements. All the variables were established from published literature.¹⁶⁻¹⁹ Respondents were asked to answer on a five-point Likert scale with 1 signifying strongly disagree and 5 signifying strongly agree. For instance, "lack of financial support hampers research output". Statistical Package for Social Sciences (version 23) was used to analyse the collected data and a *p*-value of <0.05 was measured as statistically significant.

3.2 Demographic Profile

In total, 284 respondents were considered for analysis. Of the total, female researchers (52.8 %) had higher participants compared to male researchers (47.2 %). Interestingly, 43.3 % of the respondents are 24-27 years old. Half (50 %) of the respondents had 1-2 years of research experience. A majority (71.8 %) had attended a research methodology workshop, while nearly half (48.9 %) had participated in an article writing workshop. Remarkably, more than half (59.5 %) had published research articles in a journal and close to one-third (29.2 %) had published 1-2 articles.

4. RESULT

The study employed a mean for identifying the main influences and a Chi-squared test to examine the association between studied variables. Affirmative questions were asked about an attitude towards scholarly publication. The analysis confirms, "the scholarly publication contributes to the academic growth of the institution" (mean = 4.37) was the most significant item considering researchers' attitude towards scholarly publication. Correspondingly, agreeing questions were asked about perception towards scholarly publication. The investigation approves that "conducting research enhances professional growth" (mean = 4.21) was the most imperative item concerning researchers' perception towards scholarly publication and approving questions were asked about obstacles faced when conducting research. Interestingly, "lack of research skills" (mean = 4.13) was the most prominent item considering barriers faced by researchers scholars toward scholarly publication.

Participation in the research was higher in females compared to male researchers. However, it is not statistically

significant (*p*-value = 0.858) (Table 1). Close to twothirds (58.96 %) of male and nearly two-thirds (60 %) of female researchers had participated in research activity. Some researchers have enrolled for Ph.D. and undergoing coursework; this could be one of the reasons for not participating in research. Researchers belonging to the age group 28-31 years have higher research participation (Table 1) compared to other age groups because researchers belonging to this group are in the prime period of their research and by now, they have 3-4 years of research experience and can carry out independent research. Therefore, there is a significant association between the age of the researchers and conducting research (*p*-value = 0.001) (Table 1).

 Table 1. Relationship between demographics and participation in research

		Participated in research n (%)		<i>p</i> -Value	
		Yes	No	P	
Gend	ler				
	Male	79 (58.96)	55 (41.04)	0.858	
	Female	90 (60)	60 (40)	0.838	
Age					
	Below 23	4 (14.81)	23 (85.19)		
	24-27	63 (51.22)	60 (48.78)	0.001	
	28-31	71 (72.45)	27 (27.55)		
	32 & above	31 (86.11)	5 (13.89)		

Female researchers have a higher research publication than male researchers; however, differences in percentage were not statistically significant (p-value = 0.528) (Table 2). In comparison, researchers from 24-27 years age group were found to have a higher number of published articles than other age groups. The result shows that age significantly correlates with article publication (p-value = 0.001) (Table 2).

Research enables researchers to develop analytical and critical thinking abilities through practical experience. It allows one to identify one's academic, professional, and personal interests, thereby gaining more information and insight about a particular subject and establishing one-on-one relationships with outstanding academics in their field. The result indicates that experience is vital in conducting meaningful research (p-value = 0.001) (Table 3).

Workshop on research methodology provides researchers with legality and helps researchers conduct systematic research. It also offers a comprehensive plan that aids in keeping researchers on a path, making the process even more effective and practicable. The outcomes direct that research methodology training significantly correlates with publishing articles (p-value=0.001) (Table 4).

	Years of re	<i>p</i> -Value		
	1-2	3-4	5 & above	
Article publishe	d			
0	90 (78.26)	24 (20.87)	1 (0.87)	
1-2	44 (53.01)	29 (34.94)	10 (12.05)	
3-4	4 (10.81)	22 (59.46)	11 (29.73)	0.001
5-6	2 (9.52)	13 (61.91)	6 (28.57)	
7 & above	2 (7.14)	19 (67.86)	7 (25)	

 Table 3. Relationship between years of research experience on a published article

Table 4. Relationship between attending research methodology workshop with published article

	Attended reso workshop <i>n</i> (<i>p</i> -Value	
	Yes	No	
Article publi	ished		
0	65 (56.52)	50 (43.48)	
1-2	69 (83.13)	14 (16.87)	
3-4	27 (72.97)	10 (27.03)	0.001
5-6	17 (80.95)	4 (19.05)	
7 & above	26 (92.86)	2 (7.14)	

Table 2. Relationship between demographics and the number of research articles published

		Number of research articles published <i>n</i> (%)				w Valesa	
		Nil	1-2	3-4	5-6	7 & above	<i>p</i> -Value
Gende	r						
	Male	55 (41.04)	42 (31.34)	13 (9.70)	9 (6.72)	15 (11.19)	0.520
	Female	60 (40)	41 (27.33)	24 (16)	12 (8)	13 (8.67)	0.528
Age							
	20-23	23 (85.19)	3 (11.11)	1 (3.70)	0	0	
	24-27	60 (48.78)	34 (27.64)	13 (10.57)	8 (6.50)	8 (6.50)	0.001
	28-31	27 (27.55)	37 (37.76)	14 (14.29)	6 (6.12)	14 (14.29)	0.001
	32 & above	5 (13.89)	9 (25)	9 (25)	7 (19.44)	6 (16.67)	

Attending article-writing workshop help researchers to comprehend the nuances of writing different sections of the article and help to cultivate the capability to applicably frame and structure a research argument through confirmation. The result shows that attending an article-writing workshop significantly correlates with published articles (*p*-value = 0.001) (Table 5).

 Table 5. Attending an article-writing workshop with a published article

	Attended art workshop <i>n</i> (<i>p</i> -Value	
	Yes	No	
Article publishe	d		
0	32 (27.83)	83 (72.17)	
1-2	48 (57.83)	35 (42.17)	
3-4	20 (54.05)	17 (45.95)	0.001
5-6	16 (76.19)	5 (23.81)	
7 & above	23 (82.14)	5 (17.86)	

5. DISCUSSION

In an academic environment, to publish is to live. Academics know the ultimatum: publish innovative research or risk losing a professorship or your reputation. The adage "publish or perish" was first used in a book about academic careers by a sociologist named Logan Wilson in 1942. In addition to the fact that publishing research is necessary for academics to stay current, it is also a requirement, a critical performance indicator at many Indian universities.

Publishing rates can be used to assess an academic's worth to a university and influence who receives a timely promotion. Scholars can only connect through the publication of scholarly articles. Although doing research is difficult, writing it for publication is the next step, which can be intimidating, particularly for beginning researchers. Research allows one to identify one's academic, professional, and personal interests, thereby gaining more information and insight about a particular subject and establishing one-on-one relationships with outstanding academics in their field.

In this study, involvement in research by females was found to be over 60 %. Moreover, female researchers participated actively in research compared to their male counterparts. The study also presents that over 59.5 % of the participants had published at least one article; thus, the study findings reiterate that research experience is vital in conducting meaningful research (*p*-value = 0.001). The results are generally consistent with past investigations.^{17,20}

Participants valued that scholarly publication contributes to the academic growth of the institution (mean = 4.37). As much as it is relevant to individual researchers to stay current, it is also a prerequisite, a critical performance

pointer at Indian universities for National Institutional Ranking Framework (NIRF) ranking, National Assessment and Accreditation Council (NAAC) accreditation, etc. Thus, this study finding is in line with Duracinsky¹⁷ results. AlEnazi1²¹ study pointed out that gender has a significant impact on research participation and research publication. In contrast, findings from this study reveal that gender does not affect the involvement in research (p-value = 0.858) and no impact on research article publication, thus refuting AlEnazi1²¹ findings. While age has a significant association in conducting research, researchers from 28-31 years age group have higher research participation because researchers in this group are in the prime period of their study and now have 3-4 years of research experience and can carry out independent research (p-value = 0.001). Thus, researchers' age and research experience impact research participation and scholarly publications; therefore, the findings from this study support preceding research.²¹ Ultimately, researchers with more experience in conducting research will be able to publish more research articles.

Attending research methodology training offers researchers legality and helps researchers conduct systematic research. It also provides a comprehensive plan that aids in keeping researchers on a path, making the process even more effective and practicable. Attending article-writing workshop help researchers comprehend the nuances of writing different sections of the article and help to cultivate the capability to applicably frame and structure a research argument using confirmation. Consequently, attending research methodology training significantly correlates with publishing more scholarly articles (p-value=0.001). Thus, the study findings support the published literature.^{3,9,17,21}

A research paper is the best approach to present ideas, create narratives or make arguments that are supported by evidence, and disseminate newly acquired information to others. Researchers write scholarly manuscripts for various reasons, such as awarding a degree, building a reputation, establishing recognition, and fellowship.

Participants from this study optioned that research article writing should not be made mandatory, but an individual should be allowed to write out of individual interest. On the other hand, conducting research enhances professional growth and helps in generating novel knowledge. A similar finding was also presented in published literature.^{16,17,20} While, publishing is a difficult task. First, it is a crucial part of the research process and has its own fundamental, unbreakable laws. Specific guidelines, like the Consortium for Academic and Research Ethics (CARE) by University Grants Commission for high-quality research, have been formed out of concern for quality, consistency, and transparency. On top of that, each journal has its instructions for authors. The requirements for publication are becoming more and more onerous. Various challenges were reported in published literature, like poor English language proficiency, a lack of research funds, a lack of research skills, and a lack

of research training.^{4,8,17} In this study, despite researchers participating in research programmes, they pinioned certain challenges like lack of training in research methodology, insufficient data analysis knowledge, inadequate research experience, resulting in a delay or rejection of a submitted manuscript, funding, publication fees, publication waiting period, inadequate research facilities, lack of professional mentorship, approval from an ethics committee, limited English writing skills and lack of collaboration are a prime barrier to publication that are reported in other studies.^{4,8,11,12,13,16,17,18,22} Indian scholars nonetheless managed to publish an astounding amount of scientific publications despite all the obstacles they faced, one of the highest among developing nations.²³⁻²⁴ This study has two-fold limitations; firstly, the study is limited only to Babasaheb Bhimrao Ambedkar University (A Central University), Lucknow. Therefore, inferring these results from the broader Indian researcher is impossible. Hence, the author recommends a study with a larger sample size. Secondly, a qualitative study considering factors such as financial aid or fellowship received, English language proficiency, reasons for publishing and challenges faced in publishing scholarly articles can be undertaken.

6. CONCLUSION

The study examines researcher's attitudes, perceptions and barriers to publishing scholarly communication. Conducting research is vital to update subject knowledge and essential for professional growth. This would enable researchers to hone their skills for conducting research. The scholarly publication contributes to the academic development of the institution, research enhances professional growth and lack of research skills obstructs research productivity. Of course, despite positive attitudes and perceptions, researchers faced several barriers, including a need for more research skills, training in research methodology and financial support. Thus, to overcome the obstacles, the author recommends organising a workshop on research methodology, article writing sessions, financial assistance, adequate facilities to conduct research, and prompting a supervisor to supervise the researchers.

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