

A STUDY ON SELF-EFFICACY AND JOB SATISFACTION AMONG TEACHERS IN X MIDDLE SCHOOL IN HENAN PROVINCE, CHINA

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Abstract: This study aimed to investigate the relationship between teachers' self-efficacy and job satisfaction, examined the current status of these two variables among teachers, analyzed the differences in self-efficacy and job satisfaction among teachers with different demographic backgrounds, and explored the correlation between self-efficacy and job satisfaction among teachers. A corresponding questionnaire survey was conducted using a validated scale, and a convenience sampling method was employed to survey 248 teachers at China's X Middle School in Henan Province. The following conclusions were drawn from data analysis: teachers had a high level of self-efficacy; their job satisfaction was above average. Significant differences in self-efficacy and job satisfaction existed among teachers with different teaching experiences, ages, and professional titles; partial significant differences were observed in some dimensions of self-efficacy and job satisfaction among teachers with different genders and educational backgrounds. Teachers with more teaching experience and older age had higher levels of self-efficacy and job satisfaction than those with less experience and younger age. Teachers with higher professional titles had higher levels of self-efficacy and job satisfaction than those with lower titles. A significant positive correlation was observed between teachers' self-efficacy and job satisfaction.

Keywords: Middle School, Self-efficacy, Job Satisfaction

Introduction

Education is the foundation for long-term national development, and teachers are the cornerstone of education. Teachers disseminate cultural knowledge and shoulder the crucial responsibility of nurturing the pillars of society for the country. In recent years, as the education industry has continued to deepen, the roles and responsibilities of teachers have also changed. On the one hand, teachers need to face more and more severe teaching challenges and demands; on the other hand, modern education has placed higher requirements on teachers' professional qualities and

abilities, meaning teachers need to possess richer teaching experience. Therefore, research on teachers' self-efficacy is conducive to exploring and enhancing their professional development, which undoubtedly holds great importance.

At the end of 2017, China released the "High School Curriculum Standards." In September 2019, China began to implement new curricula and textbooks across the country, initiating a new college entrance examination model. By September 2022, all regions in China had adopted and used new textbooks for the college entrance examination. The new curriculum standards emphasize students' role as the main body of learning, focus on integrating education, national policies, and real life, highlight the characteristics of the times, and cultivate students' knowledge quality and social responsibility (Zhang, 2017). Therefore, it is crucial for teachers to accurately understand and implement the ideas advocated in the new curriculum standards. In addition, high school is a period for students to receive education, so the education provided by teachers during this stage will have a significant impact on their learning.

The term "self-efficacy" was proposed by Bandura, while teachers' self-efficacy is an extension of this concept. The earliest mention of teachers' self-efficacy emerged in a school improvement program in California conducted by the RAND Corporation. Its theoretical basis is derived from Rotter's control theory of social learning theory, and subsequent research on teachers' self-efficacy mostly uses this theory as its foundation. In simple terms, teachers' self-efficacy refers to teachers' subjective judgments, perceptions, and confidence in their ability to effectively accomplish classroom teaching tasks, achieve teaching goals, and promote students' comprehensive development. Teachers' roles are not only limited to teaching and research but also play a crucial role in students' personalities and society. Therefore, in today's focus on education, promoting development, and building efficient classrooms, the concepts of teachers' self-efficacy and job satisfaction are increasingly attracting attention. What is the relationship between teachers' self-efficacy and job satisfaction? How can teachers' self-efficacy be stimulated to improve their job satisfaction? This is undoubtedly a highly valuable research topic.

Research Objectives

(1) To understand the current status of teachers' self-efficacy and job satisfaction at X Middle School.

(2) To analyze the differences in teachers' self-efficacy at X Middle School based on various demographic backgrounds (gender, teaching experience, age, professional title, and educational background).

(3) To analyze the differences in teachers' job satisfaction at X Middle School based on various demographic backgrounds (gender, teaching experience, age, professional title, and educational background).

(4) To explore and clarify the relationship between teachers' self-efficacy and job satisfaction at X Middle School.

Literature Review

Research on Teachers' Self-efficacy

The concept of Self-efficacy was first introduced by Bandura (1977), referring to individuals' predictions and judgments about their ability to perform a certain behavior. Among them, prediction is the anticipation of outcomes, while judgment is the recognition of ability. Human behavior is primarily controlled by one's abilities, which perceive the behavioral patterns adopted when dealing with tasks, influencing the level of effort and emotions. The stronger an individual's expectations, the more positive their behavior, the more sustained their effort, and the more positive their emotions.

Teachers' Self-efficacy is an extension of Self-efficacy, with its concept initially mentioned in an improvement program for a school in California by the RAND Corporation in the United States. Its theoretical foundation stems from the control theory of Rotter's social learning theory and subsequent research on teachers' Self-efficacy has largely been based on this theory as its theoretical foundation (Guskey & Passaro, 1994). However, since Bandura proposed the Self-efficacy theory within the framework of social cognitive theory, the academic community has generally believed that this theory better explains the impact of Self-efficacy on individual behavior. Since then, researchers have begun to study teachers' Self-efficacy based on Bandura's Self-efficacy theory.

A survey study by Zhu et al. (2018) involving 1,892 primary and secondary school teachers from seven provinces in China found that teachers' Self-efficacy mediates between teachers' self-concept and job burnout. Liu & Kong, (2020) found that primary and secondary school teachers' Self-efficacy in teacher-student relationships and school decision-making significantly affects their job satisfaction. Chinese scholars have also conducted extensive research on teachers' Self-efficacy. For example, Zhao & Huang (2002) studied the influencing factors of middle school teachers' Self-efficacy and found that there was no significant difference in the relationship between teachers' gender, school type, and their Self-efficacy. Zhang (2017), through a survey of middle school teachers in 16 districts of Tianjin, found that teachers' overall teaching efficacy was at a high level, and there was a high correlation between teachers' teaching abilities and their teaching efficacy. Wu (2023) found through research that learners' perceptions of teachers' support, encompassing emotional support, academic support, and social support, can positively predict Self-efficacy and learning engagement. Li (2023) found through research that gender and marital status may not be influencing factors of self-efficacy among middle school physical education teachers.

The German scholar Ralf Schwarzer developed the General Self-Efficacy Scale (GSES) in 1981, initially containing 20 items. With the deepening of research, it was later reduced to 10 items, demonstrating good reliability and validity. Since its inception, the GSES has been adopted by

researchers worldwide and is the most widely used scale, translated into 29 languages. The Chinese version of the GSES was published by Professor Zhang Jianxin and his colleagues in 1995 when surveying university students in Hong Kong. In 1984, Gibson & Dembo developed the Teacher Efficacy Scale (TES), which includes two dimensions: personal teaching efficacy and general teaching efficacy, with 30 items (Liu & Kong, 2020).

Regarding the measurement of teachers' self-efficacy, although several scales revised in foreign countries are available for use, theoretical and practical validation of these scales is still necessary when they are applied for measurement and analysis across different regions. Literature indicates that in teaching, the revision and development of Chinese-version self-efficacy scales remain inadequate, necessitating ongoing efforts to revise and develop measurement tools for self-efficacy in this domain (Li & Liu, 2000). Therefore, further exploration into the measurement of teachers' self-efficacy is indeed warranted.

Based on these considerations, the present study intends to utilize the revised Chinese-version Teacher Self-Efficacy (TSE) scale (brief version) by Wu & Zhan (2017), which consists of two dimensions: teachers' sense of efficacy in classroom management and teachers' efficacy in learning and teaching. This scale demonstrates good construct validity.

Research on Teachers' Job Satisfaction

The origins of research on job satisfaction can be traced back to the Hawthorne Studies conducted by Mayo. Hoppock (1935) was the first scholar to propose the concept of job satisfaction, defining it as the emotional response generated by employees' evaluations of their work experiences and emotional orientation. Currently, research on teachers' job satisfaction primarily focuses on exploring its influencing factors and subsequently identifying methods to enhance it. These influencing factors can be broadly divided into two categories: individual characteristics and organizational characteristics. Representative studies of the former include Marcionetti & Luciana (2022) research, which found that positive factors influencing teachers' job satisfaction include qualities, social support, and teachers' self-efficacy. Representative studies of the latter include Guo (2021) research on 760 teachers, which found a positive correlation between cooperative culture in informal groups and job satisfaction, with emotional commitment serving as a mediating factor.

In a study on the impact of kindergarten teachers' self-efficacy on job satisfaction, Hou et al. (2021) used data analysis to find a significant positive correlation between kindergarten teachers' self-efficacy and job satisfaction, as well as a significant positive correlation between occupational commitment and job satisfaction. However, occupational commitment fully mediated the relationship between self-efficacy and job satisfaction. The following are some of the scales commonly used by researchers: Firstly, the Job Descriptive Index (JDI) is a job satisfaction questionnaire that covers nine aspects with a total of 36 items, rated on a Likert 6-point scale. Secondly, the Minnesota Satisfaction Questionnaire (MSQ) exists in both a long form (with 21 sub-scales) and a short form (with 3 sub-

scales).

This study is based on a survey of teachers from X Middle School, primarily using the "Teacher Job Satisfaction Scale" compiled by Feng (1996) as a reference. The questionnaire includes five dimensions: self-actualization, work intensity, salary, leadership relationships, and colleague relationships.

Teachers' self-efficacy plays a role in students' physical and mental development, learning life, and academic status. Meanwhile, research by Trenthamll et al. (1985) showed that self-efficacy also significantly affects teachers' psychological well-being and has a notable impact on their job satisfaction. Studies indicate a significant positive correlation between teachers' self-efficacy and job satisfaction. Ye (2022) found that preschool inclusive education teachers' self-efficacy positively predicts their overall job satisfaction. This result suggests that the higher the level of self-efficacy among preschool inclusive education teachers, the higher their job satisfaction. Guo (2022) found that the higher teachers' identification with their profession, the higher their self-efficacy in educational and teaching work, and consequently, the higher their job satisfaction. Teachers' professional identity not only directly affects their job satisfaction but also indirectly enhances it through their self-efficacy.

Summary of Relevant Literature

Through a review of domestic and international literature on teachers' self-efficacy and job satisfaction, it is found that current research in China on these topics primarily focuses on higher education institutions, with relatively few studies targeting middle school teachers. Furthermore, many scholars at home and abroad study these two variables separately. However, there is empirical support for the positive predictive effect of teachers' self-efficacy on their job satisfaction, indicating a correlation between the two variables. Therefore, this study takes teachers from X Middle School in Luohe City, Henan Province, China, as the research subjects and employs a reasonable questionnaire to investigate the relationship between teachers' self-efficacy and job satisfaction, as well as the impact of different demographic backgrounds on these two variables. Using scientific research methods, this study analyzes the logical relationships among the variables and applies the research findings to the management of school teachers, thereby seeking relevant measures to improve teachers' job satisfaction.

Methodology

The survey respondents for this study were in-service teachers in Luohe City, Henan Province, China, with a total of 248 participants. During the formal survey phase, a convenience sampling method was employed. An electronic questionnaire was designed for the in-service teachers of the school using the Wenjuanxing software. The questionnaires were collected and organized within a specified time frame. In the final formal testing phase of this study, 157 questionnaires were collected, and after sorting out the invalid ones, 134 valid questionnaires remained, with an effective response

rate of 85.35%. These 134 valid questionnaires were the sample size for this study.

The original scales for Self-efficacy had Cronbach's α values of 0.892 for overall Self-efficacy, 0.901 for classroom management Self-efficacy, and 0.870 for teaching and learning Self-efficacy, all above 0.8, indicating no need for revision. Subsequently, this study conducted a reliability test on the 134 collected questionnaires. The overall Cronbach's α coefficient for the Self-efficacy questionnaire was 0.740, and the Cronbach's α coefficients for each item, after being individually deleted, were all above the criterion of 0.7, indicating good reliability and no further revision was needed.

Results

The statistical results of the basic information of the research subjects reveal the following: in terms of gender, there are 45 males, accounting for 33.6%, and 89 females, accounting for 66.4%, which aligns with the actual situation and indicates that middle school teachers are primarily female. Regarding teaching experience, 39 teachers have 10 years or less of experience, accounting for 29.1%; 51 teachers have 11 to 20 years, accounting for 38.1%; 23 teachers have 21 to 30 years, accounting for 17.2%; and 21 teachers have 31 years or more, accounting for 15.7%. In terms of age, 6 teachers are 30 years old or younger, accounting for 4.5%; 65 teachers are between 31 and 40 years old, accounting for 48.5%; 39 teachers are between 41 and 50 years old, accounting for 29.1%; and 24 teachers are 51 years old or older, accounting for 17.9%. This age distribution generally conforms to the current structure of the teacher workforce. In terms of professional titles, 4 teachers have no title, accounting for 3.0%; 59 teachers are secondary school second-grade teachers, accounting for 44.0%; 47 teachers are secondary school first-grade teachers, accounting for 35.1%; and 24 teachers are secondary school senior teachers or above, accounting for 17.9%, which is consistent with the actual situation. In terms of educational background, 2 teachers have a junior college degree, accounting for 1.5%; 41 teachers have a bachelor's degree, accounting for 30.6%; 78 teachers have a master's degree, accounting for 58.2%; and 13 teachers have a doctoral degree, accounting for 9.7%. The number of teachers with a master's degree is relatively concentrated, which is related to the current trend of middle schools comprehensively raising the educational requirements for in-service teachers. The distribution of educational backgrounds is consistent with reality.

1) Descriptive statistical analysis was utilized to examine the overall levels of Self-efficacy and job satisfaction among teachers in Henan Province. The overall Self-efficacy level of teachers in Henan Province is relatively high, with teaching and learning Self-efficacy being higher than classroom management Self-efficacy. The overall job satisfaction is above average, with self-actualization being the highest, followed by colleague relationships, workload intensity, leadership relationships, and salary income.

2) Using SPSS software, independent sample T-tests, and One-way ANOVA were conducted

to analyze the differences in Self-efficacy and job satisfaction among teachers in Henan Province with different demographic backgrounds. Significant differences in Self-efficacy and job satisfaction were found among teachers of different genders, teaching experiences, ages, professional titles, and educational backgrounds.

Table 1: Demographic Characteristics of the Sample (N=134)

Demographic Characteristics	Group	N	%
Gender	Male	45	33.6
	Female	89	66.4
Years of Teaching	Below 10	39	29.1
	11-20	51	38.1
	21-30	23	17.2
	Above 30	21	15.7
	Below 30	6	4.5
Age	31-40	65	48.5
	41-50	39	29.1
	Above 50	24	17.9
	None	4	3.0
Professional Title	Secondary School Second Grade	59	44.0
	Secondary School First Grade	47	35.1
	Senior Secondary School and Above	24	17.9
Education Level	Associate Degree	2	1.5
	Bachelor's Degree	41	30.6
	Master's Degree	78	58.2
	Doctoral Degree	13	9.7
Total		134	100

3) Pearson correlation analysis was employed to investigate the correlation between Self-efficacy and job satisfaction among teachers. The results showed that the correlation coefficients (r) between classroom management Self-efficacy, teaching and learning Self-efficacy, overall Self-efficacy, self-actualization, workload intensity, salary income, leadership relationships, colleague relationships, and overall job satisfaction reached significant levels. There is a significant positive correlation between Self-efficacy and job satisfaction among teachers.

4) After conducting variance analysis and correlation analysis based on the different backgrounds of teachers at X Middle School, the results were summarized in comparison with the research hypotheses. The hypotheses that there are significant differences in Self-efficacy among

teachers with different demographic backgrounds are partially supported; the hypotheses that there are differences in job satisfaction among teachers with different demographic backgrounds are also partially supported; and the hypothesis that there is a significant positive correlation between Self-efficacy and job satisfaction among teachers is supported.

Discussion

Based on the findings of this study, the current status of Self-efficacy among teachers is at a high level, with teaching and learning Self-efficacy being higher than classroom management Self-efficacy. In terms of job satisfaction, the overall job satisfaction of teachers is above average. Among the five dimensions of self-actualization, workload intensity, salary income, leadership relationships, and colleague relationships, self-actualization is the highest, followed closely by colleague relationships, both of which are at relatively high levels. The other two dimensions are at moderate levels. This indicates that self-actualization and colleague relationships are important factors influencing job satisfaction among teachers.

Differences in Self-efficacy and job satisfaction among teachers were analyzed based on gender, teaching experience, age, professional title, and educational background, revealing distinct characteristics and features. In terms of job satisfaction, there is no significant difference between male and female teachers. Both Self-efficacy and job satisfaction among teachers tend to increase with teaching experience. Older teachers tend to have worked longer, accumulated years of experience, and possess stronger confidence in completing tasks, thus their job satisfaction also increases. Higher professional titles are associated with increased job fulfillment among teachers. In terms of job satisfaction, teachers with different educational backgrounds exhibit significant differences in self-actualization, workload intensity, salary income, and leadership relationships, but there is no significant difference in colleague relationships.

There is a significant positive correlation between Self-efficacy and job satisfaction among teachers. This implies that the higher a teacher's Self-efficacy, the higher their job satisfaction. Teachers with high Self-efficacy possess greater enthusiasm and confidence in education and their abilities, are more willing to actively engage in educational work, and take the initiative to explore and employ innovative teaching strategies to overcome difficulties in educational tasks.

Based on the analysis of the research findings concerning the correlation between Self-efficacy and job satisfaction among teachers, the following suggestions are proposed: Firstly, focus on improving teachers' professional competence and skills. Secondly, establish and improve a comprehensive teacher career development system. Thirdly, reduces stress sources and alleviates teachers' professional pressures. Fourthly, safeguards teachers' rights and interests, and enhances their sense of well-being.

Conclusions

1) The overall level of teacher self-efficacy at X Middle School is high, with self-efficacy in teaching and learning being higher than self-efficacy in classroom management. The overall level of job satisfaction among teachers at X Middle School is above average, with self-actualization scoring the highest, followed by colleague relationship, job intensity, leadership relationship, and salary income in descending order.

2) Significant differences exist in teacher self-efficacy and job satisfaction among teachers at X Middle School with varying levels of teaching experience, age, and professional titles.

There are significant differences in teacher self-efficacy and its various dimensions among X Middle School teachers with different levels of teaching experience. In terms of overall self-efficacy and classroom management self-efficacy, teachers with 31 or more years of teaching experience exhibit higher self-efficacy than those with 30 years or less. Teachers with 21-30 years of teaching experience have higher self-efficacy than those with 20 years or less, and teachers with 11-20 years of experience show higher self-efficacy than those with 10 years or less. In terms of teaching and learning self-efficacy, teachers with 31 or more years and those with 21-30 years of experience demonstrate higher self-efficacy than those with 11-20 years and 10 years or less of experience.

Similarly, significant differences are observed in teacher self-efficacy and its dimensions among X Middle School teachers of different ages. In terms of overall self-efficacy and teaching and learning self-efficacy, teachers aged 51 and above exhibit higher self-efficacy than those aged 50 and below, and teachers aged 41-50 show higher self-efficacy than those aged 40 and below. Teachers aged 31-40 demonstrate higher self-efficacy than those aged 30 and below. In classroom management self-efficacy, teachers aged 51 and above and those aged 41-50 have higher self-efficacy than those aged 31-40 and 30 and below.

Moreover, significant differences exist in teacher self-efficacy and its various dimensions among X Middle School teachers with different professional titles. Teachers with senior middle school titles or above exhibit higher self-efficacy than those with first-level middle school titles or below. Teachers with first-level middle school titles have higher self-efficacy than those with second-level middle school titles or no professional title, and teachers with second-level middle school titles show higher self-efficacy than those with no professional title.

Significant differences existed in the job satisfaction of teachers at X Middle School and its various dimensions among those with different levels of teaching experience. Teachers with 31 or more years of teaching experience exhibit higher job satisfaction than those with 30 years or less. Similarly, teachers with 21-30 years of experience have higher job satisfaction than those with 20 years or less, and teachers with 11-20 years of experience show higher job satisfaction than those with 10 years or less.

Significant differences are also observed in the job satisfaction of teachers at X Middle

School and its dimensions among those of different ages. Teachers aged 51 and above demonstrate higher job satisfaction than those aged 50 and below, and teachers aged 41-50 have higher job satisfaction than those aged 40 and below. Teachers aged 31-40 exhibit higher job satisfaction than those aged 30 and below.

Moreover, significant differences exist in the job satisfaction of teachers at X Middle School and its dimensions among those with different professional titles. Teachers with senior middle school titles or above show higher job satisfaction than those with first-level middle school titles or below. Teachers with first-level middle school titles have higher job satisfaction than those with second-level middle school titles or no professional title, and teachers with second-level middle school titles demonstrate higher job satisfaction than those with no professional title.

3) There is a significant positive correlation between teacher self-efficacy and job satisfaction, as well as between these two variables, among teachers at X Middle School.

References

- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 84(2), 191.
- Feng, B. L. (1996). A study on job satisfaction of teachers and its influencing factors. *Educational Research*, 30 (2), 42–50.
- Guo, W. (2022). Research on paths to improve the self-efficacy of ideological and political course teachers in the new era (Master's thesis). *Xihua Normal University*, 33 (7), 41–45.
- Guo, Y. (2021). Influencing factors and improvement strategies for job satisfaction among teachers at S Vocational and Technical College (Master's thesis). *Southwest University*, 21 (4), 20–22.
- Guskey T R, Passaro P D. (1994). Teacher-efficacy: A study of construct dimensions. *American Educational Research Journal*, 50 (4), 627-643.
- Hoppock R, P. H. (1935). Job Satisfaction. *New York: Harper & Publishers*, 15(1), 13-15.
- Hou, Y. X., Yang, S., & Su, J. Y. (2021). The impact of private kindergarten teachers' self-efficacy on job satisfaction: The full mediating role of professional commitment. *Theory and Practice of Education*, 41(29), 35–37.
- Li, H., & Liu, H. S. (2000). Teacher efficacy and its impact on teaching behaviors. *Educational Research and Experiment*, 41(1), 50–55.
- Li, Y. Y. (2023). The relationship between perceived social support, self-efficacy, and job satisfaction among secondary school physical education teachers in Henan Province (Master's thesis). *Henan University*, 32 (7), 121–122.
- Liu, L., & Kong, M. (2020). The relationship between transformational leadership and teachers' organizational commitment: The mediating effect of teachers' self-efficacy. *East China Normal University Journal*, 7(8), 97–105.

- Marcionetti, J, C, & Luciana. (2022). The job and life satisfaction of teachers: a social cognitive model integrating teacher's burnout, self-efficacy, dispositional optimism, and social support. *International Journal for Educational and Vocational Guidance*, 31 (2), 1-23.
- Trenthamll, SilvernS, & BrogdonR. (1985). Teacher Efficacy and Teacher Competency Ratings. *Psychology in the schools*, 22(03), 343-352.
- Wu, L., & Zhan, H. Y. (2017). Reliability and validity of the Chinese Teacher Self-Efficacy Scale (TSE) (Short Version). *Psychological Technology and Applications*, 5(11), 672–679.
- Wu, T. (2023). The relationship between professional identity, organizational identity, and job satisfaction of primary and secondary school physical education teachers (Master's thesis). *Nanjing Sport Institute*, 12 (5), 51–52.
- Ye, M. (2022). The relationship between social support, self-efficacy, and job satisfaction of preschool inclusive education teachers (Master's thesis). *Hangzhou Normal University*, 14 (1), 71–75.
- Zhang, Z. H. (2017). A study on the relationship between competency and teaching efficacy of secondary school physical education teachers in Tianjin (Master's thesis). *Tianjin University of Sport*, 13 (3), 51–55.
- Zhao, F., & Huang, X. T. (2002). Characteristics of teaching efficacy among secondary school teachers and its correlation with self-concept. *Psychological Science*, 21(4), 472–473.
- Zhu, Liu, Fu, Yang, Zhang, & Shi. (2018). The relationship between teacher self-concept, teacher efficacy and burnout. *Teachers and Teaching*, 41(7), 788-801.