

## **EXPLORATION THE CREATIVE TEACHING BEHAVIOR OF SPECIAL EDUCATION TEACHERS: THE INTERMEDIARY ROLE OF SUBJECTIVE WELL-BEING**

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**Abstract:** Focusing on the special education teacher group, exploring the influence of professional identity on creative teaching behavior, and analyzing the mediating role of subjective well-being in this process. The particularity of education object and the complexity of teaching environment faced by special education teachers may affect their professional identity and teaching methods. In this study, 487 samples were quantified, and 362 valid questionnaires were collected. Credit validity analysis, descriptive statistics, independent sample t-test, one-way variance analysis and correlation analysis were used for independent, dependent and mediation variables; AMOS25.0 model was used to test the presence of mediation effect. Through empirical research, it is found that teachers with high professional identity are more inclined to adopt creative teaching methods to meet the learning needs of special children. At the same time, subjective happiness plays a bridge role between professional identity and creative teaching behavior. Teachers with strong professional identity usually have higher subjective happiness, which are more likely to show creative teaching behavior. Based on this, the research suggests that special education teachers should strengthen their professional identity, and the school and society should provide support and resources to reduce teachers' pressure, improve their subjective well-being, and then promote creative teaching behavior, improve the teaching effect and career satisfaction.

**Keywords:** Professional Identification of Special Education Teachers, Creative Teaching Behavior & Subjective Happiness

### **Introduction**

In the wave of global education reform, the innovation and development in the field of special education are particularly important. As a key force in this field, the teaching behavior and innovation ability of special education teachers can directly affect the learning effect and development potential of special children. Therefore, it is of great significance to explore the determinants of special education teachers' innovation behavior to improve the quality and effect of special education. Among the many

factors affecting the innovative behavior of special education teachers, professional identity and subjective well-being are considered as two key variables. Professional identity, as an individual's affirmation and value identification of their profession, is not only related to their career satisfaction and stability, but also may directly affect their creative teaching behavior and creative expression. When special education teachers are highly aware of their careers, they are more likely to devote more energy and enthusiasm to teaching innovation to meet the diverse learning needs of special children. At the same time, subjective well-being, as the overall evaluation of an individual's quality of life, also plays an important role in the creative behavior of special education teachers. The level of subjective well-being not only reflects teachers' psychological state and emotional experience, but also is likely to affect their creative behavior by influencing their teaching attitude and motivation. Research in recent years has begun to focus on the association between professional identity and subjective wellbeing and how they work together in teachers' creative behavior. The research points out that the stronger teachers' professional identity, the higher their subjective well-being, and thus the more likely they are to show innovative teaching behaviors. However, although some progress has been made in this field, the in-depth exploration of the relationships between professional identity, subjective well-being, and innovative behavior is still lacking. Especially for the special group of special education teachers, the mechanism of action between professional identity, subjective well-being, and creative behavior may have their own uniqueness and complexity. Therefore, this study will collect and analyze relevant data between professional identity and Happiness and creative behavior, providing theoretical support and practical guidance for the professional development and creative teaching of special education teachers. At the same time, this study also expects to provide policy advice on the training and incentive of special education teachers to promote the sustainable development and innovation of special education.

#### *Research Overview*

With the rapid development of educational technology, the field of special education is undergoing profound changes. In this change, special education teachers play a crucial role. They need not only to have traditional teaching skills, but also to adapt to technological changes and develop innovative teaching methods to meet students' diverse learning needs. As the key to the professional development of special education teachers, professional identity not only affects the teaching attitudes and methods, but also relates to the teaching effect and career satisfaction. However, in the context of technological innovation, the professional identity of special education teachers is faced with new challenges, and how to build and maintain a positive professional identity in the new educational environment has become an important issue. The creative teaching behavior of special education teachers is very important to improving students' learning effect and stimulating their interest in learning. However, the current research on the creative teaching behavior of special education teachers is relatively limited, and there is a lack of in-depth discussion on the influencing factors. The subjective

well-being, as a measure of individual mental health, has a significant influence on the teaching behavior of special education teachers. Teachers with high subjective well-being are more likely to show a positive teaching attitude and creative teaching behaviors to provide better teaching services for students. Therefore, this study aims to explore the mechanism of subjective well-being between professional identity and creative teaching behaviors of special education teachers, so as to deeply understand the teaching behaviors of special education teachers and provide theoretical support and practical guidance for improving their creative teaching behaviors and professional growth.

With today's rapid development of science and technology, the field of special education is experiencing unprecedented challenges and opportunities. In particular, special education teachers need to reposition their roles and improve themselves under the dual pressure of responding to technological changes and meeting students' diverse learning needs. With the wide application of virtual reality science and technology such as reality, artificial intelligence and online education, special education teachers should keep up with the pace of The Times, constantly update technical knowledge, flexibly adjust teaching strategies, so as to maximize the use of advanced technology to improve the teaching effect. The research background profoundly reveals the profound impact of technological change on the field of special education. It not only changes the teaching methods and resource allocation methods, but also encourages special education teachers to re-examine the core values of their work. From the traditional knowledge indoctrination mode to pay more attention to the cultivation of students' information literacy, innovation ability and problem solving ability, this change highlights the teachers' deep concern for students' all-round development, and also reflects the educators' strong sense of responsibility and forward-looking thinking to adapt to the future social change. In this context, this study focuses on the inherent associations between the professional identity, creative teaching behavior, and subjective well-being of special education teachers. Through the questionnaire survey, the sample data of special education teachers (including teachers in educational rehabilitation institutions) were collected, aiming to explore the interaction mechanism among the three, and provide practical strategy reference for improving the creative teaching behavior of special education teachers. Through this research, we hope to provide strong support for the development of special education teachers and promote them to achieve self-improvement and professional growth in the changing educational environment.

#### *Significant of the Study*

This study carefully analyzes the close correlation between the professional identity, subjective well-being and creative teaching behavior of special education teachers, and tries to reveal the interaction mechanism between them. On the theoretical level, this study not only promotes the deepening and improvement of the theoretical framework of special education teachers' professional identity, reveals its internal operation mechanism, but also lays a solid theoretical foundation for the

teaching innovation in the field of special education, which is conducive to the comprehensive improvement of the professional quality and teaching quality of special education teachers.

In terms of practical application, this study provides specific guidance for the career development of special education teachers. By discussing how to enhance professional identity and enhance subjective well-being, and then stimulate teachers' creative teaching behaviors, so as to meet the diverse learning needs of special students. This research result is of great significance for promoting the sustainable development of the field of special education, and provides valuable practical inspiration for special education teachers. To sum up, this study has profound significance in both theoretical and practical aspects, which not only enriches the theoretical research in the field of special education, but also provides strong support for the professional development of special education teachers, the improvement of teaching quality and the sustainable development in the field of special education.

#### *Process of the Study*

This study focuses on the special education teacher group, with subjective well-being as the mediating variable, aiming to explore the relationship between professional identity and creative teaching behavior and its inherent mechanisms. Details are as follows:

1. Research methods and data collection: Through a carefully designed scale questionnaire, sample data from special education teachers were collected to verify whether there is a significant relationship between professional identity, creative teaching behavior and subjective well-being.

2. Variable analysis and hypothesis test: The study conducted a hypothesis and test on the collected data, mainly analyzing how professional identity affects creative teaching behavior, and whether this influence is different among special education teachers of different genders and ages.

3. Mediation verification: The study further explores the intermediary role of subjective well-being between professional identity and creative teaching behavior, that is, whether professional identity affects creative teaching behavior by affecting subjective well-being.

4. Causal relationship and influence mechanism: Through in-depth analysis, this study verifies the causal relationship between professional identity and creative teaching behavior, and deeply explores the role of subjective well-being as a mediating variable and its mechanism.

5. Practical Significance and Application: The research results not only provide example support for the research of creative teaching behavior of special education teachers, but also provide useful practical guidance for the career development of special education teachers, the improvement of teaching quality and the sustainable development of the field of special education. Through this research, it is expected to have a deeper understanding of the interaction mechanism between the professional identity, subjective happiness and creative teaching behavior of special education teachers, so as to provide a scientific basis for teacher training, teaching improvement and sustainable development in the field of special education.

### *Contribution of the Study*

This study deeply explores the psychological mechanisms of special education teachers, and has specifically focused on the interplay between professional identity, subjective well-being, and creative teaching behaviors. By collecting data from the scale questionnaire, the research reveals the intermediary role of subjective well-being in professional identity and creative teaching behavior, that is, teachers' professional identity may stimulate creative teaching behavior by improving their subjective well-being. This finding not only contributes to a comprehensive understanding of the internal motivation and psychological state of special education teachers, but also provides important guidance for improving teaching quality, job satisfaction and professional development.

The significance of this study in the field of special education lies in: firstly, improves the understanding of the psychological mechanism of special education teachers, and provides a scientific basis for developing effective support and training plans; secondly, reveals the intermediary role of subjective well-being, promoting the innovation of creative teaching methods, and the research results provide theoretical support for policy makers to promote the formulation of policies for special education teachers. Finally, this study provides a new perspective and method for the research of educational psychology and special education, and helps to promote the in-depth development of relevant research. To sum up, this study has far-reaching theoretical and practical significance for teacher training, teaching quality improvement and sustainable development in the field of special education.

### *Limitations of the Study*

Although this study discusses the characteristics and interrelationships of professional identity, creative teaching behavior and subjective well-being, based on rich literature, it still has limitations and deficiencies. First, the samples are mainly concentrated in Chongqing, which limits the universality of the results, and the sample coverage area needs to be expanded in the future. Secondly, although the horizontal study design can reveal the relationship of specific time points, it cannot capture the causal relationship of dynamic change, so the longitudinal study is recommended in the future. Finally, the applicability of existing scales in special education teacher groups needs further verification, and the development of more targeted and suitable scales is an important direction for future research.

### *Definitions of the Study*

This study focuses on special education teachers, educators providing professional services to children with flawed physical and mental development, with a wide range of workplaces, including special education schools, regular schools, colleges, and rehabilitation institutions. The professional identity of special education teachers is a comprehensive, in-depth and positive evaluation of their career, which is crucial to their career development and work performance. Creative teaching behavior is an innovative, personalized and differentiated teaching method for special students, aiming to create

a positive and inclusive learning environment to meet the unique needs of students. The subjective well-being of special education teachers reflects the positive emotion and psychological satisfaction felt in work and personal life, which is closely related to professional identity, job satisfaction, personal growth and family support. Although special education teachers face challenges such as student diversity, emotional and behavioral issues, and social bias, their subjective well-being increases when they achieve a sense of accomplishment at work, recognition, and sustained personal growth. Therefore, it is of great significance to pay attention to the professional identity, creative teaching behavior and subjective happiness of special education teachers to improve their teaching quality, career satisfaction and quality of life.

### **Research Objective (s)**

This study aims to comprehensively explore how the professional identity of special education teachers shapes their creative teaching behavior, and focuses on the media role of subjective well-being in it. Through empirical investigation, the status quo of professional identity of special education teachers is evaluated, many factors affecting this identity are analyzed, and how this identification stimulates and shapes the innovative practice of teachers in teaching is revealed. In addition, it will deeply explore the role of subjective happiness in the bridge between professional identity and creative teaching behavior, that is, whether professional identity indirectly influences and promotes their creative teaching behavior by enhancing the subjective well-being of special education teachers. Finally, based on the research found that will put forward a series of specific strategies, aims to enhance special education teachers' professional identity, improve subjective well-being, and inspire more creative teaching behavior, to support teachers' personal development and improve the quality of special education, for education practitioners and policy makers to provide powerful empirical support and reference.

### **Literature Review**

This review summarizes the complex relationships between professional identity, creative teaching behavior, and subjective well-being among special education teachers. The professional identity of special education teachers has a significant impact on their teaching motivation, professional attitude and the growth quality of students. With the development of the special education field, researchers begin to focus on the connection between teachers' professional identity and innovative teaching behavior, and the role of subjective well-being in this process. The study aims to explore how teachers' professional identity affects their creative teaching behavior and analyze the role of subjective well-being as a bridge between the two. By reviewing the literature, this paper hopes to have a deep understanding of the interaction between the three, so as to provide theoretical support and practical

guidance for the professional development of special education teachers, the improvement of teaching quality and the all-round development of students.

#### *Creative Teaching Behavior*

Jeffrey & Craft (2004) noted that in 1999, the National Advisory Council on Creativity and Culture (National Advisory Committee on Creative and Cultural Education (NACCCE) described it as "a form of teaching designed to foster students' creative thinking and creative behavior". Rogers (1954) Mentioned innovation researchers from a cross-cultural perspective generally believe that due to the different cultural backgrounds, people's understanding of the essence of innovation also presents a sharp contrast with the diverse eastern group cultural orientation and western individualism in their own unique influence. Therefore, Zhang and other scholars (2007) believe that it is undoubtedly a crucial research work to deeply analyze the characteristics of innovative talents nourished by different cultural backgrounds and explore the universality and uniqueness of innovative culture from the cultural level. Kelchtermans (1996) found that the negative emotions and negative attitudes experienced by teachers in the workplace are often closely related to the school management system and the interpersonal relationship within the work team. Chen & Zhou (2023) pointed out that the reshaping of teaching work helps to stimulate teachers' teaching innovation behavior, but this effect will be affected by multiple factors such as emotional intelligence, teaching self-efficacy and workload. In particular, the increase of workload will weaken the positive link between teaching work remodeling and teaching innovation behavior, as well as the positive influence of emotional intelligence on teaching innovation behavior.

#### *Professional Identity*

Asheroft (1991) conducted an in-depth study on the pre-service training and professional identity of special education teachers. He proposed that in the field of special education, the professional identity of teachers is mainly affected by the following factors: attitude towards students, environment, professional training and clear status they have. However, it needs to be concerned that the study did not deeply analyze the factors affecting the professional identity of teachers in special education, so as to reveal how these factors specifically act on teachers' professional identity. Chen (2017) summarized the structural dimensions of the professional identity of special education teachers, mainly including the following three aspects: first, cognitive identity, which involves the deep understanding and understanding of the value and characteristics of the special education profession; the second, emotional identity, which refers to the inner pleasure and satisfaction obtained by the teacher in the actual work; the third, behavioral identity, which is based on the positive behavior motivation and external performance generated by the teacher's emotional satisfaction. Sariçam & Sakiz (2014) have deeply discussed the relationship between self-worth and job burnout among special education teachers. The results show that teachers' sense of self-worth is a key indicator to predict their burnout degree. This important finding further highlights the core importance of a sense of self-worth in the work of special



education teachers. It not only profoundly affects teachers' emotional commitment to work, but also is directly related to the sense of achievement they experience in work and their active participation attitude towards work.

### *Subjective Well-Being*

Subjective well-being (Subjective Well-Being) is used in the social sciences to measure people's overall assessment of their living conditions, including positive emotions such as happiness and satisfaction. With the rapid development of social economy, the public's pursuit of mental health and quality of life is becoming more and more significant. In this context, positive psychology came into being, since the mid-20th century, and its influence continues to expand, and still maintains a strong development momentum. It can be said that the modern evolution of subjective well-being and the prosperity of positive psychology are complementary. At the same time, sociology and pedagogy have carried out multi-dimensional research on subjective well-being, continuously deepened the understanding and understanding of this concept, and greatly enriched its connotation and extension.

Bradburn (1969) took the lead in introducing the concept of subjective well-being, and pointed out that it contains two major dimensions: positive emotions and negative emotions. He believes that individuals can feel more positive emotions and reducing the experience of negative emotions. In the vast field of psychology, the triangle theory of cognitive behavior, with its unique insights, carefully describes the close connection between human emotions, cognition and behavior. Diener, et al. (1995) conducted an in-depth exploration of subjective well-being, pointing out that various emotional experiences (whether happy or unhappy) in daily life, their satisfaction with career or career, and satisfaction with overall life affect subjective well-being to a certain extent. After in-depth research, Chinese scholar Fang (2016) found that psychological resilience plays a bridge role between job burnout and teachers' subjective well-being, namely the intermediary effect. Seligman proposed the famous "PERMA" model of happiness in 2011, which was elaborated in the book *Continuous Happiness* and was subsequently widely accepted and applied by practitioners in the field of positive psychology. The model provides a new perspective and framework for understanding and pursuit of happiness, and has a profound impact in driving the development of positive psychology. Zhao, et al. (2021) discussed the effects of psychological resilience and job burnout on the subjective well-being of hearing and language rehabilitation teachers. The results showed that psychological resilience was positively associated with subjective well-being, while burnout was negatively associated with it. At the same time, mental resilience helps to reduce job burnout. Importantly, burnout plays a partial mediator between psychological resilience and subjective well-being. Therefore, psychological resilience can not only directly improve teachers' subjective well-being, but also indirectly improve teachers by reducing job burnout. In order to improve teachers' happiness, it is necessary to pay attention to their psychological resilience and effectively alleviate job burnout.



*The Relationship between Professional Identity, Creative Teaching Behavior and Subjective Well-Being*

Summarizing the existing literature, it is not difficult to find that there are few studies on teachers' professional identity, creative teaching behavior and subjective well-being. However, there are few studies combining the three, and even less so in the field of special education. Zhang (2017) has brought new insights into the field of special education teachers, exploring the relationship between teachers' willingness to innovate, sense of self-worth and job burnout. The study found that the sense of self-worth is negatively correlated with job burnout and positively correlated with teaching innovation intention, and teaching innovation intention is also negatively associated with job burnout. Low sense of achievement suppresses the willingness to innovate in teaching, while vocational skills, personal character and social acceptance promote their willingness to innovate. In addition, the willingness of teaching innovation plays an incomplete intermediary role between self-worth and job burnout, revealing the complex relationship between self-worth, teaching innovation willingness and job burnout. This discovery provides theoretical and practical guidance for the professional development and teaching innovation of special education teachers, emphasizing the importance of enhancing the sense of self-worth and the willingness to innovate in teaching to reducing job burnout, improving the working environment and improving the teaching quality. This research not only enriches the relevant research in the field of special education, but also provides important theoretical and practical guidance for the professional identity and creative teaching of special education teachers.

*The Rationality of The Theoretical Explanation*

Cognitive behavior and emotion theory and Martin Seligman's theory of happiness can explain the influence of special education teachers' professional identity on creative teaching behavior, and the intermediary role of subjective well-being, and their rationality can also be expounded from the following aspects:

From the perspective of complementarity, cognitive behavior emotion theory focuses on the analysis of human psychological process from the three dimensions of cognition, emotion and behavior, while Martin Seligman's happiness theory more emphasizes the importance of positive attitude and behavior to improve happiness. These two theories complement each other and provide a comprehensive perspective for understanding the professional identity and creative teaching behavior of special education teachers. From the level of internal motivation: both the cognitive behavior emotion theory and Martin Seligman's theory of happiness emphasize the influence of internal motivation on individual behavior. In the process of professional identity of special education teachers, teachers' internal motivation (such as self-identity, positive attitude, etc.) is an important factor to promote their creative teaching. From the level of focusing on the mediation effect of emotion: both theories emphasize the mediation role of emotion in the individual psychological and behavioral process. As an

important emotional factor, subjective happiness plays a bridge and link between the professional identity of special education teachers and their creative teaching behavior. From the perspective of promoting personal growth and career development, both theories believe that positive psychological processes (such as cognitive, emotional, behavioral) and positive mentality can promote an individual's personal growth and career development. In the process of professional identity of special education teachers, this positive psychological process and mentality can stimulate teachers' willingness to innovate in teaching, and improve their teaching quality and career development prospects. From the level of practical guidance: the two theories not only provide us with tools to understand the psychological process of special education teachers, but also provide useful guidance for us to promote teachers' personal growth and career development in practice. For example, we can stimulate teachers' willingness to innovate in teaching by enhancing their professional identity and positive attitude, and we can also create a more positive and healthy working environment for teachers by focusing on their emotional state (such as subjective well-being).

In conclusion, the cognitive behavioral emotion theory and Martin Seligman's theory of happiness are highly reasonable and effective in explaining the role of the influence of special education teachers' professional identity on creative teaching behavior and the mediating role of subjective well-being.

## **Methodology**

This study used a quantitative study design to investigate the relationship between professional identity, creative teaching behavior and subjective well-being among special education teachers. The methodological section consists of the following sections: participants, measurement tools, data collection, and data analysis.

### *Participants*

The study sample size was obtained from the special education workers in Chongqing. That is, educators who provide professional services for children with defective physical and mental development include special education schools, ordinary primary and secondary schools, kindergartens and other relevant institutions, as well as teachers engaged in special education personnel training, research and social services in ordinary colleges and universities.

### *Measurement Tools*

Data were collected through a structured questionnaire consisting of three main components: professional identity, subjective well-being, and creative teaching behavior. Each section uses a Likert scale ranging from 1 (completely noncompliant) to 5 (fully compliant) to measure the corresponding constructs.

The professional identity of special education teachers was measured by the professional

identity scale compiled with 18 questions. The scale is divided into four factors: role values factor, professional behavior tendency factor, professional values factor, and professional belonging factor. Higher scores indicate a higher degree of teachers' professional identity. The subjective well-being scale uses the Warwick-Edinburgh Mental Health Scale (WEMWBS), a total of 14 questions, which contains three factors: positive emotions of mental health, positive mental functioning, and interpersonal satisfaction. Understanding the positive emotions of special education teachers through the scale can have an influence on the creative teaching behavior. Creative teaching behavior adopts the creative teaching behavior scale of teachers in scholar Kong Man (2019) 's Research on the Relationship between Emotional Leadership and Teacher Teaching Innovation-Medimediary Role Based on Teachers' Emotional Factors, a total of 23 questions. The scale includes five factors: idea thinking innovation, teaching content innovation, teaching method innovation, teaching resources innovation, multiple evaluation innovation. Through the scoring of these items, we can quantify the tendency of creative teaching behavior of special education teachers. These tools are based on established theoretical frameworks, and have been previously validated in academic research.

#### *Data Collection and Analysis*

During data collection, these scales passed a series of pretests to verify their reliability and validity. With validated tools, this study aims to comprehensively understand and analyze the mediating role of professional identity on special education teachers' creative teaching behavior: subjective well-being. Data collection was conducted between February and April 2024, taking full advantage of the extensive coverage and convenience of the online survey. The process is carefully curated to maximize response rates and minimize bias, and to emphasize the ethical requirements for participation. It made use of SPSS.27 Credit validity analysis, descriptive statistics, independent sample test, one-way analysis of variance analysis and correlation analysis; AMOS25.0. This approach aims to rigorously examine the relationships between study variables and pay close attention to hypothesis testing, processing of missing data, and strategies to mitigate multicollinearity.

#### **Results**

This study orchestrates a quantitative research design aiming to deeply explore the dynamic relationships between the professional identity, creative teaching behavior and subjective wellbeing of special education teachers. The rigor and accuracy of the study was ensured by clarifying the study population, strategically determining the sample size, robust sampling strategies, carefully designing the measurement tools, planning the data collection process, and developing a detailed analysis plan. At the same time, we will strictly follow the ethical principles to protect the rights and interests of the participants. The expected results will enhance the understanding of the career development of special education teachers and provide professional reference for improving the quality of teaching. In this

study, quantitative analysis was used to analyze the data of 362 questionnaires to explore the influence of professional identity on the creative teaching behavior of special education teachers: the mediating role of subjective well-being. The following are the analysis process and the key findings:

#### *Data Handling*

Invalid questionnaires were removed by descriptive analysis and Z-score calculation, including those completed within 100s or with a high answer repetition rate. The 362 validated questionnaires were used for the final analysis.

#### *Credit and Validity Analysis*

A scale or questionnaire with a good reliability coefficient, preferably above 0.80, between 0.70 to 0.80 is acceptable: subscales above 0.70 and between 0.60 to 0.70 are acceptable. In this paper, the clone Bach Alpha reliability coefficient of the subscale represented by each factor in the formal questionnaire is above 0.8. According to the above standard and the reliability coefficient table, we can know that the reliability of the questionnaire is ideal..08.9 Confirmatory factors were analyzed on the professional identity scale, subjective well-being and creative teaching behavior, respectively. The results showed that  $X^2 / df$  was lower than 3, RMSEA and RMR were lower than 0, and CFI, TLI, IFI and GFI were all greater than 0, indicating that the structural validity of professional identity scale, subjective well-being and creative teaching behavior was good. The factor load of the professional identity scale, subjective sense of happiness and creative teaching behavior are all greater than 0.5, indicating that the topic corresponding to each latent variable is highly representative. In addition, the average variance variation AVE of each latent variable was greater than 0.5, and the combined reliability CR was greater than 0.7, indicating that the convergence validity was ideal. The correlation coefficient between professional identity, subjective well-being and creative teaching behavior are all less than the square root of the corresponding AVE, indicating that each latent variable has a certain correlation and a certain degree of differentiation, that is, the rational differentiation validity of the scale data.

#### *Differential Analysis*

The sample data were analyzed by gender, special education, professional identity, subjective well-being and creative teaching behavior. The results show that, according to the above content, the influence of different factors (gender, professional background, educational background, professional title) in multiple dimensions (role values, professional behavior tendency, professional values, professional belonging, professional identity, mental health, innovative teaching behavior, etc.) can be summarized as follows:

##### 1. Differences in Gender:

There were no significant differences between men and women in role values, professional tendencies, professional behaviors, professional belonging, professional identity, and teaching

innovation ( $p > 0.05$ ). In terms of positive mood, positive psychological function, interpersonal satisfaction, and subjective well-being ( $p < 0.05$ ).

#### 2. Differences in Professional Background:

There was no significant difference in role values, professional behavior tendency, professional values, professional belonging, professional identity, and teaching innovation ( $p > 0.05$ ). Non-special education professionals had significantly higher scores in positive emotions, positive psychological function, interpersonal satisfaction, and subjective well-being in mental health ( $p < 0.05$ ).

#### 3. Differences in Educational:

There were no significant differences in role values, professional behavior tendencies, professional values, professional belonging, professional identity, positive psychological function, and innovation of teaching resources ( $p > 0.05$ ). There were significant differences in the positive emotions, interpersonal relationship satisfaction, subjective well-being, teaching content innovation, teaching methods innovation, multiple evaluation innovation, and creative teaching behaviors ( $p < 0.05$ ). Specifically, those with master's degree or above score more than those with bachelor's degree or below.

#### 4. Differences in Professional Titles:

There were no significant differences in professional titles, positive emotions, positive psychological functions, interpersonal relationship satisfaction, subjective well-being, concept thinking innovation, teaching content innovation, teaching resources innovation and other aspects ( $p > 0.05$ ). There were significant differences in role values, professional behavior tendencies, professional belonging, professional identity, teaching method innovation, multiple evaluation innovation, and creative teaching behavior ( $p < 0.05$ ). The specific performance is that the scores is lower than the primary and intermediate titles in most aspects. Overall, gender and professional background had less influence on career-related values and behavioral tendencies, but men and non-special education professionals showed higher motivation in mental health. The impact of education and professional titles on career development and mental health is more complex, and people with higher education and higher professional titles show advantages in some aspects, but they may also face challenges in mental health due to factors such as work stress.

#### *Structural Equation Model*

Test of model fit, the results show that  $X^2 / df$  is below 3, RMSEA, RMR are below 0, and CFI, TLI, IFI, and GFI are all greater than 0, which shows that the mediation model has a good fit.

#### *Intermediary Inspection*

By BOOTSTRAP ( $n=5000$  times) can be seen that the indirect effect of the confidence interval does not contain the confidence interval does not contain 0(0.172-0.334), the direct effect of the confidence interval does not contain the confidence interval of the path does not contain 0(0.355-0.582), it can be seen that the subjective well-being in professional identity on the creative teaching behavior

of some mediation, mediation effect proportion for 34.32% (0.243/0.708).

**Table 1:** Collect The Validity

Dimension	Question Item	Factor Loading	S.E	C.R.	P	Ave	Cr
Career Identity	Professional Sense of Belonging	0.757				0.552	0.832
	Occupational Values	0.739	0.071	13.099	***		
	Professional Behavior Tendency	0.735	0.073	13.036	***		
	Role Values	0.742	0.071	13.141	***		
Subjective Happiness	Interpersonal Relationship Satisfaction	0.715	0.095	10.997	***	0.522	0.766
	Positive Psychological Function	0.702	0.089	11.409	***		
	Positive Emotions In Mental Health	0.749					
Creative Teaching Behavior	Idea Thinking Innovation	0.736				0.530	0.849
	Teaching Content Innovation	0.743	0.079	13.243	***		
	Innovation in Teaching Methods	0.728	0.077	12.977	***		
	Multiple Evaluation Innovation	0.740	0.075	13.189	***		

## Discussion

The aim of this study was to investigate the influence of professional identity on the creative teaching behavior of special education teachers: the mediating role of subjective well-being. The results show that professional identity positively influences creative teaching behavior, along with Klaijnsen, et al. (2018). Meeting basic psychological needs can enhance teachers' internal motivation and professional self-efficacy, and thus strongly promote their innovative behavior consistency. Sariçam and Sakiz (2014) discussed in depth the relationship between self-worth and job burnout among special education teachers. The results show that teachers' sense of self-worth not only profoundly affects the emotional investment of teachers to work, but also directly related to the sense of achievement they experience in work and their active participation attitude towards work. This study confirms the positive correlation between professional identity and subjective well-being. Li, et al. (2021), in order to understand the relationship between health behavior, evaluative support, subjective well-being, depression tendency and their internal mechanism, conducted a questionnaire survey on special education teachers. The study found that subjective well-being and evaluative support mediate between health behavior and depression tendency, forming a chain effect. Chen & Zhou (2023) pointed out that the reshaping of teaching work helps to stimulate teachers' teaching innovation behavior, but this effect will be affected by multiple factors such as emotional intelligence, teaching self-efficacy and workload. In particular, the increase of workload will weaken the positive link between teaching work remodeling and teaching innovation behavior, as well as the positive influence of emotional intelligence on teaching innovation behavior. In other words, subjective well-being plays a mediating role between professional identity and creative teaching behavior.

In the field of education, the importance of special education teachers is self-evident. They not

only need to deal with students' diverse learning needs, but also need to stimulate students' potential through innovative teaching methods. In recent years, the relationship between the professional identity of special education teachers and their creative teaching behavior has been deeply studied, especially exploring the intermediary role of subjective well-being. This research reveals that teachers' professional identity is the internal motivation for their sustainable development, and can motivate them to invest more energy in teaching and try novel teaching methods. At the same time, subjective well-being, as a bridge connecting professional identity and creative teaching behavior, further enhances teachers' creativity and innovative spirit. However, studies also face limitations such as limited sample representation and potentially more complex relationships between variables. Nevertheless, the study provides valuable theoretical reference and practical guidance for special education teachers, and provides a new perspective for improving the teaching results. Future studies should further explore and refine the relevant theories to provide a more comprehensive understanding of the interaction between these variables.

## **Conclusions**

Through a rigorous quantitative analysis, this study confirmed the influence of professional identity on the creative teaching behavior of special education teachers: the mediating role of subjective well-being. The results showed that: 1. The scores of positive emotions, positive psychological function, interpersonal satisfaction and subjective well-being were significantly higher than those of women. 2. The scores of positive emotions, positive psychological functions, interpersonal satisfaction, and subjective well-being were significantly higher than those of those in the major. 3. In the positive mood of mental health and subjective happiness, multiple evaluation innovation, those below and below are significantly lower than those below and below; in the innovation of teaching content and teaching methods, those below and below; in creative teaching behavior and interpersonal satisfaction, those below and below are significantly lower than those with master's degree or above. 4. In the role values, professional identity, teaching method innovation, multiple evaluation innovation and creative teaching behavior, the undetermined title is significantly lower than the primary and intermediate groups; in the professional behavior tendency, the undetermined title is significantly lower than other groups; in the sense of professional belonging, the undetermined title is significantly lower than the primary and intermediate groups and the primary group is significantly lower than the intermediary group. 5. subjective well-being has a mediating role in the influence of professional identity on creative teaching behavior.

According to the current research results, the following suggestions are put forward: 1. Attention on gender equality: strengthen the attention and support for the mental health of female teachers, and ensure the implementation of the principle of gender equality in the field of education. By



holding mental health lectures and providing psychological counseling services, female teachers are helped to relieve their work stress and improve their scores in mental health. 2. Interprofessional training: Provide interprofessional training and further training opportunities for non-professional but outstanding teachers to enrich their professional knowledge and skills. At the same time, these teachers are encouraged to continue to play to their strengths and improve the quality of their teaching and innovation ability. 3. Improve educational level: Teachers with college degree or below are encouraged to improve their educational level through further study, so as to improve their ability in teaching innovation and professional development. Schools and educational institutions can provide corresponding support and resources, such as scholarships, research funding, etc. 4. Improve the professional title evaluation: Optimize the professional title evaluation system to ensure that teachers who have not determined their professional titles can get fair evaluation and promotion opportunities. This helps to enhance teachers' sense of professional identity and belonging, and then stimulate their enthusiasm and creativity in teaching and research. 5. Focus on subjective well-being: Schools and educational institutions should pay attention to teachers' subjective well-being, and enhance teachers' professional identity and creative teaching behavior by improving the working environment and providing psychological support. This helps to improve teachers' job satisfaction and loyalty, and promote the sustainable development of education.

This study partly enriches the research content on the mental health, professional identity and teaching innovation of special education teachers, and provides empirical support for related theories. It reveals the influence mechanism of gender, professional background, education background and professional title on teachers' mental health, professional identity and teaching innovation, and provides a new direction for future research. For educational administrators, these research results can help them to develop more targeted teacher support strategies, optimize the structure of teachers, and improve the overall teaching quality.

For individual teachers, it can help them understand their own advantages and disadvantages in career development, make personal development plans, and improve their career competitiveness. For policy makers, these results provide a basis for the formulation of relevant policies, help to improve the working conditions and living treatment of teachers, and enhance the attractiveness of the teaching profession.

For the future outlook, 1. In-depth study of influencing factors: Future research can further explore other factors affecting teachers' mental health, professional identity and teaching innovation, such as working environment, school culture, family support, etc., so as to have a more comprehensive understanding and understand the influencing factors of teachers' career development. 2. Longitudinal study: Conduct a longitudinal study to track the long-term changes in teachers' career development, and reveal the changing trends and influencing factors of their mental health, professional identity and

teaching innovation. This helps us to have a deeper understanding of the dynamic process of teacher career development. 3. Cross-cultural research: Cross-cultural research to compare the differences and commonalities of mental health, professional identity and teaching innovation in special education teachers in different countries and regions. This helps us to understand the characteristics and challenges of teachers' career development under different cultural backgrounds, and to provide reference for international educational cooperation and exchanges. 4. Practice intervention research: Practice intervention research is designed and implemented to explore how to improve teachers' mental health status, enhance professional identity, and promote teaching innovation through specific interventions (such as teacher training, psychological counseling, etc.). This helps to translate the research results into practical applications and provide strong support for educational practice.

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