

# "How can graduate student training be a two-way journey?" The construction of the relationship between graduate students and supervisors from the perspective of social exchange theory with the aim of value co-creation

Lingpeng Mao

Wenzhou Medical University, Wenzhou Zhejiang, 325035

**Abstract:** During postgraduate education, the supervisor-postgraduate relationship is the most important interpersonal bond, and a healthy such relationship serves as a crucial prerequisite for improving the quality of postgraduate cultivation and advancing academic research. From the perspective of social exchange theory, the alienation of the supervisor-postgraduate relationship stems from three internal mechanisms: rewards and costs, comparison and choice, and the principle of equity. Starting from four core elements—value consensus as the guide, value symbiosis as the foundation, value sharing as the link, and value win-win as the driving force—this paper explores the dimensions of value co-creation in the supervisor-postgraduate relationship, and seeks effective paths to realize their coordinated development.

**Keywords:** Social Exchange Theory; Supervisor-Postgraduate Relationship; Value Co-creation

**DOI:**10.12417/3029-2328.26.02.016

## 1. Introduction

Postgraduate education is a vital human resource for China to enhance its comprehensive national strength. It also represents the highest level of higher education and the primary channel for independently cultivating top-notch innovative talents, serving as a key indicator of a country's competitiveness in higher education. According to statistics from the Ministry of Education, China enrolled 1.3017 million postgraduates in 2023, an increase of 4.76% compared with 2022, with the total number of enrolled postgraduates reaching 3.883 million. Meanwhile, the number of postgraduate supervisors has been on a steady rise, amounting to approximately 557,000 by 2022. However, the growth rate of supervisors fails to fully match that of postgraduates, leading to an unbalanced supervisor-to-postgraduate ratio. Taking the 2021 statistics from the Ministry of Education as an example, each supervisor guided an average of more than 2.1 postgraduates, a notable increase from 1.71 in 2012.

The responsibilities and scope of work of postgraduate supervisors have also been clearly defined at the policy level. In 2020, the Ministry of Education issued *Several Opinions of the Academic Degrees Committee of the State Council and the Ministry of Education on Further Strictly Regulating the Quality Management of Academic Degrees and Postgraduate Education*, which refined the main responsibilities for postgraduate cultivation, thesis writing and degree awarding, the quality control responsibilities of supervisors, and the mechanism for handling academic misconduct. The issuance of this document has further highlighted the pivotal role of the supervisor-postgraduate relationship in postgraduate education.

Nevertheless, with the expansion of postgraduate enrollment and the growing attention to higher education, isolated "public opinion incidents" caused by conflicts and disputes between individual supervisors and postgraduates have pushed the once-concealed supervisor-postgraduate relationship into the spotlight of social public opinion. It has become a collective phenomenon closely watched by netizens, widely discussed by college students and highly concerned by the public. Such incidents have exerted a rather negative impact on the involved supervisors and postgraduates, the reputation of the relevant universities, and the overall development of postgraduate education.

## **2.Theoretical Analysis of the Supervisor-Postgraduate Relationship from the Perspective of Social Exchange Theory**

### **2.1 The Development of Social Exchange Theory**

In the 19th century, classical economists such as Adam Smith and David Ricardo put forward the basic assumption that "individuals are rational economic agents pursuing maximum material interests when transacting with others in the market", which laid the foundation for the development of social exchange theory. In the early 20th century, behaviorist psychologist B.F. Skinner proposed the fundamental theory that "reinforcement (i.e., providing certain rewards) is the basic law for the formation and change of behavior" through his "Skinner box experiments".

George Homans argued that interpersonal interactions involving emotions, rewards, resources, and justice are essentially an exchange process. Peter Blau defined social exchange as voluntary behaviors that individuals expect from others and are motivated to engage in for such exchanges. Social exchange theory holds that principles such as rationality, reciprocity, equity, marginal utility, and imbalance should be abided by in both the states of breaking and restoring balance.

### **2.2 Internal Mechanisms of the Alienation of Supervisor-Postgraduate Relationship under the Framework of Social Exchange Theory**

#### **2.2.1 The Issue of Rewards and Costs in the Alienation of Supervisor-Postgraduate Relationship**

The reward and cost principle of social exchange theory emphasizes the diversity of rewards, which include not only material benefits such as money and goods but also spiritual rewards like praise, respect, and a sense of accomplishment. Interactions between supervisors and postgraduates often involve the transmission and feedback of knowledge, experience, emotions and other aspects, resulting in either immediate direct rewards or long-term indirect rewards.

For instance, postgraduates invest time and energy in their supervisors' research projects, expecting academic guidance, research resources and support for future career development. In return, supervisors, by imparting knowledge and experience, expect postgraduates to produce outstanding research results that contribute to their academic reputation and the development of their research teams. Both supervisors and postgraduates anticipate tangible outputs and direct rewards during the postgraduate cultivation stage, and the tug-of-war over interests between the two parties may lead to tension, alienation and even confrontation in their relationship.

#### **2.2.2 The Issue of Comparison and Choice in the Alienation of Supervisor-Postgraduate Relationship**

Comparison and choice in social exchange theory are mainly reflected in the motivation and impact of the principle of rational decision-making and the pursuit of maximum interests. When engaging in social interactions, both supervisors and postgraduates weigh various possible options and make decisions based on the evaluation of costs and benefits.

For example, postgraduates often choose supervisors with high academic prestige and administrative positions in the hope of enhancing their research capabilities through better platforms. However, such supervisors may lack the energy to fulfill their cultivation responsibilities, and individual supervisors may even assign the mentoring work to associate supervisors, third supervisors or their own doctoral students. Similarly, supervisors tend to prefer postgraduates with strong research potential and abundant energy, but some postgraduates may not demonstrate such capabilities during the cultivation process. Although the motivation for the choices of both parties is rational, the conflict between expectations and reality may lead to the alienation of their relationship.

#### **2.2.3 The Issue of Equity in the Alienation of Supervisor-Postgraduate Relationship**

The equity principle of social exchange theory is often determined by the subjective evaluation of input and output by both supervisors and postgraduates. They perceive the relationship as equitable when they believe their contributions are proportional to the benefits they receive, and inequitable when the opposite is true. The issue of "equity" permeates all aspects of postgraduate cultivation, including academic power, interest distribution, academic

career planning and emotional investment.

For example, a supervisor may subjectively feel that he or she has invested a great deal of energy in guiding postgraduates, but the postgraduates' research results fail to meet expectations, leading to a mismatch between the supervisor's input and output. Some postgraduates may feel that they have made tremendous efforts but receive insufficient guidance and resources, failing to realize their expected rewards, which in turn undermines their enthusiasm and satisfaction with the supervisor-postgraduate relationship.

### **3.The Structure of Value Co-creation in the Supervisor-Postgraduate Relationship from the Perspective of Social Exchange Theory**

From the perspective of social exchange theory, the interactions in the supervisor-postgraduate relationship are manifested in terms of rewards and costs, comparison and choice, and equity, reflecting that this relationship transcends the simple "teaching-learning" dynamic and provides us with more in-depth reflections on its practical dimensions. In 2004, C.K. Prahalad and V. Ramaswamy first proposed the concept of "value co-creation", arguing that value must be jointly participated in and created by multiple parties. The term "jointly" refers to the process in which members co-construct a social value system by integrating their resources and interactions. The concept of value co-creation offers a new perspective to transcend individualism and break the alienation of the supervisor-postgraduate relationship from a social systematic level.

#### **3.1 Value Consensus as the Guide for the Supervisor-Postgraduate Relationship**

Value consensus is the starting point of value co-creation in the supervisor-postgraduate relationship, requiring supervisors and postgraduates to reach agreement on values, goals and expectations. In the traditional postgraduate education system, postgraduates are implicitly regarded as "already cultivated college students" and supervisors as "experienced senior professors". However, in reality, misunderstandings may arise between supervisors and postgraduates right at the starting point of pursuing mutual engagement.

As the implementers of postgraduate education policies, university graduate schools and cultivation units should promote the joint clarification of postgraduate cultivation goals by both parties, including academic goals, career goals and personal development goals. Through the clarification of cultivation goals, supervisors and postgraduates can reach a consensus on values and expectations. It is also essential to encourage frequent communication and interaction between them to foster mutual understanding.

#### **3.2 Value Symbiosis as the Foundation for the Supervisor-Postgraduate Relationship**

Value symbiosis is the foundation of value co-creation in the supervisor-postgraduate relationship, referring to the joint creation of value by supervisors and postgraduates in an interdependent and mutually promoting relationship. At the level of value symbiosis, supervisors and postgraduates should realize resource sharing and complementary advantages to co-create value together.

Supervisors can cultivate postgraduates' innovative and practical abilities through guiding their learning and research, thereby nurturing high-quality talents for society. In return, postgraduates can provide support for supervisors' research and teaching work through their own efforts and contributions, thus achieving value symbiosis.

#### **3.3 Value Sharing as the Link for the Supervisor-Postgraduate Relationship**

Value sharing is an important link in value co-creation, referring to the joint sharing of value outcomes by supervisors and postgraduates in the process of value creation. Universities and cultivation units should improve relevant mechanisms and advocate value sharing between supervisors and postgraduates. This can be achieved through sharing research achievements, academic outcomes and practical results, which enhances the sense of accomplishment and honor of both parties.

Supervisors should be encouraged to perform well in daily teaching management and academic support, and to share learning and research experiences such as research methods and academic thinking with postgraduates, so as to

achieve common progress for both sides.

### 3.4 Value Win-Win as the Driving Force for the Supervisor-Postgraduate Relationship

Value win-win is the important driving force for value co-creation in the supervisor-postgraduate relationship, representing the maximization of interests for both parties in the process of value co-creation. To achieve a value win-win situation, supervisors and postgraduates should rationally allocate research resources, academic resources, social resources and other types of resources to ensure that both parties receive sufficient resource support in the process of value co-creation.

They can jointly formulate learning and research plans, as well as career development plans. The joint formulation of plans clarifies the development direction and goals of both parties, thus realizing a value win-win outcome.

## 4. Conclusion

The concept of shared value in social exchange theory provides us with a new perspective to view the supervisor-postgraduate relationship beyond individual interactions. We should focus on the more consistent dimensions of the supervisor-postgraduate relationship, take value consensus as the guide, consolidate the foundation of value symbiosis, strengthen the link of value sharing, and ultimately achieve a value win-win situation.

Certainly, the construction of a value co-creation system is not a simple project. It requires the integration of resources from multiple stakeholders, including education authorities, universities, cultivation units, as well as supervisors and postgraduates themselves. Such integration is conducive to the establishment of a harmonious supervisor-postgraduate relationship, ensures the efficient and coordinated development of this relationship, and forms a multi-subject interactive structure with value co-creation as the common goal.

## References:

- [1] Department of Development Planning, Ministry of Education. *Basic Situation of National Education Development in 2023*[Z].2024-03-01.
- [2] China Accelerates the Construction of a Major Postgraduate Education Country and Steadily Moves towards a Powerful One: Over 600,000 Doctors and 6.5 Million Masters Trained in a Decade[N]. *China Education News*,2022-06-15.
- [3] Academic Degrees Committee of the State Council, Ministry of Education. Several Opinions on Further Strictly Regulating the Quality Management of Academic Degrees and Postgraduate Education[Z].2020-09-28.
- [4] Blau P M. *Exchange and Power in Social Life*[M]. Beijing: The Commercial Press, 2017.
- [5] Prahalad C K, Ramaswamy V. Co-creation experiences: The next practice in value creation[J]. *Journal of Interactive Marketing*, 2004, 18(3): 5-14.
- [6] Ma C, Qu M Y, Wang R. Examination and Construction of the Supervisor-Postgraduate Relationship in Universities from the Perspective of the Interaction Ritual Chain Theory[J]. *Journal of Postgraduate Education Research*, 2021(6): 29-34.
- [7] Chen W Y, Ruan K. A Study on the Harmonious Construction of the Supervisor-Postgraduate Relationship: An Analysis of Supervisor-Postgraduate Matching Based on the Theory of Reciprocal Altruism[J]. *Journal of Xiamen University (Philosophy and Social Sciences Edition)*, 2023, 73(1): 109-117.
- [8] Yao W J. A Study on the Current Situation and Countermeasures of the Relationship between Postgraduates and Their Supervisors[D]. Shanghai: East China University of Science and Technology, 2022.
- [9] Wu Y Y. An Analysis of Supervisor-Postgraduate Exchange Behavior Based on the Reciprocity Theory[J]. *Journal of Yangzhou College of Education*, 2020, 38(4): 63-68.
- [10] Wang B C. Inducement, Logical Mechanism and Countermeasures of Academic Moral Risks Caused by the Disorder of the "Supervisor-Postgraduate Relationship"[J]. *Journal of Jiangxi Normal University (Philosophy and Social Sciences Edition)*, 2023, 56(3): 50-57.