

# An Investigation into the Attitude Toward Special Education Curriculum and Teaching of Special Education Teachers: The Data from China's Guangdong Province

Jie Yang<sup>1</sup>, Zhiyao Liu<sup>1</sup> & Linlin Wu<sup>1</sup>

<sup>1</sup> School of Education Sciences, Lingnan Normal University, Zhanjiang 524028, China

Correspondence: Zhiyao Liu, School of Education Sciences, Lingnan Normal University, Zhanjiang 524028, China.

doi:10.56397/RAE.2023.04.07

## Abstract

To further understand the curriculum and teaching attitude of teachers in special education schools in Guangdong Province, this study adopted a stratified whole-group unequal probability sampling method and selected 768 teachers from special education schools in Guangdong Province's 21 cities for a questionnaire survey. The data on special education teachers' attitudes towards special education curriculum and teaching were selected. Descriptive statistics, one-sample t-test, independent sample t-test, and one-way analysis of variance (ANOVA) were used to analyze the data and compared with the data of special education teachers' attitudes towards special education curriculum and teaching in the National Survey of Special Education Teacher Professional Development (NSETPDS). The results indicated that the cognitive response of special education teachers in Guangdong Province to the special education curriculum and teaching attitude is positive ( $M=1.81$ ,  $SD=0.51$ ), significantly higher than that of the national special education teachers. The emotional response and general attitude were positive but significantly lower than that of the national special education teachers. The attitude of male special education teachers toward the special education curriculum and teaching was significantly higher than that of female special education teachers. Special education teachers with more than 20 years of teaching experience had a more positive attitude towards special education curriculum and teaching than those with 1-5 years of teaching experience. Based on the analysis of the research results, some suggestions are put forward to provide a basis for the professional development of teachers in Guangdong Province.

**Keywords:** special education teachers, special education curriculum and teaching, attitude

## 1. Introduction

Special education teachers refer to professionals who perform the duties of education and teaching for disabled students in special education schools, ordinary primary and secondary schools, kindergartens, and other specialized institutions (Professional Standards for Special Education Teachers (Trial), 2015). Teachers come first in the so-called development of special education (Yang, G. X. & Yang, F. Y., 2014). In recent years, the *Opinions on Comprehensively Deepening the Reform of the Construction of Teachers in the New Era*, *Professional Standards for Special Education Teachers (Trial)*, and other policies have been issued, ushering in a new historical opportunity and development opportunity for the construction of special education teachers (Wang, D. H., 2018).

Attitude refers to the persistent and consistent mental readiness and personality tendency individuals hold toward people and things around them based on past experiences. It mediates between information from external stimuli and individual behavioral responses (Liang, N. J., 2006). Special education teachers' attitudes will directly affect the academic and achievement motivation of children with special needs and their self-fulfillment goals and

values (Ma, Y. Y., 2005). The attitudes held by teachers will directly or indirectly impact all aspects of students' lives and learning (Liao, B. S., 2003; Lin, Y. X., 2001). There are many studies on special education teachers' attitudes in domestic and international academia. However, the focus varies, focusing mainly on their attitudes toward inclusive education (Politou, 2022), attitudes toward various categories of special children (Palak et al., 2009; Low et al., 2020; Arcangeli et al., 2020), such as gifted, autistic, and intellectually disabled, attitudes toward team attitudes toward collaboration (Schwab et al., 2015), and teaching efficacy (Alnahdi & Schwab, 2021), among others. Some scholars have also studied the relationship between educational attitudes and other related factors (Liao, B. S., 2003) and concluded that educational attitudes are typically associated with professional burnout. Some foreign researchers have suggested that having highly qualified educators with positive attitudes is one of the critical factors in the development of educational reform (Haberman, 2004). Another foreign study showed that the educator's attitude is an essential component of the educational support system in the classroom (Harris, 2010). American scholars have proposed ten positive attitudes that special education teachers need to have and have suggested the strong impact of special education teachers' attitudes on the development of the special education field (Smith, 2009). Based on this, this study aims to understand the attitudes of special education teachers toward special education curriculum and instruction in Guangdong Province and to address the following questions: (1) What are the differences in the attitudes of special education teachers toward special education curriculum and instruction in Guangdong Province compared to the attitudes of special education teachers toward special education curriculum and instruction nationwide? (2) What are the differences in special education teachers' attitudes toward special education curriculum and teaching in Guangdong Province under various contextual variables?

## 2. Method

### 2.1 Research Object

#### 2.1.1 Questionnaire Sampling

The teachers of special education schools in 21 cities of Guangdong Province were investigated by stratified cluster unequal probability sampling method. The detailed sampling process is as follows: Firstly, according to the geographical divisions of West Kwongtung, East Kwongtung, North Kwongtung, and Pearl River Delta, several cities are randomly selected as survey objects from each district. Zhanjiang, Maoming and Yangjiang are in West Kwongtung. In the east of Guangdong, there are Shantou, Chaozhou, Jieyang, and Shanwei; In the north of Guangdong, Yunfu, Shaoguan, Qingyuan, Meizhou, Heyuan; The Pearl River Delta includes Guangzhou, Shenzhen, Foshan, Dongguan, Zhongshan, Zhuhai, Jiangmen, Zhaoqing and Huizhou. Thirdly, according to economic development, the Pearl River Delta is defined as a developed area, and the west, east, and north of Guangdong are defined as less developed areas. Finally, 768 special education teachers were randomly sampled from the above areas. A total of 1000 questionnaires were sent out, and 768 were an effective effectively received, with an effective recovery of 100.0%.

#### 2.1.2 Participants

The descriptive statistical results show that the sample distribution characteristics of teachers in special education schools in Guangdong Province are as follows: In terms of gender composition, male teachers in special education schools in Guangdong Province account for 24.87%, and female teachers in special education schools in Guangdong Province account for 75.13%. In terms of age composition, the proportion of special education teachers aged between 26 and 35 in Guangdong Province is the largest, accounting for 36.20%, followed by those aged 36-45 (25.00%), under 25 (22.40%) and 46-55 (15.89%). The proportion of special education teachers over 56 years old in Guangdong Province is only 0.52%, showing the characteristics of young teachers on the whole. Regarding educational background, the teachers with bachelor's degrees in Guangdong Province account for the largest proportion, 81.25%; those with bachelor's degrees or less account for 14.32%, and those with master's degrees only account for 4.43%. In general, it shows the characteristics of a high degree of undergraduate education of teachers. Regarding professional background, there was little difference between the proportion of teachers majoring in special education (50.78%) and non-special education (49.22%). In terms of professional titles, 34.38% of Guangdong special education teachers have intermediate titles, 30.34% of Guangdong special education teachers have junior titles, only 11.20% of Guangdong special education teachers have senior titles, 23.05% of Guangdong special education teachers have no titles, 1.04% of Guangdong special education teachers reported "other". In terms of teaching years, teachers with 1-5 years of teaching experience in Guangdong Province accounted for the largest proportion, 41.54%; The second is the special education teachers in Guangdong Province with more than 20 years of experience, accounting for 27.60%; 16.28% have taught for 11 to 20 years, and 14.58% have taught for 6 to 10 years. In terms of school region, 51.82% of special education teachers in Guangdong Province are in developed areas (Pearl River Delta); The rest were in less developed areas (North Kwongtung, 2.73%; East Kwongtung, 10.03%; West Kwongtung, 35.42%; A total of 48.18%).

### 2.2 Measurement

Based on referring to the “Questionnaire of Teachers in Special Education Schools and the National Survey on the Professional Development of Special Education Teachers,” and combining with the characteristics of the development of special education teachers in Guangdong Province, the questionnaire “The Professional Development of Special Education Teachers in Guangdong Province” was compiled by ourselves. Based on this research, special education teachers’ basic personal information and attitudes toward special education curriculum and teaching are selected. Personal basic information mainly includes gender, age, education background, professional background, professional title, teaching years, and the region where the school belongs. The questionnaire on attitudes towards special education curriculum and teaching uses a 4-point scale, ranking from “extremely characteristic” to “Not at all characteristic”. The questionnaire was divided into two dimensions: cognitive response and emotional response. The cognitive response had 6 items, including “The special education funding situation and teaching conditions in my district have been greatly improved”, and the emotional response had 9 items, including “I am satisfied with my work”, among which 4 items were scored in reverse. In the study conducted by Yang, G. X. et al., the Cronbach coefficients were 0.760 and 0.635, respectively, and the reliability of the overall 15 items was 0.725 (Yang, G. X. & Yang, F. Y., 2014). In this study, Cronbach coefficients were 0.881 and 0.549, respectively, and the reliability of the overall 15 items was 0.766, basically meeting the requirements of internal consistency reliability.

### 2.3 Statistical Analysis

Statistical analysis of data was performed using SPSS version 26.0 (IBM, Armonk, NY, USA).

## 3. Results

### 3.1 The Overall Situation of Special Education Teachers’ Attitudes Towards Special Education Curriculum and Teaching in Guangdong Province

The statistical results showed that teachers of special education schools in Guangdong Province generally had a positive cognitive response to the current special education curriculum and teaching. However, about 15% of teachers disagreed with the statement that “The special education conditions in their region have been greatly improved” (17.32%) and “The teaching methods of special education generally adopted in China are relatively effective” (13.02%). “The present special education curriculum in China is reasonable” (14.32%). Less than one in ten special education school teachers disagreed with the statement that education for special children should be more practical (4.69%) and that the selection of teaching content should pay more attention to the needs and development of children (4.17%). The overall situation is positive.

Table 1. Proportion Distribution of Cognitive Responses of Teachers to Special Education Curriculum and Teaching in Special Education Schools of Guangdong Province (%)

	Extremely characteristic	Very characteristic	Slightly characteristic	Not at all characteristic
1. The funding situation and teaching conditions for special education in my district have greatly improved.	26.95	55.73	13.54	3.78
2. I believe that the special education teaching methods currently prevalent in our country are more effective.	25.00	61.98	11.72	1.30
3. The current curriculum of special education in China is more reasonable.	22.53	63.15	12.76	1.56
4. Education for children with special needs should be more practical.	39.97	55.34	4.17	0.52
5. The current Individualized Education Program (IEP) ensures that children with special needs receive a high-quality education.	32.29	57.29	9.64	0.78
6. The selection of teaching content should focus more on the needs and development of the children.	40.76	55.08	3.91	0.26

Teachers of special education schools in Guangdong Province generally have a positive emotional response to

the current special education curriculum and teaching. However, more than a quarter of teachers think that “Developing an Individualized Education Plan (IEP) for each child is a cumbersome and unpleasant task” (27.86%). “The classroom is often interrupted by the unexpected situation of children with special needs” (26.57%), and more than one-third (35.03%) of teachers said that they “often cannot complete the teaching task according to the schedule and are very upset”, nearly half (47.26%) of teachers think that “Individualized Education Plan (IEP) is just a formality which does not provide substantial help to children with special needs”.

Table 2. Emotional Response of Special Education School Teachers to Special Education Curriculum and Teaching in Guangdong Province (%)

	Extremely characteristic	Very characteristic	Slightly characteristic	Not at all characteristic
1. I am satisfied with my teaching job.	25.39	64.97	8.85	0.78
2*. Developing an Individualized Education Plan (IEP) for each child is a tedious and unappealing task.	22.66	49.48	21.09	6.77
3. Completing a set of teaching tasks gives me a great sense of accomplishment.	36.20	59.24	3.78	0.78
4. I enjoy teaching children with special needs.	33.33	61.20	4.95	0.52
5*. I am troubled by the fact that my class is often interrupted by unexpected situations with children with special needs.	19.14	54.30	21.88	4.69
6*. I am very annoyed by not being able to complete my teaching assignments on schedule from time to time.	18.36	46.61	29.17	5.86
7*. Individualized Education Plans (IEPs) are just a formality and do not help children with special needs.	15.23	37.50	32.81	14.45
8. I believe I am capable of handling all types of emergencies that arise in the classroom.	21.61	65.23	11.85	1.30
9. I am confident in my special education teaching skills.	20.83	61.07	16.28	1.82

Note: Those with \* are reverse-scoring questions.

In general, teachers in special education schools in Guangdong have a positive attitude towards special education curriculum and teaching.

### 3.2 Differences Between Guangdong Special Education Teachers' Attitudes Toward Special Education Curriculum and Teaching and Those of National Special Education Teachers

Descriptive statistics were made for the collected data. The collected questionnaire scores were compared with the national special education teachers' attitudes toward special education curriculum and teaching in the National Special Education Teachers' Professional Development Survey. A one-sample t-test was conducted. The results showed a significant difference between the individual special education teachers in Guangdong Province ( $M=1.81$ ,  $SD=0.51$ ) and the national special education teachers in terms of the “cognitive response” dimension of special education curriculum and teaching. The statistical test showed that the scores of individual special education teachers in Guangdong Province were significantly lower than those of individual special education teachers in China,  $t_{obs} = (767) = -6.702$ ,  $p < 0.05$ . The statistical test effect Cohen's  $d$  value was 0.24, and according to the criteria proposed by Cohen (1988), the effect size was medium. The lower the score, the more

positive the attitude. That is, the “cognitive response” dimension of individual special education teachers in Guangdong Province to the special education curriculum and teaching is significantly higher than individual special education teachers in China.

In the dimension of emotional response to the special education curriculum and teaching, individual special education teachers in Guangdong Province ( $M=2.25$ ,  $SD=0.33$ ) significantly differ from the national special education teachers. The statistical test showed that the scores of individual special education teachers in Guangdong Province were significantly higher than those of individual special education teachers in China,  $t_{obs}(767)=10.02$ ,  $p<0.05$ . The statistical test effect Cohen’s  $d$  value was 0.36, and according to the criteria proposed by Cohen (1988), the effect size was medium. The higher the score, the more negative the attitude. That is, the emotional response dimension of individual special education teachers in Guangdong Province to the special education curriculum and teaching is significantly lower than that of individual teachers in China.

In general, the individual special education teachers in Guangdong Province ( $M=2.05$ ,  $SD=0.33$ ) had a significant difference with the national special education teachers in the questionnaire Attitude of Special Education Teachers toward Special Education Curriculum and Teaching. The statistical test showed that the scores of individual special education teachers in Guangdong Province were significantly higher than those of individual special education teachers in China,  $t_{obs}(767)=1.963$ ,  $p<0.05$ . The statistical test effect of Cohen’s  $d$  value is 0.08, which is small according to the standard proposed by Cohen (1988). The higher the score, the more negative the attitude. That is, the attitude of individual special education teachers in Guangdong Province towards special education curriculum and teaching is significantly lower than that of individual special education teachers in China.

### 3.3 Differences Between Special Education Teachers with Different Backgrounds in Each Dimension of the Questionnaire

The subjects were grouped by gender, age, education, professional background, and other characteristic variables. An independent sample t-test or variance analysis was conducted with variables such as cognitive response, emotional response, and the total score of attitudes toward special education courses and teaching as dependent variables.

The results showed that in terms of overall attitude, the overall score of male special education teachers ( $M=1.85$ ,  $SD=0.48$ ) for special education courses and teaching was lower than that of female special education teachers ( $M=1.96$ ,  $SD=0.42$ ) for special education courses and teaching. The lower the score, the more positive the attitude is. That is, the overall attitude of male special education teachers towards special education courses and teaching is higher than that of female special education teachers. The difference between the means of the two groups was significant,  $t_{obs}(766)=-2.84$ ,  $p<0.05$  (two-tailed test), “ $d=2.53$ ”, according to the criteria proposed by Cohen (1988), the effect is significant. In terms of emotional response to special education courses and teaching, the emotional response scores of male special education teachers ( $M=1.91$ ,  $SD=0.51$ ) to special education courses and teaching were lower than that of female special education teachers ( $M=2.05$ ,  $SD=0.46$ ) to special education courses and teaching. The lower the score, the more positive the attitude is. That is, male special education teachers have a higher emotional response to special education courses and teaching than female teachers. The difference in the mean between the two groups was significant,  $t_{obs}(766)=-3.33$ ,  $p<0.05$  (two-tailed test), “ $d=0.29$ ”, with a moderate effect according to the criteria proposed by Cohen (1988). There is no significant difference between the cognitive reaction of male and female special education teachers to special education courses and teaching and the attitude of special education teachers to special education courses and teaching under different professional backgrounds.

Table 3. Analysis of the difference in special education teachers’ attitudes towards special education curriculum and teaching in Guangdong Province with different background variables

Dimension	Background Variables		$M$	$SD$	$F$	$p$
Cognitive Response	Gender	Male	1.76	0.52	4.637	0.032*
		Female	1.82	0.50		

	Age	Under 25 years old	1.85	0.48	0.661	0.619
		26-35 years old	1.81	0.49		
		36-45 years old	1.79	0.52		
		46-55 years old	1.76	0.55		
		Over 56 years old	1.96	0.61		
	Education Background	Junior high school	2.13	0.25	1.112	0.352
		Senior high school	2.50	0.71		
		Secondary technical school	1.71	0.58		
		Junior college	1.82	0.47		
		Regular college course	1.80	0.51		
	Professional Background	Graduate student	1.80	0.52	0.871	0.351
		Special-education major	1.84	0.51		
		Not a special education major	1.77	0.50		
	Professional Title	No title	1.86	0.49	1.010	0.401
		Junior professional title	1.82	0.49		
		Medium-grade professional title	1.78	0.52		
		Senior professional title	1.75	0.53		
		Others	1.79	0.53		
	Teaching Years	1-5 years	1.85	0.45	2.053	0.105
		6-10 years	1.80	0.54		
		11-20 years	1.81	0.56		
		More than 20 years	1.74	0.52		
	Region	Pearl River Delta region	1.80	0.52	0.941	0.332
		Non-pearl River Delta region	1.81	0.49		
Emotional Response	Gender	Male	1.91	0.51	6.674	0.010*
		Female	2.05	0.46		
	Age	Under 25 years old	2.25	0.29	1.637	0.163
		26-35 years old	2.28	0.34		
		36-45 years old	2.24	0.33		
		46-55 years old	2.19	0.36		
		Over 56 years old	2.31	0.36		
	Education Background	Junior high school	2.39	0.11	0.765	0.575
		Senior high school	2.28	0.39		
		Secondary technical school	2.14	0.47		
		Junior college	2.30	0.28		
		Regular college course	2.25	0.34		

General attitude	Professional Background	Graduate student	2.21	0.34	0.006	0.937
		Special-education major	2.26	0.34		
		Not a special education major	2.24	0.33		
	Professional Title	No title	2.28	0.31	1.170	0.323
		Junior professional title	2.26	0.35		
		Medium-grade professional title	2.24	0.32		
		Senior professional title	2.19	0.36		
		Others	2.26	0.35		
	Teaching Years	1-5 years	2.28	0.33	1.975	0.116
		6-10 years	2.25	0.31		
		11-20 years	2.26	0.35		
		More than 20 years	2.21	0.35		
	Region	Pearl River Delta region	2.23	0.35	3.021	0.083
		Non-pearl River Delta region	2.27	0.32		
	Gender	Male	1.85	0.48	9.665	0.002**
		Female	1.96	0.42		
	Age	Under 25 years old	2.09	0.29	1.315	0.263
		26-35 years old	2.10	0.34		
		36-45 years old	2.06	0.33		
		46-55 years old	2.02	0.36		
		Over 56 years old	2.17	0.45		
		Others	2.17	0.45		
	Education Background	Junior high school	2.28	0.33	0.968	0.437
		Senior high school	2.37	0.52		
		Secondary technical school	1.97	0.41		
		Junior college	2.10	0.30		
		Regular college course	2.07	0.34		
	Professional Background	Graduate student	2.05	0.34	0.152	0.697
		Special-education major	2.10	0.34		
		Not a special education major	2.06	0.33		
	Professional Title	No title	2.11	0.31	1.527	0.192
		Junior professional title	2.09	0.34		
		Medium-grade professional title	2.06	0.33		
		Senior professional title	2.02	0.35		
		Others	2.08	0.27		

Teaching Years	1-5 years	2.11	0.32	2.923	0.033*
	6-10 years	2.07	0.32		
	11-20 years	2.08	0.36		
	More than 20 years	2.02	0.34		
Region	Pearl River Delta region	2.06	0.35	2.556	0.110
	Non-pearl River Delta region	2.09	0.32		

Note:  $p^* < 0.05$ ;  $p^{**} < 0.01$ ;  $p^{***} < 0.001$

The variance analysis showed no significant difference in the cognitive response and emotional reaction of special education teachers' attitudes towards special education courses and teaching in the background changes of age, education background, professional title, and the school's region in Guangdong Province. However, in terms of the background variable of teaching age, as shown in the variance analysis of the table above, there are significant differences in the attitudes of special education teachers in Guangdong Province towards special education curriculum and teaching in the four teaching age stages,  $F(3,764) = 2.92$ ,  $p = 0.033$ .  $\eta^2 = 0.01$ . Post-hoc test showed that the attitude of teachers with 1-5 years of teaching was significantly higher than that of teachers with more than 20 years of teaching. The higher the score, the more negative the attitude. That is, the teachers with 1-5 years of teaching had a significantly lower attitude toward special education courses and teaching than that of teachers with more than 20 years of teaching.

#### 4. Discussion

##### 4.1 Through the Above Results and Analysis, the Following Conclusions Can Be Drawn

##### 4.1.1 Special Education Teachers in Guangdong Province Have a Positive Cognitive Response to Special Education Courses and Teaching, Which Is Significantly Higher Than that of the National Special Education Teachers

The results show that teachers of special education schools in Guangdong Province have a positive attitude towards special education courses and teaching. Their cognitive response to special education courses and teaching is significantly higher than that of national special education teachers. Compared with the teachers of special education schools across the country, in terms of cognitive response, the teachers of Guangdong special education schools agree with the funding and teaching conditions in their local areas, the teaching methods of special education widely adopted in China are more effective, and the curriculum of special education in China is reasonable. The reason may be that Guangdong Province is a crucial province of national economic development. The total investment of local education funds and financial education funds account for about 10% of the country, accounting for a large proportion. Since 2014, the Guangdong Provincial Government has successively launched the Guangdong Provincial Special Education Promotion Plan (2014-2016) and the Second Phase of the Guangdong Provincial Special Education Promotion Plan (2017-2020), which have not only completed the first phase of the special education promotion plan but also further promoted the reform and development of special education in Guangdong Province. Guangdong Province invests greatly in special education, providing good educational conditions for students with special needs (Wang, Y., 2019). In special education teaching combined with information, most of the information teaching aids, such as the Seewo whiteboard, are used in the classroom so that students can learn better. In terms of curriculum, Guangdong Province has carried out the teaching reform of the special education curriculum (Wang, Y., 2019), which is combined with Guangdong Province's importance to the development of quality education for students, and the special education curriculum may be more comprehensive, reasonable and perfect.

Another possible reason is that the national data survey year is earlier. The implementation of favorable policies in special education, it may cause a bias in the data of high scores in Guangdong Province.

##### 4.1.2 The Emotional Response and Overall Attitude of Guangdong Special Education Teachers to Special Education Courses and Teaching Are Relatively Positive but Significantly Lower Than that of the National Special Education Teachers

The results show that the emotional reaction and overall attitude of special education courses and teaching are relatively positive but significantly lower than that of the national special education teachers. Specifically, the teachers of special education schools in Guangdong Province are better than the teachers of national special education schools in "achieving a great sense of achievement in completing a set of teaching tasks", "Like to teach special children" is more optimistic, but compared with teachers in special education schools nationwide,



special education teachers in Guangdong Province have low satisfaction with their teaching work, making an IEP for each child is complicated, often interrupted by emergencies of special children, often fail to complete the teaching task according to the schedule and feel the worry, feel that IEP is just a form and has no practical help for special children, less confident in the ability to deal with emergencies in class, not confidence in their special education teaching skills and other problems. Investigate its reason, and there may be several aspects: 1) Guangdong teachers' special-education professional ability is insufficient. According to previous research, Guangdong special-education teachers' undergraduate degrees did not reach 60%. Second, the teachers' professional degree is low. 75% of teachers from the special education field lack specific professional knowledge and skills (Chen, X. M., 2016) and lack the behavior correction skills for students with special needs (Yang, G. X. & Yang, F. Y., 2014). 2) Special education teachers in Guangdong Province lack the professional ability to develop IEPs and skills (Hu, Y. C. et al., 2021). In addition, some studies have shown that workload is one-factor affecting teachers' teaching attitudes (Chen, J., 2017). Special education teachers need to play multiple roles in IEP, heavy roles, and a lot of time and effort to develop the IEP, and some areas and school leaders do not pay attention to the IEP, special education teachers are difficult to formulate and implement IEP so that the IEP becomes a superficial form (Yu, T. A., 2019). 3) Special children have certain particularity the problems such as attention deficit, hyperactivity, emotional disorders, easy to disturb the order of classroom behavior, or because of physical and mental discomfort in the classroom emergency, special education teachers with classroom teaching and behavior management double pressure may slow teaching task progress, which brings certain teaching pressure and trouble (Hu, Y. C. & Liu, X. W., 2021).

#### 4.1.3 The Attitude of Male Special Education Teachers in Guangdong Province Is Significantly Higher Towards Special Education Courses and Teaching Than that of Female Special Education Teachers, Among Which Emotional Response Is the Key

Unlike previous studies of teachers, special education teachers towards curriculum and teaching or special education courses and teaching (Yang, G. X. & Yang, F. Y., 2014; Liao, B. S., 2003), this study reports the gender differences in the attitude of special education teachers in Guangdong Province. From the psychological research perspective, male teachers are better than female teachers regarding career value, development identity, and career investment. Tong Hailan's research reports this point (Tong, H. L., 2018). Psychologists have pointed out that male teachers significantly influence all aspects of children's growth. Even in some aspects of knowledge, relatively more open than female teachers (Liu, L., 2009), high evaluation can make male teachers feel a higher sense of achievement and superiority so that they are more willing to invest in teaching and have a more positive attitude. In reality, the imbalance of the ratio of male and female teachers in special education schools is widespread, which virtually improves the status of male teachers in special education, has a broader development space, and has more advantages in the work to have a higher job satisfaction (Chai, J. & Wang, J., 2014). In addition, because there are fewer male teachers in special education schools, male teachers will care more about their abilities. Thus, the sense of efficacy in work is higher than that of female teachers (Shen, C. L., 2020).

#### 4.1.4 Teachers with More Than 20 Years of Teaching Experience Have a More Active Attitude Towards Special Education Courses and Teaching Than Those With 1-5 Years of Teaching Experience

In line with previous studies, older teachers were more positive than younger ones. The reasons may have the following aspects—first, the difference in teaching experience. As teaching for a long time, senior teachers has accumulated rich teaching experience in the solution of students' challenging behavior, classroom discipline management, and classroom teaching (Liao, B. S., 2003). And teachers with 1 to 5 years of teaching, due to the lack of teaching experience, often spend much time in the classroom management and students' destructive behavior, resulting in deficiency of effective teaching time, which causes harm to their teaching efficacy and attitude toward curriculum and teaching (Cooc, N., 2019). Second, the adaption to the occupational environment. Senior teachers, due to a long time of work and running, adapt to the teaching environment well (Liao, B. S., 2003), and novice teachers often need the process of psychological adjustment, faced with weak teaching skills, interpersonal adaptation, psychological adaptation, and other problems, has a particular impact on the teaching attitude (Yuan, S. S., 2020). In addition, differences among teachers of different ages in perceived social support, obstacles, teaching efficacy, school leadership, professional development participation, and other aspects may also lead to differences in their attitudes toward special education courses and teaching (Shaoan Zhang, et al., 2019).

### 4.2 Suggestions

#### 4.2.1 Policy Suggestion

(1) Improve the cognitive response of special education teachers to IEP, simplify the IEP writing method, and pay attention to the practical benefits

According to the feedback from special education teachers in Guangdong Province, the education administrative department should adopt various ways to improve the understanding of the importance of IEP in special children, clarify the operation mechanism and supervise the implementation of the IEP system, simplify the preparation of IEP and formulate unified format standards, and provide corresponding support measures for teachers to write IEP; pay attention to practical benefits, eliminate formalism, to improve their cognitive and emotional responses to special education courses and teaching.

(2) Improve the professional skills of special education teachers in Guangdong Province through the teacher professional development path

According to the situation of the special education teachers in Guangdong Province, the education administrative department should speed up the development of teachers "professional development model, school standard teachers" professional development model, and professional development model based on network environment (Xu, W., 2021), with multiple paths to teachers skills training, improve their efficacy in dealing with students' behavior and students emergency, and teaching skills.

(3) Improve the emotional response of female special education teachers in Guangdong Province to special education courses and teaching through various ways

Improving the female special education teachers' teaching efficacy and teaching skills, improving their understanding of students with special needs, improving the level of social support, providing rich resources and various ways to enhance special education curriculum and teaching emotional reaction of female special education teachers, make the special education curriculum and teaching cognitive reaction and emotional reaction balance, and improve the work input, work achievement, and teaching effect.

(4) Accelerate the popularization of supervised apprenticeships, the old and new forces complement each other in capacity

Studies have shown that if new teachers can effectively and thoroughly communicate with experienced senior teachers, even if a superficial imitation, it can also promote the professional growth of new teachers (Ma, L. N., 2018). Other studies point out that the teaching activities of senior teachers to novice teachers positively affect both the remodeling of senior teachers' work and the improvement of novice teachers' sense of self-efficacy. (Niu, L. X. et al., 2021). Chinese scholar Hu Xiaoyi et al. proposed the supervision apprenticeship model. Compared with the traditional mentoring system, teachers can develop learning activities independently, which positively impacts teachers' learning autonomy and enhances their learning motivation (Hu, X. Y. et al., 2021). Accelerating the popularization and deepening the development of supervised apprenticeships will have profound significance for the professional development of teachers.

#### 4.2.2 Research Suggestion

This study reports the significant differences in gender and teaching age of special education teachers' attitudes toward special education curriculum and teaching. Still, only the data are processed and analyzed. In the future, the influencing factors of this difference can be further studied, and the paper can explore the potential mechanism affecting special education teachers' attitudes toward special education curriculum and teaching.

#### 4.3 Study Limitations

This study selects the questionnaire in special education teachers of special education curriculum and teaching attitude measurement only compiled two subscale dimensions. According to the definition of attitude, cognitive reaction, emotional reaction, and behavioral intention are components of attitude. Studies have shown that teachers' attitudes and teaching behavior are closely related (Yang, Y. X., 2006). The lack of behavior intention dimension of the subscale may lead to Guangdong special education teachers' special education curriculum and teaching attitude measurement needs to be more comprehensive. On the other hand, the self-reported questionnaire form may need to be more conducive to the authenticity of the attitude measurement of special education teachers.

#### Author Contributions

Investigation: Jie Yang

Methodology: Zhiyao Liu, Linlin Wu

Original draft: Zhiyao Liu, Linlin Wu

Writing – Review & Editing: Jie Yang

#### Fund Project

This study was funded by the Department of Education of Guangdong Province Program (2018WQNCX105),

Guangdong Province Philosophy and Social Science Planning Fund (GD20CJY36) ,and Lingnan Normal University Research Projects (ZW1809).

### Conflicts of Interest

The authors have no conflicts of interest to disclose.

### References

- Alnahdi, G. H., & Schwab, S., (2021). Special Education Major or Attitudes to Predict Teachers' Self-Efficacy for Teaching in Inclusive Education. *Frontiers in Psychology*, 12, 680909. <https://doi.org/10.3389/fpsyg.2021.680909>.
- Arcangeli, L., Bacherini, A., Gaggioli, C., Sannipoli, M., & Balboni, G., (2020). Attitudes of Mainstream and Special-Education Teachers toward Intellectual Disability in Italy: The Relevance of Being Teachers. *International Journal of Environmental Research and Public Health*, 17(19). <https://doi.org/10.3390/ijerph17197325>.
- Chai, J. & Wang, J., (2014). An Investigation into Special Education Teachers' Career Identity and Job Satisfaction. *Chinese Journal of Special Education*, (11), 8-14.
- Chen, J., (2017). A Study of University Teachers' Beliefs and the Influence Factors for Their Teaching: Based on the Perspective of the Scholarship of Teaching. *Journal of Jimei University (Education Science Edition)*, (06), 7-13.
- Chen, X. M., (2016). Research on the development status of Special Education in Guangdong Province—Based on the data comparison of Guangdong, Beijing, Jiangsu, Zhejiang, and Shanghai. *Education Exploration*, (10), 68-73.
- Cooc, N., (2019). Do Teachers Spend Less Time Teaching in Classrooms with Students with Special Needs? Trends From International Data. *Educational Researcher*, 48, 273-286.
- Gan, Z. L., (2003). A survey on special education teachers' attitudes toward the importance of expertise and professional knowledge. *Chinese Journal of Special Education*, (04), 85-88.
- Haberman, M., (2004). Can Star Teachers Create Learning Communities? . *Educational Leadership*, 61, 52.
- Harris, A. R., (2010). Investigating Efforts to Change Educator Attitudes and Teaching Strategies through Professional Development Focused on the Use of Backward Design Curriculum and the Principles of Efficacy: Educator Behavior.
- Hu, X. Y., Zhai, Y. X., Sun, Y. X. & Wang, Y., (2021). Development of Evidence-based Practice Research for Autistic Children and Its Enlightenment to Special Education Teacher Education. *Teacher Education Research*, 33(04), 7-13. <https://kns.cnki.net/kcms/detail/detail.aspx?doi=10.13445/j.cnki.t.e.r.2021.04.002>.
- Hu, Y. C., Liu, X. W., (2021). Research on the teaching perplexity of Teachers in Special education Schools in Guangdong Province. *Journal of Suihua University*, 41(04), 104-109.
- Hu, Y. C., Wu, Y. Y., Liu, X. W., (2021). Research on the Professional Competencies and Assistance Needs of Formulating IEP of Teachers in Special Education Schools in Guangdong Province. *Modern Special Education*, (24), 12-21.
- Liang, N. J., (2006). *Introduction to psychology*. Shanghai: Shanghai Educational Publishing.
- Liao, B. S., (2003). The study of the relationship between special education teachers' attitude and burnout in junior high and elementary schools. Taiwan: Department of Special Education, National Changhua University of Education.
- Lin, Y. X., (2001). A Study on the Interview, Assessment and Survey of Educational Attitudes for Junior High School Teachers and Elementary School Teachers. Taiwan: Department of Education, National Cheng Kung University.
- Liu, L., (2009). The Study of Current Situation and Strategies on Professional Development of Preschool Special Education Teachers in Shanghai. East China Normal University.
- Low H. M., Lee, L. W., & Che Ahmad, A., (2020). Knowledge and Attitudes of Special Education Teachers towards the Inclusion of Students with Autism Spectrum Disorder. *International Journal of Disability, Development and Education*, 67(5), 497–514.
- Ma, L. N., (2018). Strategies for vocational adaptation of kindergarten novice teachers. *Course Education Research*, (03), 198-199.
- Ma, Y. Y., (2005). The influences of teachers' attitudes on learning motivation of students with visual and auditory impairment. *Chinese Journal of Special Education*, (02), 23-27.

- Niu, L. X., Li, H. P. & Lu, S. C., (2021). Research on the Influence Mechanism of Job crafting in the Context of Mentoring. *Science & Technology for Development*, (11), 2038-2046.
- Notice of the Ministry of Education of the People's Republic of China on printing and distributing the Professional Standards for Special Education Teachers (Trial), (2015). *Ministry of Education of the People's Republic of China*, (10), 40-44.
- Palak, Z., Kirenko, J., Gindrich, P., Kazanowski, Z., & Pielecki, A., (2009). Student Teachers in Special Education and Their Readiness to Work with Gifted and Talented Children. *Gifted and Talented International*, 23(1), 39-48.
- Politou, T. C., (2022). Investigation of the Feelings, Attitudes and Concerns of Special and General Education Teachers Regarding the Inclusive Education of Students with ADHD. Online Submission, 9.
- Schwab, S., Holzinger, A., Krammer, M., Gebhardt, M., & Hessels, M. G. P., (2015). Teaching Practices and Beliefs about Inclusion of General and Special Needs Teachers in Austria. *Learning Disabilities: A Contemporary Journal*, 13(2), 237-254.
- Shen, C. L., (2020). Study on Professional Personality Traits of special education teachers. Shanxi Normal University.
- Smith, A. L., (2009). Enhance the Image of the Special Education Teacher. *The Delta Kappa Gamma Bulletin*, 75, 27.
- Tong, H. L., (2018). Research on the Present Situation and Countermeasures of Special Education Students' Professional Identity. Liaoning Normal University. <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201802&filename=1018172981.nh>.
- Wang, D. H., (2018). The situation and tasks of the construction of teaching staff in the new era. *Educational Research*, (03), 4-11.
- Wang, Y., (2019). Based on the new starting point, to achieve the greater development of special education in Guangdong. *Modern Special Education*, (17), 5-7.
- Xu, W., (2021). The Model of Teacher Professional Development and Career Planning—A Review of Teacher Professional Ethics and Professional Development. *Research in Educational Development*, 41(18), 2. <https://kns.cnki.net/kcms/detail/detail.aspx?doi=10.14121/j.cnki.1008-3855.2021.18.001>.
- Yang, G. X. & Yang, F.Y., (2014). *National Survey and Policy Analysis for Teacher Professional Development in Special Education Schools*. Shanghai: East China Normal University Press.
- Yang, Y. X., (2006). On the Change of Teachers' Teaching Attitude in the New Curriculum Reform. *Theory and Practice of Education*, (03), 38-40.
- Yu, T. A., (2019). Thoughts on special education teachers in IEP implementation in China. *Economic Research Guide*, (15), 126-127.
- Yuan, S. S., (2020). A Study on Professional Adaptation of Novice Teachers in Special Schools for Intellectual Disability and Related Factors. East China Normal University. <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202002&filename=1020635982.nh>.
- Zhang, S., Shi, Q., & Lin, E. X., (2020). Professional development needs, support, and barriers: TALIS US new and veteran teachers' perspectives. *Professional Development in Education*, 46, 440-453.

## Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).