A Review of Domestic Research on Teacher-Student Interaction

Wenlan Jiang* Chengliang Chen

Anhui Vocational College of Press and Publishing, Hefei, Anhui, 230601, China

Abstract: By setting the option of "higher education discipline" by searching the keywords "teacher-student interaction", "teacher-student communication", "tutor", etc. on CNKI net, a total of 162 Chinese papers were obtained, and according to the differences of different research fields and research objects, they are divided into three categories in this paper: research on teacher-student interaction based on different groups, research themes of teacher-student interaction and theoretical traceability of teacher-student interaction.

Keywords: Teacher-student interaction; Research review; Teacher-student communication; Theoretical traceability

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1. The Concept of Teacher-Student Interaction

Most scholars believe that teacher-student interaction is an interactive system that occurs in multiple contexts, with multiple forms and contents, "a social relationship based on the learning and communication behavior between teachers and students, and a kind of exchange of knowledge, thoughts and emotions that mutually influence. This includes both teacher-student interaction that occurs in the classroom teaching context and teacher-student interaction that occurs outside the classroom [1]." ("Study on the Influence of Teacher-student Interaction on the Adaptability of Liberal Arts Postgraduate Students to Learning"). Some scholars believe that in the teacher-student interaction, there are various forms, various natures, and various degrees of psychological interaction or behavioral interaction in a certain classroom teaching environment.

Professor Wu Kangning analyzed the process of teacher-student interaction from the perspective of educational sociology. The first is the process of defining the interactive situation by teachers, involving teachers' general concepts and teachers' understanding and expectations of students. The second is the process of defining the interactive situations by students, which depends on students' general concepts and students' understanding and expectations of teachers. The third is the collision process between teachers and students, that is, the process of trying to change each other in the interaction between teachers and students. The fourth is the adjustment process be-

tween teachers and students, and the interpretation and re-understanding between teachers and students.

2. The Study on Teacher-Student Interaction between Different Groups

2.1 About the Interaction between Supervisors and Postgraduate Students

This kind of literature analyzed the current differences in teacher-student interaction, problem countermeasures, interaction types, interaction modes and influencing factors between supervisors and postgraduate students.

With the help of theory and foreign research results, Cai Xiang, et al. sorted out the current types and modes of teacher-student interaction, and divided supervisors into five types according to the "management grid theory": "poor type, caring type, team-oriented type, task-oriented type, mass type/moderate type". From the perspective of "Emotion-Academic", four modes of "supervisor-postgraduate student interaction" were obtained, namely "family interaction", "comprehensive interaction", "herding type interaction, and "target interaction" (Analysis of Postgraduate Student Supervisor Types and "Supervisor-Postgraduate Student" Interaction Modes). Song Xiaoping directly quoted the research results of foreign scholars and identified eight types of teacher-student interaction from the four dimensions of cooperation between teachers and students, resistance, coercion and obedience: "leader type, help/friendliness type, understanding type, giving-students-freedom-and-responsibility type, vague/unclear type, dissatisfied type, admonishing type,

and strict type ^[2]". (Research on the Interaction between Teachers and Students in the Training Process of Doctoral Students)

In addition, some literature has empirically analyzed the motivation, behavior and influencing factors of teacher-student interaction, for example, for the independent variables of the paper "Research on the Relationship between Teacher-student Interaction Motivation and Behavior from the Perspective of Postgraduate Students", the motivation of scientific research projects, motivation of curriculum and employment, motivation of emotional communication, life value motivation, achievement motivation and further study motivation were set up from the perspective of students. The behaviors between teachers and students were used as the dependent variable, including the frequency, duration, mode, atmosphere, and type of teacher, and demographic variables (postgraduate student's discipline, personality, gender) were used as the control variables.

The paper "Research on the Factors Influencing Postgraduate Student-Supervisor Interaction" comprehensively summarized the influencing factors of teacher-student interaction, including supervisor factors (attitude, performance, academic level, availability), postgraduate student factors (learning attitude, professional ability, perception of interaction effects) and demographic factors (differences in personality, gender, age, etc. between teachers and students).

2.2 Teacher-Student Interaction between Tutors and Students

By searching such keywords as "tutor's teacher-student interaction", "tutor's interaction", "tutor's communication and interaction" and "tutor's communication" on CNKI net, 45 papers related to the theme of teacher-student interaction were obtained, including 3 core journal papers. In terms of the number of papers on tutors' teacher-student interaction, there are few papers, and the number of papers on core journals is lower, and the current literature is limited to the discussion of moral education. However, tutors are the most extensive, direct and frequent group in the teacher-student interaction, and have rich experience in teacher-student interaction, which is worth digging deeper into.

The literature analyzed the interaction mechanisms or modes between tutors and students, the conflict resolution of teacher-student interaction, and the relationship between teacher-student interaction and students' innovation ability from the perspectives of moral education work, professional identity, role positioning, and education methods.

On the whole, only a few of such literature use research methods of questionnaire surveys and interviews, and some use relatively novel ethnographic, philosophical speculation, interactive meta-discourse and other research methods, which are generally descriptive expressions of tutors' work experience in educating students and individual experience, although easy to understand, but lack a certain theoretical height and scientific research methods, and these papers appear thin in hierarchy and the theme structures are similar.

For example, in the classification of the types of teacher-student interaction, the classification methods of most of the literature come from the tutors' individual experience judgment, according to the relationships between tutors and students, the paper "Research on the Relationship between College Tutors and Students" divides the relationships into "leading type, teacher-student type, friend type, guidance type, mutual respect and mutual assistance type". There are also classifications based on theoretical models, for example, "authoritative-friendly type, authoritative-alienated type, liberal-friendly type and laissez-faire type" mentioned in "Analysis of the Interaction Relationship between College Tutors and Students under the Mode of Quartering Method".

Many papers draw on multiple theoretical perspectives, such as the interaction perspective, role theory, symbolic interaction, Habermas communication behavior, interactive meta-discourse, Pygmalion effect and other theoretical perspectives to cut into the teacher-student interaction research of the tutor group. For example, the paper "Return to the Co-existence and Co-prosperity of the Living World" mentioned that "In 1981, Habermas' representative work "Theory of Communicative Action" made a comprehensive and systematic division of social behaviors. Human beings' social behaviors are divided into four different types according to the different associations that occur between actors and the outside world [8]." According to Habermas' theory of communicative action, the paper reconstructed the tutor's teacher-student relationship, and proposed there are three specific ways of communicative action: sharing, dialogue and understanding. Similarly, the paper "Construction of a Multi-dimensional Model-based System for Tutors' Moral Education Work in the Context of Symbolic Interactive Communication" prompts people to pay attention to the current needs of student individuals through the situational principles of symbolic interactive thinking, and cultivate students' experience and feelings of life.

2.3 Teacher-Student Interaction among Groups by Category

A small number of papers divide different student groups from the perspectives of gender, arts and science students, first-generation and non-first-generation college students, and compare and analyze the differences in teacher-student interaction. The master's thesis "Research on Teacher-Student Interaction in Undergraduate Education Based on the Comparison of Arts and Science Majors—Taking H University as an Example" integrates constructivist theory, Habermas' communication theory and symbolic interaction theory, and sets five dimensions of the teacher-student interaction scale: student interaction participation, teacher-student interaction frequency, teacher-student interaction content, teacher interaction mode, teacher-student interaction effect, and uses statistical methods such as chi-square test and comparison of means to study the differences of arts and science students in teacher-student interaction in the above five aspects. Although the paper "Analysis of Teacher-Student Relationship Interaction in Colleges and Universities Based on Comparison of Male and Female Students" also adopts the questionnaire survey method, the investigation method is relatively simple, and only compares and analyzes the proportion of choices of male and female students on several problems in three dimensions: general understanding of teacher-student interaction, understanding of teacher-student relationship, and awareness of factors affecting teacher-student interaction.

3. Research Themes of Teacher-Student Interaction

3.1 Ideological and Political Education and Interaction between Teachers and Students

The literature adopts theoretical description, focusing on the importance of teacher-student interaction in moral education work, which is closely related to the discipline of ideological and political education, and introduces the current situation of teacher-student interaction problems, reasons and significance in detail. For example, the master's thesis "Research on the Cultivation of Socialist Core Values from the Perspective of Teacher-Student Interaction" comprehensively summarizes the problems of teacher-student interaction: "The subject of interaction lacks initiative, the methods are single, the content is deficient, and environment is poor [12]".

As a kind of social relationship, the emotional elements of teacher-student interaction have been quoted many times in literature. "It has the characteristics of commonality, equality, and emotion [13]." (Multidimen-

sional Reflections on Teacher-Student Interaction in the Process of Moral Education)

3.2 Teacher-Student Interaction Based on Communication Behavior

The concept of teacher-student communication is broader than that of teacher-student interaction in terms of range, and has philosophical connotations, and it can even be considered that teacher-student interaction is part of teacher-student communication. "The deep meaning of teacher-student communication lies in making people become human and making people live a meaningful and valuable life through learning in communication. Teacher-student communication should not be understood as the background, conditions and means for teachers and students to complete educational or teaching tasks, or narrowed to teaching, a means of knowledge transfer [14]." (*The Deep Meaning of Teacher-Student Communication in School Education*)

A number of papers analyzed the current status and existing problems of teacher-student communication in colleges and universities through empirical research methods, and the paper "The Boundaries of Teacher-Student Communication in Chinese Universities: Students' Perspectives" points out the appropriateness of 38 communication behaviors of teachers and students in Chinese universities and the boundary problems behind them. It is believed that "the communication between teachers and students in universities has a positive role in promoting the development of college students, but the frequency of communication between teachers and students in universities is not high, the time is short, the content is single, and the communication relationship between teachers and students is loose [15]".

Some papers explore the path of constructing teacher-student communication based on Habermas' theory of communication action, and try to establish a teacher-student communication mode and mechanism, for example, the paper "The Practical Turn of Teacher-Student Interactive Communication Mode in the Digital Age" mentioned "Teacher-student communication has changed from a linear and preset mode to a non-linear and interactive mode, and there has been a practical turn in the aspects of the structure of actors, communication language paradigm, media interpretation and the context in which communication behavior occurs [16]".

From a philosophical point of view, some papers point out the relationship between intersubjectivity and teacher-student communication, the paper "Intersubjectivity: The Essential Attributes of Teacher-Student Communica-

tion Relationship" believes that "first of all, it is a social relationship, the communication relationship between teachers and students in the educational society, and intersubjectivity is the essential attribute of teacher-student communication relationship [17]."

3.3 Research on the Impact of Teacher-Student Interaction on Study and Ability

The literature on teacher-student interaction in classroom teaching are the most, the researchers not only focus on the analysis of teacher-student interaction in the classroom of specific disciplines, but also extensively explore the practical application of teacher-student interaction in classroom teaching such as teaching mode, method, effect, quality, and scene.

In addition, there is some literature studying the influencing factors of teacher-student interaction on academic achievement, learning ability, and adaptability. Most of them are mainly empirical papers, and the independent variables are usually teacher-student interaction, which can be teacher-student interaction in classroom teaching, extracurricular practice, and scientific research activities, or the trust and influence degree of teacher-student interaction can be set separately. The master's thesis "Research on the Impact of Teacher-Student Interaction on Academic Achievement of Postgraduate Students in Colleges and Universities" pointed out that "the guidance pressure of supervisors is increasing, the quality of teacher-student interaction is challenged, and the quality of postgraduate education is also greatly affected. Therefore, it is urgent to use empirical research methods to explore the influence effect and influence mechanism of teacher-student interaction on academic achievement of postgraduate students [18]."

The empirical papers mainly collect teacher and student data by questionnaire survey for statistical analysis. Questionnaire sources include the Chinese College Student Learning and Development Tracking Questionnaire (CCSS), NSSE-China, and known foreign research scales. For example, the master's thesis "Research on the Influence Mechanism of Teacher-Student Interaction on Learning Input of Postgraduate Students" mentioned that "this study uses foreign theories to divide teacher-student interaction into two dimensions and eight types for research." The questionnaire includes the Learning Input Scale, the Satisfaction Scale for the Basic Psychological Needs in Interpersonal Relationships, and the Teacher-Student Interaction Scale [19]."

On the whole, the papers mostly affirmed the positive impact of teacher-student interaction on academic achievement, learning input, innovation ability, etc., dis-

assembled the constituent factors of independent variables of teacher-student interaction, exhibited the correlation between variables in teacher-student interaction in detail, and analyzed the role of some mediating variables and control variables in the process of teacher-student interaction.

4. The Theoretical Origin of Teacher-Student Interaction

The collected literature explores the theoretical basis of teacher-student interaction from the perspectives of multiple disciplines such as philosophy, psychology, sociology and pedagogy, among which constructivism, symbolic interactionism, and Marxist practical view of communication are the more commonly cited theories.

From the perspective of the philosophical theory source of teacher-student interaction, Husserl's "intersubjectivity", developed into Habermas' theory of "communication action", and then to the Marxist "practical view of communication" (it is believed that the essence of contemporary society is a globalized communication society, which has multiple levels of communication activities, namely, material communication, spiritual communication and language communication, and people's communication practice, that is, material communication, is undoubtedly the basis of the communication society.), it reflects that the process of teacher-student interaction is a two-way, interactive and constantly evolving practice activity between teachers and students, and teacher-student interaction is based on understanding and cooperation, the aim is to make the two sides tend to be ideologically consistent. The communication theory of another famous philosopher K. Jaspers has a profound impact on educational research, his communication theory believes that communication is an important way for people to conduct emotional communication and cultural exchange. Communication is a kind of communication between subjects, and the subjects interact and are the subject to each other, not the communication between the subject and the object.

From the perspective of the sociological source of teacher-student interaction, symbolic interaction theory attaches importance to the establishment of language or emotional symbols, so as to build a good interaction situation, this is proposed by the American psychologist George Herbert Mead, he believes that symbols are the medium of social interaction, in the social interaction between the subject and the object, the self and others, through the characterization of objective things by symbols, they promote interactive communication between

people, individuals conduct experiential mutual communication with the surrounding environment and other individuals based on various social relations and social interactions to gain self-awareness in order to achieve the interaction of mind, self and society.

From the perspective of the psychological source of teacher-student interaction, the main representatives of constructivist theory are J. Piaget, et al. Constructivists hold that knowledge is not imparted by teachers, but acquired in the process of acquiring it. In the context of social culture, learners acquire knowledge and culture with the help of other people or things, including teachers, classmates, auxiliary equipment, learning materials, etc. through the construction of meaning. "Modern society construction theory not only regards learning as a process of self-construction, but also emphasizes that the cognitive structure of individuals cannot be separated from social interactions. Learning is the process of interaction between individual construction and social construction, and knowledge is the result of gradual construction in the process of interaction between individuals and the environment [21]." In a nutshell, education and teaching activities are inseparable from teacher-student interaction.

From the perspective of educational phenomenology, the master's thesis "Tracing the Meaning of Teacher-Student Communication among College Students" introduces the meaning enlightenment of phenomenology. Phenomenology is the philosophical foundation of educational phenomenology and was founded by the German philosopher Husserl. This school believes that meaning is the connection between the subject and the object, and the fit of different subjects and objects produces different meanings. The world is understandable, the world is given meaning by people, meaning is not an objective attribute of things, meaning exists in people's survival activities, and meaning comes from the collision between people and the world. When phenomenology entered the discipline of education, pedagogical methodology is produced, the phenomenological research of education in China was deeply influenced by M. Van Manen, and M. Van Manen's phenomenological pedagogy was "oriented in phenomenology, hermeneutics, and semiotics or linguistics".

The paper "Review of Teacher-Student Interaction from Multidisciplinary Perspective" published by Li Xiangling and Lei Xiangzhu in 2014 subdivides the sources of teacher-student interaction theory from the perspectives of sociology, philosophy and educational ecology, and makes a comprehensive summary of the teacher-student interaction theory in recent years. "First, from the perspective of

sociology, it is generally believed that education is a social activity to cultivate people, and teacher-student interaction is a special form of social interaction. The content of interaction includes cognitive interaction, emotional interaction, value interaction and behavioral interaction. Therefore, it includes structural functionalist theory, conflict theory, and symbolic interaction theory. Second, from a philosophical perspective, the intersubjectivity of teacher-student interaction is proposed. Intersubjectivity, also known as interactive subjectivity, is an important concept in phenomenology, hermeneutics, existentialism, and postmodernist philosophy. Husserl first proposed category and theory such as 'interactive subjectivity' in his phenomenology, and later Habermas further developed it on this basis. Habermas believes that intersubjectivity emphasizes mutual understanding, equal coexistence, and harmonious treatment between multiple subjects. 'Intersubjectivity' is an important content used by Habermas to construct the theory of communication, and his theory of intersubjective communication action has a far-reaching impact. Third, according to the 'law of limiting factors' proposed by educational ecology, he believes that teachers and students are the two most important ecological factors in the classroom ecological environment [20]."

5. Conclusions

In summary, from the analysis of the research objects of teacher-student interaction, the current literature focus on the supervisors and postgraduate students and undergraduate education teachers and students, and the research focuses most on the teacher-student interaction scene in the process of education and teaching, while there is less research on the teacher-student interaction of the tutor group, and the work practice is mostly used to replace the theoretical category of teacher-student interaction, which is limited by the phenomenon of teacher-student interaction without in-depth thinking about the essence of teacher-student interaction.

The empirical research results of all literature point to the significance and importance of teacher-student interaction in various groups, and the difference lies in the composition factors of independent and dependent variables, as well as the difference of mediating variables, which brings innovative ideas to literature analysis. For example, the empirical analysis of the "Empirical Study on the Effect of Student-Supervisor Interaction in Training of Postgraduate Students" is more complicated, and a theoretical model of vivid interaction influencing factors and effect factors is constructed, it uses influencing fac-

tors as independent variables and effect factors as dependent variables, to analyze the correlation between each other. Whereas most of the literature generally selects the type, frequency, method, and results of teacher-student interaction for research.

From the analysis of the theoretical sources of teacher-student interaction, philosophy and sociology are highly cited subject areas, among which the phenomenology, communication behavior, symbolic interaction and other theories are applied in educational activity scenes to explain the phenomenon of teacher-student communication and interaction, and give inspiration and suggestions for countermeasures, they are the common ideas after the introduction of theories in the paper. It is precisely because of the introduction of philosophical categories that the writing perspective of teacher-student communication is broader and more abstract than that of teacher-student interaction.

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References

- [1] Wang, Zh.Zh., 2009. The influence of teacher-student interaction on the adaptability of learning of liberal arts postgraduate students. Baoding: Hebei University.
- [2] Cai, X., Lv, F.F., 2010. Analysis of the types of supervisors of post-graduate students and the interaction modes of "supervisor-post-graduate students". Modern Education Management. (10), 66-68.
 DOI: https://doi.org/10.16697/j.cnki.xdjygl.2010.10.018
- [3] Song, X.P., Mei, H., 2012. Research on the interaction between teachers and students in the process of doctoral training—Based on the perspective of doctoral students. Journal of China Higher Education Research. (08), 50-54.
 - DOI: https://doi.org/10.16298/j.cnki.1004-3667, 2012.08.012
- [4] Chen, Zh.H., 2019. Research on the relationship between teacher-student interaction motivation and behavior from the perspective of students. Harbin: Harbin Institute of Technology. DOI: https://doi.org/10.27061/d.cnki.ghgdu.2019.003234
- [5] Yang, H.X., 2019. Research on the factors influencing the interaction between postgraduate students and their supervisors. Changsha: Hunan University.
 - DOI: https://doi.org/10.27135/d.cnki.ghudu.2019.001910
- [6] Liang, F.J., Zhang, W.J., Cui, J.M., 2013. Research on the relationship between tutors and students in colleges and universities. Journal of College Advisors. 5(04), 76-79.

- DOI: https://doi.org/10.13585/j.cnki.gxfdyxk.2013.04.015
- [7] Sun, Y.N., 2020. Analysis of the interaction between tutors and students in colleges and universities under the method of quartering. Journal of Modern Society. (15), 23-24.
- [8] Zhu, R.M., 2021. Return to the symbiosis and co-prosperity of the living world: On the enlightenment of Habermas' Theory of communication action on the teacher-student relationship of tutors in colleges and universities. Science Consulting (Education and Research). (05), 4-6.
- [9] Wang, J., 2012. Construction of multi-dimensional model system for tutors' moral education in the context of symbolic interactive communication. Journal of College Advisors. (02), 18-20+78.
- [10] Zhang, N., 2020. Study on teacher-student interaction in undergraduate education based on the comparison of arts and sciences. Wuhan: Hubei University.
 - DOI: https://doi.org/10.27130/d.cnki.ghubu.2020.000072
- [11] Cao, G.J., 2013. Study on the relationship interactivity between teachers and students in colleges and universities based on the comparison of male and female students. Journal of Education and Vocation. (11), 179-180.
 - DOI: https://doi.org/10.13615/j.cnki.1004-3985.2013.11.029
- [12] Zhang, X.X., 2016. Research on the cultivation of socialist core values from the perspective of teacher-student interaction. Changsha: Hunan University.
- [13] Wang, D.Y., Fu, Y.J., 2011. Multidimensional thinking on teacher-student interaction in the process of moral education. Journal of Education and Vocation. (03), 55-57.
 DOI: https://doi.org/10.13615/j.cnki.1004-3985.2011.03.034
- [14] Pu, R., 2002. The deep significance of teacher-student interaction in school education. Journal of Educational Research. (02), 53-57.
- [15] Liu, A.Sh., 2017. The boundaries of teacher-student interaction in Chinese universities: students' perspectives. Journal of Modern University Education. (02), 89-95.
- [16] Ye, N., 2016. The practical shift of teacher-student interactive communication mode in the digital era. Journal of Education Science of Hunan Normal University. 15(01), 38-43+51.
- [17] Zhang, J.M., Xiao, Y.L., 2006. Intersubjectivity: The essential attribute of teacher-student communication relationship. Journal of Heilongjiang Researches on Higher Education. (01), 174-176.
- [18] Wang, Y., 2021. Study on the influence of teacher-student interaction in colleges and universities on the academic achievement of postgraduate students. Kunming: Yunnan Normal University. DOI: https://doi.org/10.27459/d.cnki.gynfc.2021.000020
- [19] Zhang, L.Sh., 2016. Research on the influence mechanism of teacher-student interaction on learning input of postgraduate students. Wuhan: Central China Normal University.
- [20] Li, X.L., Lei, X.Zh., 2014. Review of teacher-student interaction from multidisciplinary perspectives. Teaching and Management. (09), 20-22.
- [21] Xiong, Y.F., 2020. An empirical study on the effect of "student-supervisor interaction" in the training of master degree students. Nanchang: Nanchang University.
 DOI: https://doi.org/10.27232/d.cnki.gnchu.2020.003652