

METRICS AND MEANING: A COMPREHENSIVE EVALUATION OF RESEARCH PERFORMANCE IN THE HUMAN AND SOCIAL SCIENCES LANDSCAPE

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Abstract: The humanities and social sciences hold a pivotal role in higher education, yet a unified evaluation framework for assessing scientific research performance in these fields remains elusive. Researchers have identified issues within the existing evaluation mechanisms, necessitating the development of a scientific evaluation system and compatible standards tailored to humanities and social sciences professionals.

The primary goal of scientific research performance evaluation is to pinpoint deficiencies in research endeavors, fostering continuous enhancement of scientific research capabilities. Evaluation in humanities and social sciences is particularly critical, serving as a cornerstone for appraising achievements and galvanizing the enthusiasm and creativity of researchers in these domains. Furthermore, the efficacy of the evaluation mechanism directly influences scientific research management, further underscoring its significance.

To propel the evolution of research performance evaluation in humanities and social sciences, this study undertook a comprehensive exploration of the current evaluation framework. By analyzing existing challenges, the study has identified solutions to refine and improve the research evaluation mechanism, ultimately advancing the quality and impact of scientific research in these vital fields.

Keywords: Humanities and social sciences, scientific research performance, Evaluation mechanism
Research evaluation, Higher education

Introduction

The humanities and social sciences discipline plays a key role in the development of higher education. However, there is not a unified evaluation index of humanities and social sciences about how to evaluate scientific research performance of humanities and social sciences. What's more, the problems in the evaluation mechanism of scientific research performance in humanities and social sciences have been presented by researchers in humanities and social sciences. Thus, it is vital to construct a scientific evaluation system and formulate evaluation standards that are compatible with the professional development of researchers of humanities and social sciences. The purpose of scientific research performance evaluation is to find out the problems in scientific research performance through evaluation, and promote the further improvement of scientific research strength. The evaluation of scientific research performance of humanities and social sciences is a key section in the appraisal of achievements of humanities and social sciences, and it is of great significance to mobilize the enthusiasm and creativity of researchers in humanities and social sciences. In addition, as an important part of the evaluation of researchers in humanities and social sciences, the scientific and reasonable evaluation mechanism could directly affect the scientific research management. Therefore, in order to promote the development of the research performance evaluation mechanism of researchers in humanities and social sciences, the study conducted an in-depth exploration of the research performance evaluation mechanism. The study analyzes the problems in the current research performance evaluation mechanism of humanities and social sciences, and finds out the solutions to improve the research evaluation mechanism of humanities and social sciences.

1. Basic principles of scientific research performance evaluation of humanities and social sciences

2.1 Principle of innovation

Lu (2009) put forward three criteria for establishing a comprehensive evaluation system that conforms to the characteristics of humanities and social sciences achievements. First, the emphasis on the quantity of achievements should be transformed into the quality of achievements; second, in the evaluation process, the practicability and transformation of the achievements of humanities and social sciences should be focused; third, the scientific and reasonable representative work evaluation system should be conducted [1]. Therefore, innovation should be the basic principle of scientific research performance evaluation mechanism of humanities and social sciences which could promote the development of scientific research performance evaluation mechanism of humanities and social sciences and reflect the significance of scientific research performance evaluation of humanities and social sciences.

2.2 Principle of feasibility

Liu (2009) pointed out that there were many problems in practice in the evaluation of humanities and social sciences which had negative influence on the feasibility of the evaluation mechanism of humanities and social sciences. It mainly includes the conflict between academic standards and nonacademic standards; the conflict between basic theoretical research standards and applied research standards; the conflict between local standards and international standards; the conflict between innovative standards and normative standards; the conflict of criteria of different evaluation objects and the conflict of qualitative and quantitative criteria; the subject and procedure of the evaluation of humanities and social sciences; the re-evaluation of evaluators and evaluators of humanities and social sciences; the lack of innovation in the evaluation of humanities and social sciences; the insufficient research on the complexity of the achievements of humanities and social sciences; the ignorance of problem of non-single evaluation index of humanities and social sciences; the insufficient research on the limitations of evaluation methods; the ignorance of the problem of localization of evaluation of humanities and social sciences [2]. Thus, the feasibility of the current scientific research evaluation mechanism of humanities and social sciences is not enough. When establishing the evaluation mechanism of scientific research performance of humanities and social sciences, managers should fully consider all aspects of the evaluation mechanism, combine the characteristics of humanities and social sciences, and comprehensively improve its feasibility.

2.3 Principle of combining qualitative evaluation with quantitative evaluation

Li (2010) stated that institutional innovation in the evaluation mechanism of humanities and social sciences research scientific research included combining qualitative evaluation with quantitative evaluation [3]. The qualitative evaluation method is a subjective evaluation method based on the evaluator's subjective judgment. The evaluator gives a direct judgment on the academic value and level of the evaluation object. Quantitative evaluation method is an objective evaluation method which is to find the operational quantitative index to measure the difference to reflect the "quantitative difference" which is difficult to quantify. In the evaluation of scientific research performance of humanities and social sciences, managers should combine qualitative and quantitative criteria.

2. Research process

Table 1: The CITC and reliability test

Measured Items	CITC	Cronbach's Alpha if Items Deleted	Cronbach's Alpha

Q1	0.584	0.574	0.952	0.953	0.952	0.948	0.953
Q2	0.602	0.800	0.950	0.950			
Q3	0.733	0.710	0.949				
Q4	0.768	0.689	0.950				
Q5	0.791	0.718	0.949	0.950	0.953	0.949	
Q6	0.533	0.748	0.949	0.949	0.949	0.949	
Q7	0.741	0.769	0.949				
Q8	0.781	0.783	0.949				
Q9	0.766						
Q10	0.754						
Q11							
Q12							
Q13							
Q14							
Q15							
Q16							
Q17							
Q18							

In order to explore the problems of the evaluation mechanism of scientific research performance, the researcher designed the questionnaire index system from the aspects of evaluation criteria, evaluation subjects and evaluation procedures based on related literature. Five-level Likert scale was conducted to collect data. In order to determine the reliability and validity of the questionnaire, the study conducted a small sample survey of humanities and social sciences teachers in A university through stratified sampling with 100 electronic questionnaires. 93 questionnaires were recovered with a recovery rate of 93%. After excluding invalid questionnaires, 89 valid questionnaires were obtained. Thus, effective recovery rate was 89%. The reliability and validity of the questionnaire are as follows. As shown in Table 1, the overall reliability of the questionnaire is 0.953, and all the measurement items pass the reliability test. According to the rotated component table (Table 2), it can be seen that 3 factors are obtained. Factor 1 contains 8 measured items. The factor loading coefficient for each measured item of factor 1 is between 0.682 and 0.863. The factor reflects the factor of evaluation criteria. Factor 2 contains 6 measured items. The factor loading coefficient for each measured item of factor 2 is between 0.706 and 0.817. The factor reflects the factor of evaluation subjects. Factor 3 contains 4 measured items. The factor loading coefficient for each measured item of factor 3 is between 0.697 and 0.798. The factor reflects the factor of evaluation procedures. The KMO value of the questionnaire is 0.921. It indicates that the validity of the questionnaire is good and it can be used for formal investigation.

After determining the feasibility of the questionnaire, 1000 electronic questionnaires were distributed to 1000 teachers of humanities and social sciences in 10 universities, and 972 were recovered. After excluding invalid questionnaires, 953 valid questionnaires were obtained, with an effective recovery rate of 95.3%. The overall reliability of the questionnaire is 0.952 and the KMO value of the questionnaire is 0.923.

Table 2: The rotated component of the scale

Measured items	Factor loading coefficient			Communality
	Factor 1	Factor 2	Factor 3	

Q1			0.697	0.646	
Q2			0.763 0.763	0.649	0.704
Q3			0.798	0.722	0.777
Q4				0.825	0.834
Q5	0.804	0.846		0.726	0.759
Q6	0.863	0.782		0.758	0.701
Q7	0.808	0.823		0.715	0.802
Q8	0.732			0.780	0.801
Q9	0.682			0.650	
Q10				0.757	
Q11				0.785	
Q12					
Q13		0.817	0.757		
Q14		0.781	0.706		
Q15		0.706			
Q16		0.800			
Q17					
Q18					

3. Results

The main problems of scientific research performance evaluation mechanism of humanities and social sciences are analysed and summarized through the collected data. The results show that the main problems of scientific research performance evaluation mechanism of humanities and social sciences include the following three aspects. Firstly, according to the survey results, all universities have established a performance appraisal system centred on quantitative indicators. Universities emphasize the quantitative evaluation of scientific research achievements of humanities and social sciences teachers, but ignore the assessment of teachers' scientific research ability. Some universities clearly specify the number of academic papers that teachers need to publish in each employment term, which leads to teachers ignoring the significance of scientific research. This kind of system cannot supervise the process of scientific research activities, nor can it supervise the scientific research behaviour of teachers. The mechanism is not conducive to the reflection of the value of teachers' scientific research [4].

Secondly, according to the survey results, evaluation standards of evaluating the scientific research performance of humanities and social sciences teachers need to be improved in some universities. For example, the evaluation criteria of different types of teachers in the classification evaluation are not detailed enough, and the evaluation criteria cannot be scientifically and carefully formulated according to the characteristics of different levels of teachers. In addition, administrative staff in some universities are more involved in the formulation of scientific research performance evaluation standards which has a negative impact on teachers' scientific research performance evaluation [5].

Thirdly, according to the survey results, the evaluation subjects in the scientific research performance evaluation mechanism of humanities and social sciences in universities mainly include research managers, peer experts, etc. In some universities, most of the scientific research managers occupy the dominant position in the evaluation subject. There are few opportunities for teachers to participate in evaluation work which could cause conflicts of management and evaluation and bring great resistance to the implementation of scientific research performance management in universities [6].

4. Discussion and Conclusion

The study finds that the main problems of the current scientific research performance evaluation mechanism of humanities and social sciences include the over-quantitative evaluation indicators, the undetailed evaluation criteria and the undiversified evaluation subjects. Based on this, the study puts forward the following suggestions. Firstly, universities should strengthen quality indicators. In order to establish a scientific and reasonable evaluation mechanism of scientific research performance in humanities and social sciences, universities need to strengthen the quality index, balance the relationship between quantity and quality, and pay attention to the innovation quality of research results. Universities should make good use of qualitative evaluation methods in evaluation according to the diversity of research results in humanities and social sciences, and emphasize the innovation and academic value of research results, rather than over-emphasizing the number of scientific research papers and the number of scientific research funds [7]. Secondly, universities should refine the evaluation criteria. Universities can make use of bibliometrics to study and refine evaluation indicators [8]. In addition, universities should constantly explore the establishment of classification evaluation methods and formulate different evaluation standards according to different categories of teachers. Universities should reduce the requirements for scientific research and emphasize on the teaching effect of humanities and social sciences teachers who undertake a large number of course teaching tasks. Meanwhile, in the scientific research assessment, universities should establish scientific evaluation methods to evaluate the scientific research work of humanities and social sciences teachers based on the characteristics of discipline, appropriately extend the evaluation period, reduce the pressure of scientific research on teachers, and promote them to produce more high-quality academic achievements. Third, universities should construct diversified evaluation subjects. The evaluation subjects of the scientific research achievements of humanities and social sciences in universities should be diversified, rather than limited to the administrative administrators of scientific research in universities. The various organizations or individuals should be comprehensively considered [9].

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References

- Lu H. (2009). *Study on the output assessment system of humanities and social science in Shaanxi Normal University. Technology and Innovation Management*, 30(05), 570-572.
- Liu D C. (2009). *A survey of evaluation of China's humanities and social science research. Journal of Chongqing University (Social Science Edition)*, (1), 54-59.
- Li H. (2010). *The research on humanities and social science achievement evaluation mechanism in universities. Journal of Beijing Information Science & Technology University*, 12, 13-15. DOI: 10.16508/j.cnki.11-5866/n.2010.s1.010.
- Zhu C. (2012). *On incentive mechanism of scientific research of liberal arts teachers in local engineering colleges and universities. Journal of Anhui Science and Technology University*, 26(03), 123-125.
- Yu Y, Ke Q S, Feng R X, Fu Y L (2022). *The dilemmas and solutions of the scientific research evaluation of humanities and social science teachers in colleges and universities-Taking Beijing A university as an example. Journal of Beijing University of Chemical Technology (Social Sciences Edition)*, (04), 105-111.

- Zhang E M, Shi W B. (2022). Study of scientific research performance evaluation of humanities teachers in local universities. Scientific Management Research, 40(03), 76-32. DOI: 10. 19445/j. cnki. 15-1103/g3. 2022. 03. 009.*
- Lin C L. (2011). Exploration of the evaluation of research achievements in the humanities and social sciences. Journal of Higher Education Management, 5(02), 42-45. DOI:10. 13316/j. cnki. jhem. 2011. 02. 012.*
- Ren Q E. (2010). On the evaluation of research achievements of humanities and social sciences. Journal of Chongqing University (Social Science Edition), 16(01), 115-118.*
- Tan C H, Wang L. (2014). Research on the supporting system for evaluation mechanism of universities' humanities and social science. Journal of Macro-quality Research, 2(01), 102-109. DOI:10. 13948/j. cnki. hgzyj. 2014. 01. 005.*