

# Research on the motivation to contribution and influencing factors of university students——a semi-structured interview based on qualitative research

Yueyao Li<sup>1,2</sup>, Sanhong Deng<sup>\*1,2</sup>, Yue Zhang<sup>1,2</sup>

<sup>1</sup>School of Information Management, Nanjing University, Nanjing 210023, China

<sup>2</sup>Jiangsu Key Laboratory of Data Engineering and Knowledge Service, Nanjing University, Nanjing 210023, China

sanhong@nju.edu.cn

**Abstract:** Due to the lack of theoretical knowledge and practical experience, the university students have many deficiencies in contribution. We conducted semi-structured interviews with 28 undergraduate and postgraduate students of Nanjing Agricultural University. At the same time, we used descriptive statistics and cross-analysis methods to analyse the motivations of college students' initial contribution and the influencing factor of their choice. Based on this, this paper puts forward some suggestions for the initial submission of college students, and the journals are also provided for reference in the selection of manuscripts.

## 1. Introduction

Paper contributors are driven by different motivations and various factors from the decision of publish a paper to the successful publication. Motivation to contribution refers to the psychological activity or internal motivation that can cause and promote the author to maintain the activity of contribution [1]. The author's motivation to contribute plays a decisive role in his creation, and indirectly affects the quality and the value of journals. College students, as the main part of the initial contribution group, will have a lot of subjective and objective considerations. This research applies the semi-structured interview method and focuses on this group. The main purposes are as follows: 1) to accurately explore the driving factors of different students' contribution behaving in colleges, and to summarize the publishing characteristics, goals and needs of this group; 2) researchers try to put forward some suggestions to help generate more excellent author resources, and indirectly optimize and control the manuscript content so as to improve the journal quality.

## 2. Theoretical basis

### 2.1. Research on contribution motivation

The motivation of the author's submission can be summarized as the psychology and behavior from the generation of ideas to the submission of articles. Shen yun roughly listed the author's motivation for submission as the need for creative inspiration, creative thinking, self-realization and external stimulation [1]. Zhang hong subdivided the contribution motivations of these groups into different types [2]. Zhang Hanmin roughly divided the author's motivation for submission into four types: dissemination type, exposure type, practical type and response type, and pointed out that the motivation



for writing is mostly mixed type [3]. Chen ling and Zou xu understood the author's experience in paper submission and their views on the journal and the process of paper publication through face-to-face communication with university science and technology workers [4]. Ye Jihong and Xie Yinghua respectively sent questionnaires to postgraduates of universities and more than 3,000 scientific and technological workers in China, and studied their paper publication [5-6].

The author's motivation to contribute is not only affected by himself/herself, but also restricted and impacted by social, economic and cultural elements. Teresa m. Amabile proposed in 1997 that all creation and achievements in all fields flourish under the internal motivation, while the external motivation plays the role of auxiliary promotion [7]. As proposed by Mirjana Peji Bach, scientific research publishing in social development, in addition to disseminating knowledge, could stimulate the motivation of researchers to publish scientific research results [8].

## *2.2. Inquiry into the influencing factors*

Factors that influence the author's contribution include the author's environment, journal, editor, etc. Xia Dengwu summarized the factors affecting the author's motivation to contribute, and divided them into internal and external elements [9]. Chen ling generalized the author's opinions on contribution, paper publishing process and journals through face-to-face communication with scientific and technological workers in colleges and universities [4]. Hou Zhenxing and Liu Yanhua respectively explored the influencing factors of scientific paper writing through modeling and content analysis, providing references for the research of this paper [10-11].

In foreign countries, Eline Poelmans used the economic history journal as an example to examine the factors that affect WTW (willingness to wait) and broke them down into personal influence and work-related effect [12]. Rawda Ahmed Omer investigated the main obstacles encountered by researchers in the submission process to well-known journals based on in-depth review of relevant literature and a series of structured interviews [13]. Linda V. Knight established a comprehensive model of academic journal researchers' criteria for journal selection, including 39 detailed influencing factors in three categories. Linda Bol and Douglas J. Hacke analyzed the writing process of young scholars from the perspective of reviewers, believing that it is more likely to be successful to combine good writing ability with complete research [14-15].

As can be seen from the foregoing, the literature has used a variety of methods to study the contribution behavior of different groups. However, only qualitative research methods are used to explore student contributors. On the basis of in-depth investigations, there are few studies that consider the motivation of submission and the reason affecting submission. This paper takes the first-time contributors of universities as the research object, and supplements the research on its motivation and influencing factors.

## **3. Research Methodology**

Semi-structured interview allows interviewees to freely express their ideas within a certain range, so as to obtain rich and direct information. In the process of implementation, the obtained data can be quantitatively analyzed due to its high elasticity. In this study, 28 college students were selected as interviewees to record the communication process by voice. The interview time of each interviewee is about 30 minutes. During the interview, interview questions are modified in time according to the designed interview outline and interviewees' answers [11].

The interview mainly starts with two major topics. Before each major topic, there are guidance questions, and there are sub-topics below each topic. The questions under each sub-topic can be changed flexibly during the interview. After answering the questions, the interviewees will be asked additional questions according to the answers. If there are three consecutive interviewees who hold negative opinions on a question, the question will be deleted when the next interviewee is interviewed. If one interviewee puts forward opinions different from the alternative questions in the interview, this question will be added to the alternative questions in the subsequent interview until the last two interviewees.

#### 4. Results

The researchers selected 12 eligible male and 16 eligible female respondents. There are 5 senior students, 21 postgraduate students and 2 doctoral students. There are 21 natural science students and 7 social science students. Of the seven who have published their papers, 12 are in preparation. 22 choose to work directly after graduation, and 6 choose to study for a master's degree, a doctoral degree or further scientific research.

##### 4.1. Analysis on the motivation of initial contribution

Through interviews, it can be found that in general, the subjective factors of contributors play a decisive role, and external elements can urge or speed up the process. The motivation of most contributors tends to be the same, and some aspects are different. Table1 is obtained after extracting and sorting out the characteristics of interviewees and their mentions of various motives.

Table 1. Results of the reflective construct assessments.

variable		Graduation needs		Achievement display		Personal value		Employment progression		or	Etc.
<b>Gender</b>	<b>Male</b>	9	75.0%	8	66.7%	4	33.3%	4	33.3%		
	<b>Female</b>	12	75.0%	10	62.5%	9	56.2%	8	50.0%		
	<b>Senior</b>	0		2	40.0%	3	60.0%	2	40.0%		Professional understanding;
<b>Grade</b>	<b>Master's degree</b>	19	86.4%	15	71.4%	9	42.9%	10	47.1%		Scholarship;
	<b>Doctor</b>	2	100%	1	50.0%	0		0			Self-interest;
	<b>Natural science</b>	17	81.0%	14	66.7%	8	38.1%	9	42.9%		Teacher's encouragement;
<b>Subject</b>	<b>Social science</b>	4	57.1%	4	57.1%	5	71.4%	3	42.9%		Help others;
											Contribute to the field.

Gender, grade and discipline have different effects on the motivation of first-time contributors. Female and social science students paid more attention to self-improvement, while male and natural science students paid more attention to external pressure. The process of producing the motivation of contribution of lower grade students pays more attention to perceptual thinking, while graduate and doctoral students are relatively rational.

##### 4.2. The factors that influence the contributors' orientation

During the interview, it can be learned that the factors affecting people with different motivations and the importance of these elements are different. Same as motivation, factors affecting interviewees are summarized and unified to obtain the table2.

Table 2. Results of the formative construct assessments.

variable		Impact factor		Journal authority		Recommended by others		Review cycle		Etc.
<b>Subject</b>	<b>computer science</b>	4	100%	4	100%	1	25.0%	3	75%	
	<b>life sciences</b>	17	100%	10	58.8%	9	52.9%	10	58.8%	Whether the journal has discrimination;
	<b>social science</b>	4	57.1%	7	100%	5	71.4%	1	14.2%	State-led policy changes;
<b>Professional development</b>	<b>Emerging profession</b>	8	72.7%	11	100%	6	54.5%	5	45.5%	Page charges;
	<b>Traditional profession</b>	17	100%	10	58.8%	9	52.9%	3	53.0%	Editorial attitude

The degree of discipline and professional development has a certain impact on the choice of journals. Contributors to social sciences are more concerned with non-quantitative factors, such as recommendations from others, popularity and authority of journals. Contributors in the natural sciences, on the other hand, tend to value quantitative criteria such as the impact element of the journal and the length of the review period. Computer science students choose journals based on their authority, while

life science students choose to take advice from others. Emerging professional authors pay more attention to the authority of journals, while authors of traditional majors value the impact factors of journals. The authors of the two majors had similar attitudes toward the cycle of review and referrals.

## 5. Conclusion

Graduation needs, demonstration of experimental results, realization of personal value and employment or help for further study are the main motivations for college students to submit papers. Gender, grade and subject have different effects on these motivations. Female and social science students pay more attention to self-improvement, while male and natural science students care more about external pressure. The process of producing the motivation of contribution of lower grade students pays more attention to perceptual thinking, while graduate and doctoral students are relatively rational.

Journal influence factor, recommendation from others, journal authority and review period are the major factors that impact college students' contribution orientation. The degree of discipline and professional development will affect these elements. Natural science students generally pay attention to the impact factors and review cycles of journals, while social science students are more concerned with journal authority and others' opinions. Both new majors and traditional majors pay more attention to journal impact factors, among which the former will pay extra attention to journal authority.

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