# PRE-SERVICE TEACHERS' PERCEPTIONS TOWARDS THE INCLUSION OF CHILDREN WITH SPECIAL EDUCATIONAL NEEDS IN CHINESE PRE-SCHOOLS

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Inclusive education, an integral facet of contemporary special educational practices, seeks to integrate children with special educational needs (SEN) into mainstream pre-school environments. The success of this approach relies on the perspectives of pre-service teachers, who are trained to become the prospective teachers responsible for addressing diverse learning needs in inclusive classrooms. This study explores the attitudes of 258 pre-service pre-school teachers in China towards inclusive education for children with SEN, utilizing the Teacher Attitudes toward Inclusion Scale (TATIS). The research provides nuanced insights into the viewpoints of these future teachers as they prepare to enter full-time pre-school teaching. The findings reveal a generally positive yet moderately inclined attitude towards inclusive education among the participants. The study underscores the need for enhanced training and support for pre-service teachers in China, with a specific focus on inclusive education. These insights contribute modestly to the ongoing global discourse on pre-school education and offer valuable perspectives to enhance the quality of inclusive pre-school education in China.

**Keywords:** Inclusive education, SEN, Pre-school teacher, Attitudes

# **INTRODUCTION**

The worldwide education sector has gradually adopted and expanded inclusive education during the last few decades. An essential social justice idea from the Salamanca Statement (UNESCO, 1994) has inspired the concerns for special educational needs (SEN) and inclusive education. The concept of inclusive education is typically discussed in two ways (Leijen et al., 2021). The first argument is 'inclusion for some' which supports the idea that children with special needs have a right to get the best possible education from personnel who have undergone specialised training. This point of view contends that in order to adequately serve and support children with SEN, specific services and staff may be needed. The second argument is 'inclusion for all', which argues that all children should have the chance to study with one another, despite having different requirements. This point of view emphasises that all children, regardless of their requirements, have a right to obtain an education in a regular educational setting. The United Nations Children's Fund (UNICEF, 2023) claims that inclusive education is the most efficient means of ensuring that all children have equal opportunities to go to school, learn, and acquire the necessary skills.

The present research adopts the latter definition, in which all children should be given the opportunity to learn in a classroom alongside their peers, regardless of their skills, physical condition, gender, race, cultural background, or economic status. Consequently, all pre-school children, including those with special needs or impairments, are welcome to participate in inclusive education. Embracing this educational philosophy, in addition to pre-school children with SEN themselves, teachers should also pay attention to the practitioners of inclusive education, namely the teachers. To accomplish this goal, it is essential for early education providers, including pre-service teachers, to undergo relevant training and receive support to address the distinctive educational requirements of disabled children within the framework (Tristani & Bassett-Gunter, 2020). This perspective is underscored by a study conducted by Megapanou (2022), which revealed that teachers who participated in inclusive education settings experienced significant enhancements in their perceptions of both children with SEN and those with general developmental milestones. These improvements were particularly notable in the areas of social skills, academic progress, and personal development.

#### LITERATURE REVIEW

## **Teacher Attitude**

It is essential to prioritize the development of the pre-school teaching staff if inclusive pre-school education is to be developed. The primary objective of inclusive education is to create educational fairness and equality, making sure that all pre-school children have the chance to obtain a high-quality education and accomplishing the most learning and growth possible. This calls for teachers and schools to plan and carry out educational activities in a way that accommodates the various needs and capacities of all pupils. According to research, pre-school teachers' actions are what make inclusive pre-school education effective. Teachers' attitudes toward inclusive pre-school education are one of the key determinants of the success of this type of education for pre-school children with SEN (Boyle et al., 2020; Pit-ten Cate et al., 2018). According to a review in China, teachers who are aware of the special education requirements of their target students and who are supportive of inclusive education are better able to provide materials and provide a helpful learning environment for these children (Yang & Yu, 2021).

## **Inclusive Education in China**

The Government of China, along with its education policies, has emphasised the necessity of adopting inclusive education, aligning with the global trend of supporting such educational integration. Commencing in the 1980s, China has initiated inclusive education programs, with a predominant focus on mandating education for students with disabilities (Meng Deng & Harris, 2008). In 2013, the Ministry of Education in China introduced an action plan for the implementation of inclusive education across elementary and secondary schools (Yan & Deng, 2018). The promotion of inclusive pre-school education and the assertion of every pre-school child's right to education have become key focal points in the progression of pre-school education in China.

The field of pre-school education in China is experiencing rapid expansion and elevation of standards. Given the specialised educational demands placed on pre-school teachers, there is an urgent need for comprehensive research on the attitudes of pre-service teachers towards inclusive education. However, existing research primarily targets in-service teachers (Wang, 2014). Moreover, studies on pre-service teachers have predominantly focused on primary

education rather than pre-school education (Yang & Lv, 2021). This approach does not align with China's current demand for training more teachers who are holding advanced degrees in pre-school education, revealing a notable research gap within the country's higher education sector in supporting the best practice of inclusive pre-school education.

# PURPOSE OF THE STUDY

The objective of the current study is to comprehensively examine the attitudes of pre-service pre-school teachers in China towards inclusive education for pre-school children with SEN. This research aims to analyze factors which influence pre-service teachers' readiness and approach to inclusive education. It seeks to explore the demographic variables affecting these attitudes, including gender, academic year, and prior experience with SEN students. Additionally, the study intends to identify areas where pre-service teachers feel the need for further education and training, thereby guiding the development of targeted instructional strategies and policy-making in China. By understanding the nuances of pre-service teachers' attitudes as reflected through the TATIS, the research aims to contribute to the improvement of inclusive education practices and the preparation of future pre-school teachers in China.

## **METHODOLOGY**

## **Participants**

The selected participants for this study comprised 258 students specialising in pre-school education from a vocational college situated in Guangdong Province. Utilising a combination of purposeful and convenience sampling methodologies, the sample included students from different academic years: 20.54% from Class 2020, 37.6% from Class 2021, with the remaining 41.86% split between students from Class 2022. The focus for this research was pre-service pre-school teachers, specifically their perspectives on supporting pre-school children with special needs within the context of Chinese pre-schools. The age range of our participants spanned from 19 to 22 years old. The study involved pre-service teachers from Year 1 to Year 4 in a vocational college. In this study, despite that Year 1 and Year 2 pre-service teachers did not have exposure to students with SEN, they were included in the study because they had already undergone courses on inclusive education and SEN. Consequently, they are familiar with these concepts.

#### Instrument

This study employed a survey questionnaire for data collection, comprising two sections: General Information and the Teacher Attitudes toward Inclusion Scale (TATIS, Cullen et al., 2010). Demographic data of the participants were collected, including general information such as gender, academic level, field of study in education, their exposure to students with SEN, any training they received in inclusive education, their internship experiences, the subjects they taught, the types of learning disabilities they encountered in their students, their experience in inclusive education, and their interest in learning more about it.

TATIS (Cullen et al., 2010) consists of 14 items, which are composed of three major factors: attitudes toward students with disabilities in inclusive settings (POS), beliefs about the efficacy of inclusion (BEI), and beliefs about professional roles and responsibilities (PRF). The instrument used in this study employs a 7-point Likert scale to score each item, ranging from

1 (Very Strongly Disagree) to 7 (Very Strongly Agree). The TATIS results were subjected to statistical analysis, which revealed the presence of three factors that accounted for over 58% of the variance and demonstrated high validity. The overall reliability coefficient of the instrument, as measured by Cronbach's Alpha, was 0.821, with individual item coefficients ranging from 0.680 to 0.863. In this study, the Cronbach's Alpha was reported as 0.864 for POS, 0.897 for BEI, 0.899 for PRF and 0.793 for overall items. As for validity, the KMO for all items is 0.878. Therefore, the instrument TATIS is valid and reliable for research use in China.

## **Procedures**

This survey was conducted with the pre-service teachers, using an online questionnaire. At the time of study, Year 1 and Year 2 students were studying in the campus. The lecturer instructed the students to complete the online questionnaires using their phones face-to-face at the end of the class. The Year 3 students were performing their teaching practicum in the local pre-schools. They were instructed to fill in the questionnaire online remotely.

## **Data Analysis**

The data were analysed using SPSS 27.0. The raw scores on the questionnaire were analysed, where prior to SPSS data processing, the items of POS and PRE were treated as reverse questions. Finally, the total score of TATIS is the sum of the three factors. Teachers' attitudes toward inclusive education were divided into low (score: 14-42), moderate (score: 43-70), and high (score: 71-98), according to the total TATIS score. TATIS scores had a mean of 50 and a standard deviation of 10. The analysis of variance (ANOVA) was used to find the significant difference in demographic data.

#### RESULTS

# **Demographic Data**

According to the data, the survey had 258 valid participants, demonstrating a female-majority (n=241,93.41%) respondent group. The data showed that 62.4% (n=161) of the participants had not taught students with learning disabilities, the highest percentage. Attention deficit hyperactivity disorder (n=44,17.05%) and autism spectrum disorders (n=24,9.3%) followed. The percentages of respondents who had experience with hearing, visual, and physical impairments were comparatively low (3.1%,0.78%, and 1.55%, respectively).

Furthermore, the survey revealed areas where the participants wished to gain further knowledge: teaching methods for students with learning difficulties (n = 168, 65.12%), types of parental (n = 145, 56.2%) and teacher assistance (n = 148, 57.36%), and ways to aid students in an inclusive environment (n = 149, 57.75%). Causes and diagnostic methods for learning difficulties were also high-interest areas (n = 121, 46.9% and n = 126, 48.84%, respectively).

Finally, the preferred platforms for acquiring inclusive education skills were university courses (n = 191, 74.03%) and pre-school teacher training (n = 181, 70.16%), with the internet also serving as a common resource (n = 133, 51.55%). Detailed descriptive statistics concerning Demographic Data can be seen in Table 1.

 Table 1

 Descriptive Statistics for the Demographic Data

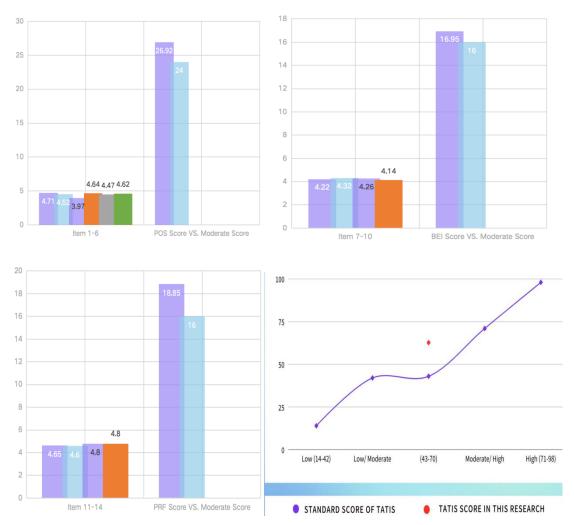
Item Demographic Data	F	%	M	SD
Gender			1.07	0.249
Female	241	93.41		
Male	17	6.59		
Grade			1.79	0.762
Freshman	108	41.86		
Sophomore	97	37.6		
Senior	53	20.54		
Specialization			1.95	0.227
Mainstream	244	94.57		
Special	14	5.43		
Interact with SEN Students Before			1.76	0.428
Yes	62	24.03		
No	196	75.97		
Learn about or Received Training in Inclusive Education			1.74	0.437
Yes	66	25.58		
No	192	74.42		
Internship Experience			2.07	0.808
No experience	60	23.26		
1-2 times	134	51.94		
3-4 times	49	18.99		
More than 4 times	15	5.81		
Teaching Experience in Inclusive Education (years)			1.31	0.588
No experience	193	74.81		
Less than 1	54	20.93		
1-2	8	3.1		
More than 2	3	1.16		

Note: Total number is 258 participants.

# Pre-Service Teachers' Attitudes on Inclusive Education

The TATIS (Cullen et al., 2010) was utilised to evaluate teachers' attitudes towards inclusive education across 14 items. The mean scores for all items, ranging from item 1 to item 14, varied between 3.97 and 4.80. The POS, BEI, and PRF factors had mean scores of 26.92, 16.95, and 18.85, respectively, while the TATIS had a mean score of 62.72 (refer to Figure 1).





The POS mean score of 26.92 shows that teachers have a moderate attitude towards students with disabilities in an inclusive setting, due to its score being above the standard mean, indicating a positive tendency. Teachers also demonstrated moderate attitudes towards beliefs about the efficacy of inclusion (BEI) and beliefs about professional roles and responsibilities (PRF), leaning towards positivity. However, the overall attitude of teachers towards inclusive education (TATIS) was moderate but tended towards positivity, as indicated by a mean score of 62.72 (refer to Figure 1). Descriptive statistics for the item, factors and overall scale are seen in Table 2.

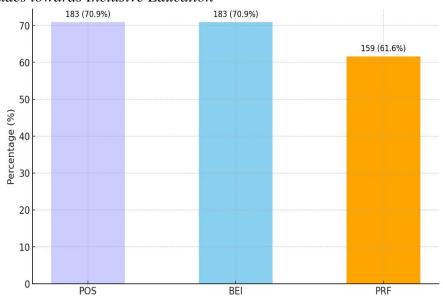
**Table 2**Descriptive Statistics for the Items, Factors and Overall Scores

Item/ Factor	Decsription (TATIS, Cullen et al., 2010)	Mean	Standard Deviation
Item 1	All students with mild to moderate disabilities should be educated in regular classrooms with non-handicapped peers to the fullest extent possible.	4.71	1.49
Item 2	It is seldom necessary to remove students with mild to moderate disabilities from regular classrooms in order to meet their educational needs.	4.52	1.55
Item 3	Most or all separate classrooms that exclusively serve students with mild to moderate disabilities should be eliminated.	3.97	1.63
Item 4	Most or all regular classrooms can be modified to meet the needs of students with mild to moderate mild to moderate disabilities.	4.64	1.46
Item 5	tudents with mild to moderate disabilities can be more effectively educated regular classrooms as opposed to special education classrooms.		1,41
Item 6	Inclusion is a more efficient model for educating students with mild to moderate disabilities because it reduces transition time	4.62	1.42
Item 7	Students with mild to moderate disabilities should not be taught in regular classes with non-disabled students because they will require too much of the teacher's time.		1.53
Item 8	I have doubts about the effectiveness of including students with mild/moderate disabilities in regular classrooms because they often lack the academic skills necessary for success.		1.55
Item 9	I have doubts about the effectiveness of including students with mild/moderate disabilities in regular classrooms because they often lack the social skills necessary for success.		1.47
Item 10	I find that general education teachers often do not succeed with students with mild to moderate disabilities, even when they try their best.		1.50
Item 11	I would welcome the opportunity to team teach as a model for meeting the needs of students with mild/moderate disabilities in regular classrooms.		1.33
Item 12	All students benefit from team teaching; that is, the pairing of a general and a special education teacher in the same classroom.		1.43
Item 13	The responsibility for educating students with mild/moderate disabilities in regular classrooms should be shared between general and special education teachers.		1.46
Item 14	I would welcome the opportunity to participate in a consultant teacher model (i.e., regular collaborative meetings between special and general education teachers to share ideas, methods, and materials) as a means of addressing the needs of students with mild/moderate disabilities in regular classrooms.		1.44
Factor 1	POS: Item 1-6	26.92	6.92
Factor 2	BEI: Item 7-10	16.95	5.29
Factor 3	PRF: Item 11-14	18.85	4.96
Full Scale	POS+BEI+PRE	62.72	10.78

A total of 72.9% of pre-service Chinese teachers (n=188) had moderate attitudes towards inclusive education. High attitudes were more common than low attitudes for the full scale (TATIS) factor, with 56 (21.7%) and 14 (5.4%) teachers, respectively.

As for teachers' perceptions of students with mild to moderate disabilities (POS), the majority also had moderate attitudes towards inclusive education, accounting for 183 individuals or 70.9%. In terms of beliefs about the efficacy of inclusion (BEI), most teachers, or 183 individuals (70.9%), had moderate attitudes towards inclusive education. Similarly, for perceptions of professional roles and functions (PRF), 61.6% of teachers, or 159 individuals, also demonstrated moderate attitudes (refer to Figure 2).





The statistical analysis shows that male teachers had a slightly positive attitude (M = 27.94, SD = 7.58) compared to female teachers for POS (M = 26.85, SD = 6.89). However, the overall results indicated that gender did not differ significantly in attitude (t = 0.092, p = 0.762), but there was significant difference in 'year of study' [F(2,255) = 5.222, p = 0.006]. Year 2 (M = 65.29, SD = 11.0) is the most positive attitude group towards inclusive education, as compared to Year 1 (M = 60.5, SD = 8.37). Significant differences were also found in POS [F(2,255) = 3.86, p = 0.022] and PRF [F(2,255) = 3.638, p = 0.028] factors.

Moreover, teaching experience with special educational needs students showed significant differences in inclusive education [F(3,254) = 2.898, p = 0.036] and BEI [F(3,254) = 3.83, p = 0.01]. The pre-service teachers who have no experience in inclusive education have a more positive attitude towards inclusion compared to the pre-service teachers with experience, as indicated in the BEI scores (M=17.52) and general inclusive education (M=63.5).

Through linear regression analysis, finally, it was found that the POS factor [F (1,256) = 549.22, p.= 0.000], BEI factor [F (1,256) = 8.92, p.= 0.003] and PRF [F (1,256) = 544.83, p.= 0.000] are all significantly differed to the full scale appear and all are playing a positive role.

## **DISCUSSION**

The purpose of this study was to gain insight into the perspectives of pre-service pre-school teachers regarding pre-school children with special needs and attitudes toward the implementation of inclusive education in the pre-school setting. The study focused on pre-service teachers' attitudes toward inclusive education. Through a survey of 258 pre-school students from higher vocational colleges in Guangdong Province, we explored their perspectives on supporting pre-school children with SEN Chinese pre-school settings. The majority of the pre-service pre-school teachers who took part in the research were passionate and qualified, and they all shown a strong interest in and excitement for inclusive teaching for students with special education needs.

The findings revealed that most teachers had moderate attitudes toward inclusive education, but tended to be positive. The results were in line with the research undertaken by Chinese scholars (Wang, 2014; Yang & Lv, 2021), which stated that Chinese teachers generally held positive attitudes toward inclusion. In addition, this study found that male pre-service teachers had slightly more positive attitudes towards SEN pupils, while there were significant differences in overall attitudes towards inclusive education between different grades of preservice teachers. This finding is consistent with a study in Australia which found that students who had studied an inclusive education programmes or were in the later stages of their studies had more positive attitudes towards inclusive education (Kraska & Boyle, 2014). In addition, the findings of this paper are also in line with a comparative study of Turkish and American pre-service pre-school teachers' attitudes towards inclusion of children with disabilities, which showed that pre-service teachers in these two countries had similar and positive attitudes towards inclusive education (Rakap et al., 2016).

This study also found that attitudes towards inclusive education were closely related to teachers' special educational experience, which is consistent with Yang and Yu's (2021) findings that teachers who understand the special educational needs of their target students and are supportive of inclusive education are better able to provide these students with materials and a beneficial learning environment. However, it is important to note a divergence from Wang's (2014) study, which highlighted that most existing research on attitudes towards preschool inclusive education is directed at in-service teachers and focuses primarily on secondary vocational education. In contrast, the present study extends the scope to pre-service teachers within higher vocational education, offering new insights into this demographic's readiness for inclusive practices. This distinction is crucial, as it contributes to a more nuanced understanding of how educational level and teaching experience might influence educators' perceptions of inclusion.

Furthermore, the findings of this study resonate with those of a study conducted in Mexico. A study in Mexico assessed the impact of a pre-service teacher program on teachers' feelings, attitudes, concerns and self-efficacy to educate students with disabilities in inclusive education and found that special education pre-service teachers held the most positive views on inclusive education in the later stages of the program, while pre-school teachers had the least positive views (Romero-Contreras et al., 2013). Similar to the Mexican study, this research also revealed that pre-service teachers' attitudes towards inclusive education are closely related to their educational experiences and stages. However, unlike the participants in the Mexican study, this study focuses on pre-service pre-school teachers from higher vocational colleges in China.

This difference provides us with a unique perspective to understand pre-service teachers' views on inclusive education in different cultural and educational systems.

Overall, the findings of this study are largely consistent with those of the existing literature, but also provide some new insights and findings that provide valuable references for research and practice in pre-school inclusive education.

#### CONCLUSION

The current study provides an in-depth exploration of Chinese pre-service pre-school teachers' attitudes towards the education of children with SEN, revealing that their overall attitudes towards inclusive education tended to be moderate but generally positive. In particular, this study found that sophomore students had more positive attitudes towards inclusive education, which may reflect the influence of the educational programmes on students' attitudes. In addition, pre-service teachers who lacked experience in special education held more positive attitudes toward inclusive education than teachers with such experience, a finding that has important implications for teacher training and the design of educational programs.

The findings of this study have important implications for pre-school education and its curriculum design in China. It highlights the importance of strengthening the focus on Inclusive Education and SEN in teacher education programs. In addition, this study contributes to the global discourse on pre-school education. The findings of this study show that pre-service teachers can have positive attitudes towards inclusive education even when they have limited educational experience. This point is crucial for advancing the global agenda of inclusive education. Finally, this study emphasizes the importance of continuously assessing pre-service teachers' attitudes towards inclusive education. Future research should continue to explore how different factors influence the attitudes of pre-service teachers and consider how educational interventions can promote more positive attitudes, thus providing deeper insights and guidance for inclusive education practice in China and globally.

## RECOMMENDATIONS FOR FUTURE RESEARCH

It is noteworthy that pre-service teachers' recognition of training opportunities does not imply that enhancing their positive attitudes towards inclusive education can only rely on training. Studies have found that increasing knowledge about legislation and policies related to inclusive education, as well as boosting confidence in becoming an inclusive education teacher, do not necessarily address their concerns about having students with disabilities in their classrooms, or the pressure they feel (Forlin & Chambers, 2011).

It is necessary to conduct repeated measurements to accurately assess the attitudes of pre-service teachers towards inclusive education in China. Such measurements serve to confirm and strengthen existing conclusions regarding teachers' attitudes towards inclusive education. Furthermore, it is imperative to create training programmes that aim to improve these attitudes. The success of pre-school inclusive education in the future is heavily dependent on these factors.

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