Journal Homepage: www.ijo-bs.com

International Journal of Business Society

Contents lists available at: https://www.ijo-bs.com/issue.html

# STUDY OF SCIENTIFIC VOCATION, PUBLICATION STRATEGIES AND TIME-MANAGEMENT TACTICS: SCHOLARS IN CHINA

Song Shijuan[1]; Cut Fitri Rostina[2*], Widya Sari[3]

[1]*Master student of management, Faculty of Management, Universitas Prima Indonesia*
[2]*Faculty of management, Universitas Prima Indonesia, Email: (cutfitri@unprimdn.ac.id)*
[3]*Faculty of management, Universitas Prima Indonesia*
[*]*Corresponding Author*

Information of Article

*Article history:*
Received: 7 Nov 2021
Revised: 8 Nov 2021
Accepted: 30 Nov 2021
Available online: 3 Dec 2021

*Keywords:*
Academic level
Researchers
Associates
Scientific enthusiasm
Time management

## ABSTRACT

The goal is to understand better how the competitor scientific system has influenced researchers (in China) with historically poor and uncertain science funding. One of the primary goals of this study was to discover the characteristics that impact a scientist's career path and the critical publishing methods and time management techniques. A six-month-long online survey was prepared and distributed. Postdoctoral and senior academics were also represented in six hundred replies, with thirty-nine percent of the total coming from Ph.D. students (forty-two percent). National science policy negatively influenced scientific vocation (response probability = sixty-nine percent and financial availability sixty-two percent. Younger researchers were particularly hard hit by the difficulty of obtaining scholarships and full-time posts fifty percent. Peer interaction activities, such as working in a team of fifty-one percent and collaborating with other groups seventy-six percent and attending conferences, were shown to have a favorable effect on scientific vocation fifty-nine percent. To be a full-time researcher, the most common technique was to publish in high-impact journals eighty-seven Young researchers, on the other hand, like to present their discoveries in conferences fifty-seven percent. Scientific output seventy-three percent and teaching thirty-nine percent were the two most important activities for generating new ideas, although the latter was also the lowest exciting. Our findings include three standout features. Structural issues associated with the shows a linear have a detrimental impact on one's desire to pursue a career in science, whereas peer interactions have a favorable effect.

## 1. Introduction

Researchers are increasingly outnumbering nations' financial resources for science, which is inconsistent with the growth of researchers [1, 2]. Getting a full-time research post is becoming more challenging for young researchers throughout the globe [3]. More than eighty-five percent of the postdoc fellows recruited and hired at many European universities wanted to continue their academic careers. Still, only three to five percent were picked for full-time posts [4, 5].

Ph.D. students, who compete with experienced academics for steady positions, are similarly affected by this competitive environment. Scientific research relies heavily on government funding, which has been inconsistent in the past [6, 7]. There are many scholarships and full-time research jobs. More study is required on how this environment affects youth (Ph.D. students and postdoc associates) and older researchers' 'strong desire to pursue the scientific profession' to continue their teaching life.

Researchers must publish their findings in peer-reviewed journal articles to disseminate scientific information. Journals that have a big readership and advance the cause of knowledge are included among the essential journals (i.e., those with a high impact factor). As the competition for those publications grows, the amount of demand from reviewers for each submission [8]. This leads to a competing work climate that emphasizes short-term objectives because of the intense publishing pressure. Even in the early stages of a researcher's career, the quality and quantity of their publications are used as indicators of academic success.

A researcher's job hunt is made more difficult by the high demand for qualified applicants who have published their work in renowned global journals. As a result, there are a plethora of publishing tactics that must be honed through time [9]. Ideally, the ability to publish should be gained in the initial phases of a Ph.D. program and reinforced throughout a postdoc position. On the other hand, researchers are often tasked with various tasks, which necessitates effective time-management tactics.

Scientific breakthroughs come from novel ideas generated through reading, connecting with others, and, most importantly, pondering [8]. Reflection time is becoming rare as more time is spent drafting and reviewing grant applications. In the past, empirical data has shown that this behavior has a considerable detrimental influence on researchers' production. There are also substantial hurdles to focusing on the scientific purpose since administrative activities fill up an ever-increasing portion of each day [10].



https://dx.doi.org/10.30566/ijo-bs/2021.special.22

Teaching and training human resources are essential responsibilities that researchers at academic institutions must fulfill. A researcher's fundamental problem is to manage their time effectively to maintain an active scientific output, publish in scientific publications, and supervise other duties, such as teaching and human resources training. As a result of the intense competition for resources and positions in research, it is vital to determine which activities are most highly rewarded, time-consuming activities, and those that generate ideas and the desire for further study.

This paper can be organized as follows: Section 2 introduces the Materials and Instructions. Section 3 presents the results and statistical values obtained from the survey. Detailed discussion will be provided in Section 4. Section 5 will draw the Conclusion.

## 2. Materials and Instructions

### *2.1 Explanation of the survey*

A study team used the Google Forms software to construct a structured, closed, anonymous online survey to gather data. It was accompanied by a note outlining the purpose of the package and the recipient. Among the four types of structured questions were the following: Scientific vocation characteristics, publishing techniques, and time-management tactics are all included in this section of the profile of an individual. For the most part, the questions were in a multiple-choice style, with just three or four alternatives available for each of the five or eight categories.

Concerning quantity and quality, the SCImago quartile rating categorization (Quartile 1 to Quartile 4, SCImago 2021) was consulted, and a category for non-indexed, local, and technical articles was created. Detailed survey questions and answers may be found in the Supporting information. The average response time was set at thirteen minutes. To fine-tune the survey's format before it was widely distributed, a pilot survey was administered to a sample of fifteen Doctoral students or postdoc fellows.

In addition to email and social media, a survey was sent. It was also delivered to thirty-one post-graduate institutions to guarantee that researchers from all across the nation were represented. A total of seven hundred thirty-two people completed the poll, with comparable demographics to the country's population.

### *2.2 Analysis of the Data*

There was a particular validation approach followed. We were able to narrow the field down to six hundred seventy-one respondents from a larger pool of six hundred because the remaining respondents lacked critical information or provided inconsistent responses. For the multiple-choice questions, we tallied the number of times each answer option was picked by each respondent (three or four possibilities were provided). Finally, the variable for each academic level was subtracted from the total number of respondents to make it a non-response-dependent variable. According to the name "response frequency," it does not equal one.

Investigating whether there was significant bias in the survey because of problems with respondent selection, we checked to see whether any responses were linked to any structural variables. As a result of this, we derived the "coefficient of variance" (CV) ordered by structural groupings that represent gender, maternity/paternity; institutional affiliation; geographic location; and total current number of publications.

We determined the CV for each group by dividing the standard deviation by the mean 'answer frequency'. The response variable's variability is quantified by this parameter, regardless of its size. The bigger a variable's variability is for comparisons, the smaller its CV. As a result of the most frequently answered questions (response frequency is more significant than twenty-nine percent) that were directly relevant to our goal, the median CV was eleven percent in the case of its most frequently answered questions.

As a result, we found no significant bias in the information source due to the structural factors. Gender was not a factor in the frequency of responses, even though the percentage of women in this survey was somewhat more significant than the total of females in the U.S. and official statistics.

Afterward, we sorted the data into three categories: Ph.D. students, postdocs, and senior researchers, based on everyone's information in the profile part. Individuals who held a senior researcher position on a long-term basis were referred to as senior researchers. Other academics were asked to self-categorize in the survey replies, and we examined to see whether their answers were consistent. This was made apparent in cases where the frequency of correct answers was more than twenty-nine percent, and the CV across structural variables was more extraordinary than twenty-five percent.

## 3. Statistics and Results

### *3.1 Overview*

There are both good and bad influences on a person's interest in science. There was a distinct pattern to the positively and negatively elements that impacted researchers' scientific vocations. Negative variables in national science policy and funding/resource availability were more common at every academic level (median rates for researchers were sixty-seven percent and sixty percent, respectively).



https://dx.doi.org/10.30566/ijo-bs/2021.special.22

It was shown that Ph.D. students and postdoctoral associates were less likely to pursue careers in science if they couldn't easily apply for scholarships or full-time posts (the average response frequency for both phases was forty-three percent). Postdoctoral female researchers were more likely to pick this unfavorable characteristic (sixty-one percent) than male researchers (thirty-two percent). One of the most common reasons cited by postdoctoral researchers with greater than ten recent publications was a poor working environment (with a frequency of thirty-one percent).

The majority of researchers (on average = fifty-one percent) cited their coworkers, the office atmosphere (forty-one percent), their own personal and family situations (forty percent), and their supervisor's advice as to the most pleasant aspects of their jobs (twenty-nine percent). Researchers in their fifties and sixties were more likely to rate their work environment as favorable (thirty-nine percent) than unfavorable (forty percent).

Younger researchers showed a similar tendency (forty percent positive vs. fifteen percent negative, on average for PhDs and postdoctoral researchers). With more than nine publications, postdoctoral researchers were more likely to describe their employment environment as favorable (sixty-three percent) than those with nine or fewer papers (forty-five percent).

### *3.2 Approaches to Time Management and Creative Inspiration*

Most respondents spent most of their time working on scientific research (seventy-three percent) and teaching (thirty-nine percent). Postdoctoral fellows engaged time in scholarship opportunities (thirty-two percent), while Ph.D. students focused on coursework (forty-one percent) and thesis writing (thirty-five percent). Senior researchers concentrate on human resource development (forty-two percent) and funding applications (thirty-seven percent).
Postdoctoral associates and senior researchers affiliated with universities had a greater average teaching relevance (average of fifty-two percent) than those affiliated with other institutions (average = nineteen percent). Ph.D. students and postdoctoral fellows added three to four more secondary tasks, while senior researchers contributed five additional activities.

## 4. Discussion

Obtained findings include three standout features. As a result, the scientific inclination is adversely impacted by structural elements connected to the shows, which are linear and favorably influenced by peer interactions.
The key structural issues that were considered flawed were policies. Contrary to popular belief, even while the number of articles produced per dollar invested in the system is extensive. A majority of the postdocs surveyed said they wanted to work in research, but the lack of scholarships and full-time posts was seen as a deterrent. It's simpler to accept the scientific system's uncertainty when you have a steady job. This helps explain why older researchers weren't as concerned about the lack of full-time opportunities as junior researchers.
The more scholarships a postdoc receives, the more dissatisfied they get. In addition to the beneficial impact that peers contact had on students, it was also picked as a source of fresh ideas. Collaborating is encouraged for early-career scholars, as indicated by the growth in the number of contributors per manuscript. A supportive and career-stage-independent workgroup was essential for a successful Ph.D. or postdoctoral career. Young researchers also often mentioned the effect of the workplace atmosphere, both favorable and unfavorable, on their findings.

## 5. Conclusion

After looking at the findings of our study carried out in China, we've come up with a list of suggestions for universities and other research institutions:

- Why will relevant researchers be even more relevant in international publications if the national science budget increases? So, we can get some new gear, hire some good technicians, pay for field trips and publishing costs, etc.

- Encourage regular meetings of the study team to foster debate at various stages of the investigation. Scientific publications may be boosted by peer engagement, which should focus on the early phases.

- Look for chances to collaborate with other research groups to connect with regional or worldwide research networks. One method to help with this is to encourage institutions to establish framework agreements and make grants for clear research stays available both locally and overseas.

- Integrating research into policy is essential to maintain interaction with local areas, stakeholders, and decision-makers, both in person and via dissemination initiatives. Researchers' evaluations should consider this, as should the research organizations that support them.



https://dx.doi.org/10.30566/ijo-bs/2021.special.22

## References


[1] S. Gralka, K. Wohlrabe, and L. Bornmann, "How to measure research efficiency in higher education? Research grants vs. publication output," *Journal of Higher Education Policy and Management,* vol. 41, no. 3, pp. 322-341, 2019.

[2] P. Stephan, "Perverse incentives," *Nature,* vol. 484, no. 7392, pp. 29-31, 2012.

[3] M. Husemann, R. Rogers, S. Meyer, and J. C. Habel, ""Publicationism" and scientists' satisfaction depend on gender, career stage and the wider academic system," *Palgrave Communications,* vol. 3, no. 1, pp. 1-10, 2017.

[4] N. Mdletye and P. Hlongwane, "An evaluation of challenges relating to recruitment and selection processes in the Robben Island Museum," 2019: International Conference on Public Administration and Development ….

[5] G. Ishrat, "A comparative study of Recruitment & Selection, Training and Development policies in Indian MNCs and Foreign MNCs," *IOSR Journal of Business and Management,* vol. 7, no. 5, pp. 29-43, 2013.

[6] T. A. F. Tambe and L. L. A. J. Miguel, "Assessing emerging trends of expansion and women enrolments in the higher education system in Mozambique," in *Women's Studies International Forum*, 2021, vol. 88: Elsevier, p. 102503.

[7] I. Beilin, V. Khomenko, and N. Kalenskaya, "Institutional aspects of the cluster development of the regional economic system," *Humanities & Social Sciences Reviews,* vol. 7, no. 6, pp. 192-196, 2019.

[8] M. Catillon, "Trends and predictors of biomedical research quality, 1990–2015: a meta-research study," *BMJ open,* vol. 9, no. 9, p. e030342, 2019.

[9] V. Gewin, "How to write a first-class paper," *Nature,* vol. 555, no. 7694, 2018.

[10] D. Gaughran, *Let's Get Digital: How To Self-Publish, And Why You Should*. David Gaughran, 2020.




https://dx.doi.org/10.30566/ijo-bs/2021.special.22