From “Journal-based Evaluation” to “Contribution-Based Assessment” - Why a Prior Consensus on the “Laws of Life Development” Must Be Rebuilt

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Abstract

In March 2026, the National Science Library of the Chinese Academy of Sciences announced that it would no longer update or release its Journal Ranking Tables (also known as the CAS journal ranking lists) from that year. While superficially a technical adjustment, this decision in fact reveals a deep crisis within the current research evaluation system. As the direction of reform shifts toward “evaluating research based on its contribution to society”, a fundamental question is brought to the fore: What constitutes “contribution”? This paper argues that the existing evaluation system contains a fundamental blind spot. It only quantifies and assesses researchers’ tangible outputs such as papers, patents, and awards, while ignoring a critical and continuously operating dimension of social impact. Specifically, as a human being, a researcher exerts a sustained influence on the physical and mental health and cognition of those around them through their own physical and mental state, defined here as the “human environment”. Through this everyday interpersonal interaction, this influence profoundly shapes the development of families, organizations, and even society as a whole. The existing evaluation system fails to see this kind of impact because it lacks an understanding of the mechanism by which “the human being itself functions as an environment”. This paper does not attempt to provide a complete evaluation framework. Its value lies in identifying the aforementioned blind spot and highlighting a necessary path to address it. To fill this blind spot, cross-disciplinary collaboration is required to rebuild a basic consensus on the “laws of life development”. This consensus should prioritize exploring the mechanisms by which an individual’s physical and mental state constitutes a “human environment”. It should also clarify how such an environment influences those nearby and how it accordingly promotes or hinders the sustainable development of collective life. In addition, it should address how to foster innovative capacity at both individual and collective levels. Only on the basis of such a consensus can a new evaluation system be established - one genuinely grounded in the criterion of “Whether it promotes the sustainable development of life”.

Keywords

Research evaluation, Journal-based evaluation, Contribution, Human environment, Laws of life development

Introduction

The decision of the Chinese Academy of Sciences to discontinue its Journal Ranking List has opened a critical window for reforming research evaluation. As the focus shifts from “journal-based metrics” to “societal contribution”, a fundamental question emerges: What counts as contribution? Current evaluation systems share a blind spot - they measure quantifiable outputs (papers, patents, awards) while completely overlooking another real and consequential dimension of impact: the researcher’s own state of being, which constantly shapes the cognition, emotion, and behavior of those around them. This paper identifies this blind spot and argues that rebuilding a cross-disciplinary consensus on the laws of life development is the necessary precondition for any meaningful reform of research evaluation [1].

The problem: The evaluation crisis behind the discontinuation of journal ranking tables

On March 27th, 2026, the National Science Library of the Chinese Academy of Sciences issued a statement announcing that it would no longer update or release its Journal Ranking Tables (also known as the CAS journal

ranking lists) from 2026 onward. This decision marks the official retirement of the CAS journal ranking tables after twenty-two years of operation, and has sparked extensive discussion within the academic community. While superficially a technical adjustment, its deeper significance lies in the fact that the "journal-based evaluation" model - centered on journal rankings and impact factors - is now facing a profound crisis of legitimacy.

At the same time, a university president publicly stated that future research evaluation should shift toward "research's contribution to society". This view quickly became a focal point of discussion, yet a more fundamental question has emerged: What constitutes "contribution"? By what criteria should societal contribution be assessed [2]?

Without rigorous addressing of this question, "contribution-based assessment" risks deviating from "journal-based evaluation" toward "vote-based evaluation" or evaluation shaped by the will of certain authorities. None of these alternative models can genuinely foster the sustainable development of scientific innovation [3].

A common blind spot in existing evaluation systems

Whether they rely on impact factors, citation counts, journal rankings, or simplistic statements of "social benefit", existing evaluation systems share a fundamental blind spot: They measure only researchers' quantifiable outputs (papers, patents, awards), yet completely overlook another real and continuously effective dimension of social impact [4].

This overlooked dimension in existing evaluation systems is the researcher as a whole person, particularly their physical and mental state, which we term the "human environment". This term refers to the dynamic interpersonal field formed by an individual's resonance that can be perceived by others. As our decade-long research demonstrates, this field continuously shapes people's emotions, cognition, and behavior. Researchers are no exception. A researcher's physical and mental state - whether calm or anxious, open or closed, energetic or exhausted - exerts a sustained influence on colleagues and family members with whom they interact.

This continuous interpersonal impact further shapes the sustainable development of the family, the organization, and even society as a whole [5].

Following the high degree of disciplinary fragmentation in the modern era, we have lost a cross-disciplinary consensus on what constitutes "conditions conducive to the sustainable development of life". Biology centers its discourse on survival and reproduction, while economics focuses on growth and efficiency. Psychology, education, and medicine each adopt distinct core concerns: happiness and adaptation, competence and qualities, as well as disease and cure, respectively. Each discipline relies on its own conceptual framework and thus fails to form a shared yardstick for defining "contribution". Against this backdrop, it is exceedingly difficult to determine the criteria for assessing "social contribution" [6].

However, in our preliminary research, we have observed correlations among an individual's physical and mental state, cognition, and behavior. In other words, multiple disciplines or cross-disciplinary initiatives may start from the observer's own lived experience of life and examine the correlation between one's physical and mental state, cognition, and behavior. Through this approach, different disciplines could identify a common thread that underlies the laws of life development [7].

Core argument: Rebuilding a consensus on the "laws of life development" as a prerequisite for evaluation reform

To determine whether a piece of research is "contributive", we must return to a more fundamental question: If both individuals and collectives are regarded as living entities (a term used here to encompass both biological organisms and social wholes), what are the laws governing the sustainable development of life? Among human-related factors, what creates obstacles to sustainable development?

We propose that the natural sciences, the social sciences, and the humanities - together with research communities in traditional culture and civil scientific exploration groups - join forces to re-explore the laws of sustainable life development. The first step is to clarify the phenomena of unsustainable life development (decline and death), and then to identify what can reverse the trend of decline and restore vitality (sustainable development).

In our observations, we have found that living entities tend to develop from order to disorder, from vitality to

decline and death. However, based on our team's decade-long accumulation of phenomenological observation research, we have noted that human individuals and collectives, possessing self-awareness, are not simply destined to passively slide toward this trend. For example, living entities may reach a critical point before health declines into disease or enter the early stage of a shift from order to disorder. Through self-awareness of their own state and shifts in their life cognition, such entities can actively reverse this downward trajectory and return to a pathway of sustainable development.

This capacity for "reversal" is the most critical mechanism within the laws of life development, and the one most in need of cross-disciplinary investigation.

Based on this understanding, we propose that only by establishing a cross-disciplinary consensus on the laws of life development - particularly this mechanism of reversal - can we provide an epistemological foundation for a new research evaluation system [8].

Preliminary directions: Several exploratory dimensions from "individual-interpersonal field interaction" to "sustainable development of life"

In the process of cross-disciplinary collaboration to explore the laws of life development, the following dimensions merit priority attention. These dimensions are based on our team's preliminary phenomenological observation and cannot yet be precisely quantified, but they may serve as a starting point for joint cross-disciplinary research.

Individual level

(1) To explore the correlation between an individual's physical and mental health and his or her cognition and behavior.

(2) To explore immediate and sustained changes in an individual's physical and mental health status through interaction with the "human environment" [9].

Collective level

(1) To explore how an individual's physical and mental health contributes to relational health within the collective "human environment" [10].

(2) To explore the relationship between relational health within the collective "human environment" and the innovative capacity of both individuals and collectives.

Reversal mechanism level

(1) To core explore the key pathways for reversing the developmental trajectory from "decline/disorder" toward "vitality/order".

(2) From the perspective of physical and mental health, to explore methodologies of "reversal" suitable for the general population.

The level of innovative capacity development

Innovative capacity, as a core criterion of research evaluation, has been repeatedly observed in our preliminary research to be associated not only with an individual's physical and mental health but also, to a significant extent, with the degree of relational harmony within the "human environment" in which the individual is situated. This involves two interrelated levels. The first is the state of the researcher's own "human environment". The second is the condition of the collective "human environment" field in which the researcher is embedded, namely the overall atmosphere of the team or organization, including whether it has mechanisms to transform interpersonal relationships from conflict to harmony.

A researcher with a sound physical and mental state and harmonious interpersonal relationships is better able to form high-quality co-creative relationships with the surrounding "human environment". Consequently, his or her innovative behavior exhibits greater breakthrough potential and sustainability. Conversely, a researcher who is anxious, self-suppressed, or embedded in tense relationships - even one with exceptional personal talent - will encounter more obstacles to co-creation with the surrounding "human environment", thereby limiting the emergence of collective innovative capacity.

Therefore, the exploration of mechanisms underlying "innovative capacity development" should not be confined to individual-level factor analysis in cognitive psychology or management studies. Rather, it should become one of the priority topics within the study of the "laws of life development". The key question is this: How does innovative capacity emerge from the generative interaction between a healthy "human environment" and an individual's conscious awareness?

The above-proposed dimensions are not groundless; they are grounded in long-term, cross-disciplinary observation. Regarding how to proceed from the researcher's own lived experience of life to cross-disciplinary collaborative observation of these dimensions, as well as a set of operational research

paradigms (including observational methods, recording frameworks, and preliminary indicators), we will elaborate in detail in subsequent research [11].

Conclusion

The discontinuation of the CAS journal ranking tables has opened a rare window of opportunity for research evaluation reform. However, we must clearly recognize that if the reform merely replaces one set of quantitative indicators with another - such as a "social impact score" or "media coverage counts" - it is unlikely to achieve meaningful change.

Genuine reform requires scholars from all disciplines to acknowledge a fundamental fact: We know very little about the "laws of sustainable life development". We lack a cross-disciplinary, communicable, and cumulative cognitive framework for determining whether a given piece of research promotes or hinders the sustainable development of life - for individuals and for collectives alike.

This paper does not claim to have found a complete solution for assessing "contribution". Its value lies in drawing attention to a neglected issue: If the measure of "contribution" is to be linked to the sustainable development of individuals and collectives, then we must first return to the question of what the laws of sustainable life development are. Scholars from various disciplines need to explore these laws through observation of phenomena. However, the existing observational paradigm suffers from a fundamental blind spot: It cannot access the real impact of the researcher, as a "human environment", on the phenomena of life. To fill this blind spot, a methodological shift may be necessary: Researchers across disciplines need to return to first-person observation of their own life phenomena (both internal and external), and gradually develop a shared observational language and recording framework through cross-disciplinary dialogue.

Therefore, we call for the following: Before rushing to design new evaluation indicators, scholars from all disciplines should first join forces to reexamine our cognitive presuppositions regarding the "laws of life development". This is the epistemological foundation upon which any new evaluation system must rest. Without this prerequisite, any discussion of "contribution" will be built on sand.

The true significance of the discontinuation of the CAS journal ranking tables may well lie in the fact that it compels us to pause and return to this most fundamental question.

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Conflicts of Interest

The authors declare no conflict of interest.

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