

UC Santa Barbara

UC Santa Barbara Electronic Theses and Dissertations

Title

Influencing Factors of Chinese Teachers' Attitudes towards Current Chinese Special Education System

Permalink

<https://escholarship.org/uc/item/7qs2140r>

Author

Li, Ao

Publication Date

2016

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA

Santa Barbara

Influencing Factors of Chinese Teachers' Attitudes towards Current Chinese Special
Education System

A Thesis submitted in partial satisfaction of the
requirements for the degree Master of Arts
in Education

by

Ao Li

Committee in charge:

Professor Mian Wang, Chair

Professor Michael Gerber

Professor George H. S. Singer

December 2016

The thesis of Ao Li is approved.

Michael Gerber

George H. S. Singer

Mian Wang, Committee Chair

September, 2016

ABSTRACT

Influencing Factors of Chinese Teachers' Attitudes towards Current Chinese Special Education System

by

Ao Li

Recent decades have witnessed the establishment of a dual system of Chinese special education, which is special education school and the Learning in Regular Classroom movement (LRC). Teacher's attitude about the rising special education system has become a focal research topic in the field. As an emerging trend, research has mainly focused on Chinese teachers' attitudes about LRC. Although special education school still remain as an important way of educating children with disabilities in China, research has seldom focused on teachers' attitudes towards special education, and thus merits a need of inquiry for better understanding.

The aim of this study is to investigate what constitute Chinese teachers' attitudes about special education system and practice, and what factors affect Chinese teachers' attitudes. The study examined the effect of four types of variables: demographic variables, professional character variables, affective variables and support variable on teachers' attitudes about Chinese special education system. This study employed a large-scale nationally representative data set from the *Study of Professional Development Status of Chinese Special Education Teacher* for secondary data analysis. The survey was developed

and distributed using a multistage stratified cluster sampling method by East China Normal University. A total of 3,485 special education school teachers from 126 schools of nine provinces participated in the study. Findings showed that teachers' attitudes did vary based on their gender, workplace and position category. Demographic variables including age (only slightly negatively correlated with public school teachers' attitudes when based on teacher's position category) , educational qualification, length of special education teaching did not pose effect on teachers' attitude. Some professional characters including teaching skills, in-service training, knowledge about special education were found positively correlated with teachers' attitudes, while other professional character variables, including major and the kind of special education school they teach did not pose effect on their attitudes. Affective variables (self-efficacy level, teaching efficacy level and sense of achievement) and support variable (level of support) were also positively correlated with teachers' attitudes about Chinese special education system. In the last section, implications were given for school leaders, teacher educators and researchers.

TABLE OF CONTENTS

I. Introduction.....	1
A. Background.....	2
1. Development of Chinese Special Education System	4
2. Teacher's Attitude about Special Education and IE	16
B. Statement of the Problem.....	19
C. Significance of the Study.....	22
II. Method.....	25
A. Participants.....	25
B. Measures.....	25
1. Data Ananalysis.....	26
III. Result.....	28
A. Demographics of the Participants.....	28
B. Results of Independent <i>t</i> -test.....	30
C. Results of ANOVA.....	30
D. Results of Pearson Correlation.....	31
E. Results of Linear Multiple Regression.....	34
IV. Discussion.....	38
A. Influencing Factors on Teacher's Attitude.....	38
B. Limitations.....	45
C. Implications.....	46

References.....	49
Appendix.....	58

LIST OF TABLES

Table A1. Descriptive statistics of Participant's Demographic Variables.....	58
Table 2. Total Mean of Attitude Score of Demographic Variables.....	28
Table 3. Descriptive Statistic of Influencing Variables.....	29
Table 4. Descriptive Statistic of Professional Character and Mean Attitude Score...	33

I. Introduction

In China's dual special education system, special education schools still remain as an important way of educating children with disabilities in China. According to China's Ministry of Education, as of 2015, the total school enrollment into the Chinese special education system is 442,200 students with more than 50,000 teachers teaching in these special education schools. There are 2,053 special education schools nationwide, with a total enrollment number of 202,600, which accounted for 45.8% of the total special education school enrollment number. LRC ("Learning in regular classroom") students accounted for 54.2% of the total school enrollment (MOE, 2016).¹ Nearly half of students with disabilities still study in special education schools. While there has been research in inclusive education, seldom has this research focused on special school teachers' attitudes towards special education. In research about inclusive education, teacher's attitude was highlighted as an influential factor in the implementation of inclusive education program in regular schools (Forlin & Chambers, 2011; Ainscow & Sandill, 2010; Youn, 2016; Ahmmed et al., 2012). Teachers' attitudes about special education are not limited to their own state of mind, but may elicit certain overt behavior in relation to special education, which could range from extremely positive to extremely negative (Eagly and Chaiken, 1993), and thus it merits a need of inquiry for better understanding about what factors may pose effect on teacher's attitude.

This study investigated what constitutes Chinese teachers' opinions towards the special education system and practice and what factors affect these attitudes. To achieve this purpose, I employed a large nationally representative data set from *The Study of Professional*

¹ The percentage was calculated based on self-report numbers of regular classroom teachers.

Development Status of Chinese Special Education Teacher for secondary data analysis. I examined the effect of four types of variables: demographic, professional character, affective and support on teachers' attitudes about the Chinese special education system. In background, I will explain the development of the Chinese special education system over the past three decades, followed by an introduction of the two major factors that influence it. Next, will be the discussion on the current practice of inclusive education in China, 'sui ban jiu du' movement (Learning in Regular Classroom, or LRC) and a given summary of literature regarding what factors influence teachers' attitudes of special education and inclusive education. Then, an explanation of the data analysis and findings are presented and important issues are then discussed. Finally, implications for school leaders, future teacher educators and researchers are given.

A. Background

One cannot discuss Chinese teachers' attitudes towards special education without first understanding Chinese people's attitudes towards disability. How society views disability can serve as a teacher's first impression towards special education. The concept of 'disability' in China is contextualized and construed through Chinese cultural history, political ideology, and contemporary social status, which are often filled with complexities and even contradiction (Wang & Mu, 2014). More than a thousand years ago, Confucian ideology, which is deeply entrenched in Chinese culture, taught ancient Chinese people how to treat people with disabilities. This philosophy advocated kindness and respect for people with disabilities but they were kept at the bottom in society and were discriminated against (Yan & Guanglun, 2014). The situation has not changed in modern society where people

with disabilities continue to be viewed as ‘having the lowest status’ (Zhang & Spencer, 2015, p.348). Their rights to education have long been neglected, and even their learning capability is doubted. It is very easy for educational difficulties to be pathologized as deficits inherent within students, not the problem within the school practice (Ainscow, 2005). Even today, there are still a considerable number of Chinese people, if not the majority of them, hold the view that the right to education for children with disabilities should give way to the so-called ‘normal children’, and the subjects of their learning are mainly life skills, which should be taught at home (Chen, 1996).

In this study, by examining the trend of Chinese special education over the past three decades, it sets the ground for discussing what factors affect Chinese teachers’ attitudes about China’s special education system. Under the wave of inclusive education which was officially stated in the Salamanca Statement in 1994, China, while still facing great challenges with its incomplete special education system, is finding its ways to embrace this idea. Unlike the U.S., where the majority of children with disabilities learn in regular classroom though still facing risks for exclusion and expulsion from school (Bussue, 2015), the past three decades in China have witnessed the emergence of a combination of special education and inclusive education in Chinese schools. In practice, Learning in Regular Classroom (LRC) has become the main education method for children with disabilities, while special education school still remains an inseparable part of Chinese special education system (Zhao, 2013). The juxtaposition of the modern Chinese special education demands us to investigate factors that pose effect on teachers’ attitudes about Chinese special education system, and this line of research is both valuable by offering directions for future policy

makers on special education policy and helpful for promoting public understanding for special education teachers.

1. The Development of the Chinese Special Education System During the Past Three Decades

Compared to its long history and rich culture, China, as a growing economy, has a relatively short history on special education. It was not until the year of 1874 did the government established the first school for blind students, and in the year of 1887, the first school for deaf students was established (Chen, 1996). When The People's Republic of China was founded in 1949, there were only 42 special schools which held more than 2,000 students (Yang & Wang, 1994). Under the influence of the prevalent view that pupils with disability should be taught separately if not at all, which was believed by a small number of extremely conservative Chinese people, the majority of pupils with disabilities spent their time at home with not enough schools for them. After more than six decades, the special education system in China has gone through many ups and downs. Recent years has witnessed a heated debate about inclusive education. This trend first started in a few countries with rather long-established special education systems back in the 1960s and 1970s, including the United States, France and the United Kingdom (Artiles et al., 2006). However, within teachers, administrators and local LEA officers, there is still confusion about what it means to be inclusive (Ainscow, 2005; Slee & Corbett, 1996), and the inclusive research genre, as seen by scholars, is also characterized by controversy, claim and counterclaim (Allan & Slee, 2008).

To understand the Chinese special education system, especially what inclusive education means in China under the current situation, it is imperative to first define the target

population of inclusive education. As inclusive education evolves with the promotion of equality (e.g. Education for All), it has been attached to a wider sense of meaning. Ainscow and his colleagues (2006) made a summary, and they suggested five ways of thinking about who should be the beneficiary of inclusion:

- 1) Inclusion as concerned with disability and ‘special educational needs’
- 2) Inclusion as a response to disciplinary exclusions
- 3) Inclusion as about all groups vulnerable to exclusion
- 4) Inclusion as the promotion of a school for all
- 5) Inclusion as Education for All.

Presently, according to China’s Compulsory Education Law (Revision) (NPC Standing Committee, 2006) and Educational Act for the Disabled (Revision) (State Council of the PRC, 2011), inclusive education in China is prepared to serve school-age children and young persons with disabilities, which coincides with the first definition, also the most common one endorsed by the majority of related studies (Dyson et al., 2002). That is, the target group of inclusive education in China overlaps with the population who is entitled to special education.

With more countries joining the trend of inclusive education, after the initial stage in the 1960s, the issue of including students with disability was first officially mentioned in *Teaching Plan for Full-Time School (Class) of Intellectual Disability (Draft)* in China in the year of 1987 (Xiao, 2005). This document regulated that the majority of children with mild intellectual disability should learn in regular classroom (Xiao, 2005). According to Meng and Kim (2006), LRC model is confirmed to be the key model of education for children, and the movement has been implemented extensively. Since 2001, the percentage of included students (learning in regular classrooms or special class in regular schools) accounts for

about 60% of the total number of children and young persons with disabilities who study in school (Peng, 2012). In practice, LRC has become the main education method for children with disabilities, while special education school still remains an inseparable part of Chinese special education system (Zhao, 2013). However, neither of the laws aforementioned explicitly view inclusive education as the overarching philosophy when it comes to educating children with disabilities, and what kind of education will be provided for those with moderate to severe disabilities is obscured in the law. In the Compulsory Education Law (NPC Standing Committee, 2006), Article 17, Section three, ‘sui ban jiu du’ is listed as one of the options for school-age children and young persons with disabilities to receive compulsory education. In the newly revised Educational Act for the Disabled (State Council of the PRC, 2011), Article 19, Section three, it further delineates under what circumstance the student with disability will be included in regular class for the nine-year compulsory education, as follows:

“... regular school should accept school-age disabled children and young persons *who are capable to receive regular education* to study in mainstream class, and provide support for their study and recovery (p. 3).”

If young students long to pursue higher degree after that, in Article 29, Section four, it proclaims that

“General high school, institution of higher education and institution of adult education must recruit examinees with disabilities who meet the nation’s admission standard, and rejections should not be based on examinees’ disability (p.3).”

The first article mentioned fails to protect the right of children and young students of moderate to severe disabilities. Compared to other students, they would not be able to keep

up with lessons in a regular classroom, and thus indirectly lowering their chance for further education. Once these students are out of or rejected by the regular education system, without a supportive education system, the chance for them to continue on their studies and meet university admission standards is exiguous.

In 2013, according to the Ministry of Education of the PRC, the number of children with disabilities studying in regular primary school classroom was 129,508. The number of those studying in regular middle school classroom was 58,026. No exact data is available for how many children continue their high school student life in regular classrooms (Chen et al., 2006). Ten years after the publication of the second National Sample Survey on Disability (or, NSSD) (Office of National Statistics, 2007), the *Statistical Communiqué on the Development of the Work on Persons with Disabilities* released in 2015 by Disabled Persons' Federation (DPF) tells the latest development of inclusive education beyond the stage of compulsory education in China. Nationwide, there are 109 special education classes at senior high schools, with 7,488 students, among whom, 6,191 were deaf and 1,297 were blind. 8,508 students with disabilities were accepted in mainstream higher education institutions, and 1,678 disabled students entered special higher education institutions. The sharp decrease of the number of students with disabilities reaching middle school education is shocking, because it implies that the ground of LRC has shrunken when it comes to middle school. Some possible explanations may include that those students transfer to special education school/vocational school to continue their middle school education or end up staying at home due to multiple reasons (poverty, transportation, custom etc.). According to the 2015 *Statistical Communiqué on the Development of the Work on Persons with Disabilities* (DPF, 2015), there were 100 medium-level vocational education schools for persons with

disabilities, with 8,134 current students. It is not irrational to imply that for those who never attended regular school before, the chance for them to study in a regular middle school is close to impossible. Although it is a major improvement for the Chinese government to embark on inclusive education rather than solely developing a separate system of special education parallel to general education, at current stage, special education schools still play an indispensable role in China's special education system.

Numbers can tell part of the story, but it cannot say anything about what happens to the students in their environment (Ferguson, 2008). No one can tell the quality of the education offered to children with disabilities from its definition alone. Florian (2008) contended that inclusive practice is about the things that staff in schools *do* which give meaning to the concept of inclusion. Each school could have their own version of LRC based on different local regulations, school culture, resources, teacher's attitude and other factors. The difference between students participating in classroom activities and sitting in class forms a huge difference and determines the quality of inclusive education. Research shows that the quality of the education provided by LRC program for included students in China can be worrying (Wei, Yuan and Liu, 2001; Guo & Yao, 2006; Lai, 2014). Rural areas are marked by inadequate resources, undeveloped support system, lack of professional knowledge and publicity about the LRC, which broaden the gap between policy and quality of inclusive education (Tang, 2015). In the research paper written by H.X. Wang, Peng and Y.J. Wang (2011), they examined the situation of inclusive education in Beijing Haidian district, which is considered a pioneering district in education with abundant educational resources. After interviewing teachers, school leaders and parents of 82 primary schools with LRC program in Haidian district, the results stated that included-students, as reported by their teachers, could

not effectively participate in learning or class activities. In addition, certain problems often occurred during main courses, like students leaving their seats randomly, failing to participate in the classroom discussion, attacking others, failing to stand in a queue or shouting during assembly. The situation is not hopeful when we consider that 75.3% of the teachers interviewed held a neutral position for including students with disabilities (only 20% of the teachers think they are capable for developing IEP), and 56.5% of the school leaders thought it depends on the student's individual basis whether inclusive education (LRC) is appropriate. The research showed that in Haidian district, inclusion, which still remains skeptical by teachers and school leaders, was simply floating on the surface without penetrating into the special education system. Many factors contributed to this situation: school leaders' and teachers' doubt in inclusive education, inadequate professional training and knowledge of inclusive education and other factors which related to a broader or even national environment. This research reflected the reality of inclusive education in Haidian district, and this result may serve as a guide for scholars who want to apprehend not only from a policy perspective, but more from a practical perspective of what is inclusive education in China.

To summarize, in China, due to the limited numbers of special schools and lack of funding, inclusive learning emerged under the pressure to make education more accessible for this large group as mandated by the compulsory education law in 1986. Since then, inclusive education has gradually been adopted as an important way of educating children with disabilities during the past three decades, and it is manifested in an educational model for children with disabilities calls 'sui ban jiu du' or LRC, which goes parallel with special education schools. Later, the Educational Act for the Disabled (State Council of the PRC,

2011) regulates that regular schools should accept school-age disabled children and young persons who are capable to receive regular education to study in mainstream class, and provide support for their study and recovery. Currently, inclusive education has become the mainstream when educating children with disabilities, while special education schools also shoulder responsibility of educating these children. However, due to many contextual factors, including both local and national ones, the quality of inclusive education provided in China is far from satisfactory, and further effort and support from the government is urgently required.

Two Major Factors that Influence Special Education System in China. China, a developing country marked by its population and expanse, is preordained to face many challenges in building an equal and efficient education system that can satisfactorily address the diverse needs of every school-age student, especially those with disabilities, who are considered a vulnerable group in China's society. According to the second NSSD (Office of National Statistics, 2007) released in 2007, 6.34% of mainland China's 1.3 billion population, approximately 82 million people, is people with disabilities. The percentage has increased by 1.44% compared to the first NSSD in 1987, handicapped people accounted for 4.9% of the total population of 1.1 billion (Chen, 1996). Among the 82 million, 2.46 million are children from 6 to 14 years old, which is 2.96% of the total population of people with disabilities. The estimated number of children from birth to 14 years old, given by the first NSSD in 1987, is 8.14 million. In a paper written by Zhao (2013), the author states that since 1986, the number of children and young persons with disability attending school continue to grow from 47,200 in 1986 to 398,700 in 2011. However, as Meng and Manset (2000) point out that despite the significant progress in school enrollment, a large number of children with disabilities needs are still excluded from public school education. The data from the second NSSD confirms

this assertion. It shows that by 2006, only 63.19% of the school-age disabled children receive the nine-year compulsory education (either in special school or in regular school). That is, approximately 900,000 school-age children with disability in China do not attend school by 2006. By 2013, the number has dropped to 83,000 (MOE of the People's Republic of China, 2015). For those who do not attend school, their choices are limited: they are either kept at home or stay in welfare institutions (Chen, 1996). This reality sets the fundamental tone for China to steadily develop inclusive education, while special education school, at the current stage, still plays an important role for educating children with disabilities (Zhao, 2013). Two major background factors that influencing the progress of building a completed special education system in China are imbalanced economic development and government policy and support (Barton, 1997). These two factors which themselves are intertwined in some aspect, thus makes it harder and more complicate to illustrate them separately, but the linkage between the factors can serve as a catalyst and mediates the effect to other areas when one factor changes for the better.

Imbalanced economic development. The great need for education of people with disabilities facilitated the introduction of IE (“Inclusive Education”) to China, which increased the universalization of compulsory education for disabled students (Guo & Yao, 2006; Peng, 2012; Lai, 2014; Tang, 2015). However, the unbalanced economic development of different provinces hindered the progress of building a complete special education system in poverty-stricken areas. In Meng & Kim’s paper (2004), they suggested that the situation is more severe in rural areas of west China as a result of large disparities in the ethnic, economic, and geographic conditions between the rural and urban, Western and Eastern regions of the country. *The Mid-stage Assessment of The National Medium and Long-term*

Plan on Education Reform and Development revealed problems concerning the development of special education, in which the uneven economic development was clearly stated (MOE of the People's Republic of China, 2015). The second NSSD shows that 75.04% of the total population with disabilities live in rural areas, further implying that children with disabilities have a higher probability living in those areas and thus have a lower chance to study in schools compared with their city counterparts. In Tang's paper (2015), she described the current situation of LRC in the school where she served as a teacher. The school was located in rural Sichuan province. She stated that for a rural school to conduct LRC, it must first conduct a general survey for school-age students with disabilities so as to identify them and register them in school. Due to the lack of resources and funding, without specialized team and personnel in the process of screening, sometimes students with learning difficulties can be mistaken for students with disabilities. Secondly, a biased public consensus of LRC in rural areas have led to skepticism about the effectiveness of the program. This has prevented some parents from sending their children to regular school and even caused a pessimistic view of LRC in the school itself.

The effect of China's economy on education is significant since compulsory education is provided by the local government. Each local government needs to allocate additional investment to support its development alongside the funding given from the central government (Chen, 1996). For rural schools located in poverty areas, the funding sources are limited and unstable. The two aforementioned difficulties in Tang's paper can be alleviated provided that enough funding is available to conduct large scale survey and to publicize and demystify IE to the general public. Other difficulties she mentioned include: poor school management (poor condition, teacher's lack of professional knowledge of LRC), incomplete

support system for LRC, which are problems not exclusive to rural areas, but also faced by big cities.

The imbalance of the development of special education system between the Eastern and Western, rural and urban China is the aftermath of various factors, both historical and geographical. It takes time and effort for the underdeveloped areas to remedy and narrow the gap so that all Chinese children with disabilities in these areas can, firstly, have access to compulsory education. This also echoed with Lo's idea (1998) that the priority of inclusion in poor areas is to include more students with disabilities in general schools. Secondly, they can receive quality education that suits their educational needs in regular classrooms. For Eastern and urban areas of China with better ground of LRC, the challenge is to explore a suitable and effective support system to offer quality education to children with disabilities rather than letting them physically stay in the classroom while ignoring their progress and needs. By establishing a complete and responsive support system, it also encourages Western China to learn from the successful practice of other areas and accelerate their pace in consolidating LRC as the major method of education for children with disabilities. To achieve this goal, government policy to support inclusive education needs to be enacted and a comprehensive support system ought to be established.

Government Policy and Support. The generalization of inclusive education in Western developed countries is intertwined with the promulgation of mandatory laws and policies. Although according to Eleweke & Rodda (2002), mandatory legislation may not be the panacea concerning the development and implementation of inclusive programs in developing countries, such laws will spell out details to facilitate achieving the goal. Research also showed that in Western countries, government policies and laws promoted the

effective implementation of inclusive programs (Eleweke & Rodda, 2002). With a rather established and mature education system and wealthy economy, the U.S policies and laws in the 1970s support moving students systematically into general education settings. By the 1990s, students with disabilities in the U.S were far more likely to spend the school day in ordinary school buildings than in separate settings (Artiles et al., 2006). However, the situation of Chinese special education is more complicated which requires further discretion when it comes to policy making.

From 1982 to 2013, the Chinese government has released about fifteen laws, regulations and documents regarding the educational placement of children with disabilities (Zhao, 2013). The goal is to increase the enrollment rate of children with disabilities, and narrow the educational differences between areas. In one of the government document released in 2014, the *Special Education Promotion Plan (2014-2016)*, the advancement of inclusive education was the overall objective of the Chinese special education system in order to let every child with disabilities in China receive education that accommodate their needs (General Office of the State Council of the People's Republic of China, 2014). Yet, the educational needs brought by the huge population of children with disabilities in China cannot be solely catered by the LRC movement. The government needs to perfect the special education system by building special education schools at the same time. The government had explicitly made plans to improve enrollment of special education schools, especially those in middle and Western part of China. Three government documents released in 2007, 2009 and 2010 all emphasize the role of special education school (Zhao, 2013). In the *National Medium and Long-term Education Reform and Development Plan (2010-2020)*, it regulates that by 2020, every city and county with population more than 300,000 should have one special education

school. The effect of establishing more special education schools and the expansion of enrollment is reflected in the decreasing trend of LRC in recent years as mentioned in the 2015 MOE of the People's Republic of China report. In Zhao's paper (2013), she argued that from 2007 to 2011, the number of students with disabilities in regular classrooms decreased every year, while the number of students studying in special education schools increased.

In addition to the government's investment in building more special education schools, policies which specify details of conducting and supporting LRC are also enacted. According to Barton (1997), educational policies and practices are inherently political and that these important details are solidified in laws that dictate from a political perspective what inclusive education is and what it should look like when implemented in local schools. More importantly, the definition of inclusive education given in the policies becomes more encompassing and less isolated. This can be seen as the outcome of a more developed and open Chinese society over the past decade, which brings a change of attitude of the general public and attention towards inclusive education. The Law of Compulsory Education (Revision) (NPC Standing Committee, 2006) and the Educational Act for the Disabled (Revision) (State Council of the PRC, 2011) provide legal bases for conducting LRC in China by listing it as one of the educational placements for children with disabilities. Specific regulations and details of implementing the LRC program were first stated in the national *Pilot Project on Implementing Learning in Regular Classrooms for Children and Adolescents with Disabilities* (MOE, 1994) (Meng & Kim, 2004). In the document, it identified students with three categories of disabilities as the main object of LRC. These three categories are visual impairments (blind and low vision), aural-speech disability (deaf and hard of hearing) and intellectual disability (mild, or moderate if possible). In the

Tentative Management of Learning in Regular Classrooms for Children and Adolescents with Disabilities in Beijing (Beijing Educational Committee, 2013), the target population of LRC has broadened to incorporate children and adolescents with visual disability, hearing impairment, speech disability, physical disability, intellectual disability, mental disorder and multiple disabilities, including cerebral palsy, autism and other categories. According to the document, children and adolescents with mild disabilities who are able to receive compulsory education in regular classrooms should be included. *The Standard of Learning in Regular Classroom for Different Disability Category* (Beijing Educational Committee, 2013) was also promulgated to supplement the enforcement of LRC in local school. Compared with the national document, the latter ones modified the range of qualified student groups by adding and specifying more categories, which protects the educational rights of more children and encourages children with disabilities that did not fall into the three main categories to study in regular schools. The clarification and executive standard for screening children with different disabilities also supervises and enforces local schools to enroll each and every child who meets the standards.

The progress of local regulation in promoting inclusive education will be weakened without further legislative support from the Chinese government. Clearer regulations regarding the needs and interests of children with disabilities in regular school should be added in national laws. After all, educating children with disabilities is the responsibility of the whole education system, rather than special education schools alone (Peng, 2012).

2. Teacher's Attitude about Special Education and Inclusive Education

Research about what predicts teacher's attitude about inclusive education is abundant compared with research about teacher's attitude of special education. Various factors are

found to affect teachers' attitudes, and they can be divided into three categories: child, teacher and school (Hastings & Oakford, 2003).

The nature and type of a child's disability can play an important role in shaping teachers' attitudes toward inclusive education (Wei et al., 2001; Evans & Lunt, 2002; Forlin & Chambers, 2011; Chen et al., 2006). Generally speaking, teachers have a higher level of acceptance for children with sensory difficulties and physical difficulties, and think that they need less support and are easier to accommodate in school. However, within these two categories, the severity of the disability also impacts on Chinese teachers' attitudes. The majority of regular classroom teachers in the research (from Beijing and Hong Kong) disagree with the idea of including deaf or blind students in their classroom, but when it comes to students with weak sight or hard of hearing, the percentage of acceptance greatly increases. In another research, pre-service teachers are more supportive of including students with mild supportive needs, but they are less supportive of including children with higher supportive needs. Students who were physically aggressive towards others were agreed with the least. In Evans & Lunt's study (2002), a mixed group comprised of teachers, health professionals and social workers and those working in a range of integrated and segregated settings for children with special educational needs from England and Wales thought students with emotional and behavioral difficulties or with severe learning disabilities as the most difficult groups to include. This trend is similar to the research about Chinese teachers. Only 28% and 20% of the participants from Beijing and Hong Kong, respectively, agreed with the idea of including students with behavioral problems.

The second category of variables that influences teachers' attitudes about inclusive education is the teacher's own professional characteristics. In Peng's (2003) research, the

author found that special education teachers who participated in the training of inclusive education held more positive attitude than those who did not. However, if the training content was about general special education skills, then it would not change teachers' inclusion attitudes. Other factors that yielded inconsistent conclusions include years of teaching and gender. Years of teaching was found to be negatively related with teachers' inclusion attitudes in some research (Hastings & Oakford, 2006; Avramidis & Kalyva, 2007), but in Wei and Yuen's (2000) research, no relationship was found between these two variables. Demographic factor like gender was not found to be related with teachers' attitudes in Wei and Yuen's study (2000), while in other research, the results were mixed (Brady & Woolfson, 2008). With regard to self-efficacy level, general education teachers who reported success in instructing students with learning and behavior problems may be more willing to include these students in their classroom and persist in educating those students more than teachers who feel less successful (Brownell & Pajares, 1999).

For pre-service teachers, a strong link was found between their perceived level of confidence and knowledge and their attitudes about inclusion (Forlin & Chambers, 2011). Unexpectedly, interaction with people with disabilities did not affect their overall attitudes about inclusion (Forlin & Chambers, 2011). Previous training in inclusive education, such as taking courses, yield inconsistent results in different research (Forlin & Chambers, 2011; Forlin, Loreman, Sharma & Earle, 2009; Li, 2012; Shade & Stewart, 2010). However, the level of experience in educating students with disabilities, or the achievement of higher qualifications made no difference in their attitudes about inclusion (Forlin & Chambers, 2011).

Finally, school factors were found to be linked with teachers' attitudes about inclusion. Whether they taught in general school or special education school yielded different results. Research found that general school teachers held a more negative attitude compared with special school teachers (Wei & Yuen, 2000). Another research conducted in China compared teachers of four different kinds of special education schools (school for the blind/deaf/blind and deaf/intellectual disability), and found out that teachers from schools for the blind were more positive towards inclusive education while teachers from school for the deaf were more negative (Peng, 2003). Other studies have also recommended school support as an important variable in facilitating successful inclusive education (Brownell & Pajares, 1999; Podell & Tournaki, 2007).

In regard to teacher's attitude about special education, three studies conducted with Chinese teachers' college pre-service teachers might give us some directions about what factors we should pay attention to. In Zhang & Li's study (2014), they found out that gender influences those pre-service teachers' level of interest for special education as well as their willingness to learn special education courses. Females teachers scored significantly higher than their male counterparts in these two areas. In other research done by Guo & Shi (2004) and Zhang & Sheng (2005), they found similar results that females are more willing to become a special education teacher than males. Another demographic factor is the birthplace of the student, namely whether students are from urban or rural areas makes a significant difference in their level of understanding about special education.

B. Statement of the Problem

As an indispensable part of the Chinese special education system, special education teachers and special education schools shoulder responsibility of educating students with disabilities. However, research has shown that special education teachers have lower career identity level compared to their counterparts in regular schools (Chai & Wang, 2014). Wang & Wang's research (2012, 2013) provided possible reasons concerning that special education teachers are often marginalized, given less attention and support by the general public. These teachers also face fewer chances to experience the sense of honor and accomplishment when compared to general education teachers (Liu 2007). Research has found that higher career identity is linked with a higher level of work satisfaction, which means a more positive and self-motivated attitude at work (Chai & Wang, 2014). Yet a relatively low level of career identity of special education teachers serves as a reminder to Chinese researchers to delve further into the area of special education teachers.

Other research has also yielded some concerning results about special education teachers (Wang, Xiong & Li, 2012). To understand the current status of Chinese special education teachers, they reviewed previous research and then concluded that special education teachers who participated in previous studies have a significantly lower performance on mental health compared with the national norm. The group also experienced high levels of occupational burnout which is positively correlated with occupational stress. It is important for researchers to start figuring out what factors may impact a special education teacher's attitude towards their occupation.

Literature review from former studies have suggested that factors related with children, teacher and school impact the teacher's attitude. In this study, I divided the predicting factors into four categories, demographic variables, teacher's professional characteristic variables,

affective variables, and support variable. Demographic variables include gender, age, workplace, educational qualification and length of special education teaching experience. Gender and the length of special education teaching experience yielded mixed results in previous researches which deserved further investigation. Educational qualification which was proved to influence teacher's attitude in previous research is also included. Age and workplace are important demographic variables for teachers but seemed to be overlooked in previous research, so I include them in the list of demographic variables. The second category of variables is teacher's professional character, which include position category, teacher's major in university, perceived teaching skills, the length of in-service training, category of special education schools, and knowledge about special education. The amount of training which was proven to influence teacher's attitude is also included in the current study. Prior research has shown that the type of child's disability can play a role in shaping teachers' attitudes about inclusive education. In my study, I used the category of special education schools in place of children's type of disability. A teacher's major in university, perceived teaching skills, and knowledge about special education are important components of the teacher's professional characteristics, which may influence their perception about special education. The third category of variables is affective variables, which include teacher's self-efficacy level, teaching efficacy level, and sense of achievement. The effect of self-efficacy level was proven in previous studies, and this variable is included in this study to test its effect on influencing Chinese teachers' attitudes. Besides self-efficacy, teaching efficacy which represents how teachers perceive the effectiveness and value of their teaching is also considered as a potential predictor of their attitude, as well as their sense of

achievement. Support level which was proven as a significant variable in other research is listed as the fourth category of predicting variable.

This study will specifically answer the following research questions within the Chinese special education system:

1. Do demographic variables of Chinese special education teachers (gender, age, workplace, educational qualification, length of special education teaching experience) affect their attitudes towards China's special education system and practice?

2. How do teachers' professional characteristics (position category, major, teaching skills, in-service training, the kind of special education school they are teaching, knowledge about special education) affect their attitudes towards special education?

3. Do Chinese special education teachers' affective variables (self-efficacy level and teaching efficacy level, sense of achievement) affect their attitude towards special education?

4. Does teacher's support variable (level of support) affect their attitude towards special education?

5. Are there other important variables predicting Chinese special education teachers' attitude towards inclusive education and special education?

C. Significance of the Study

According to Collinson (2012), "Attitudes involve a complex interweaving of beliefs and affective responses that influence individuals' worldviews, their decisions and judgments, and their choice to act in certain conscious or subconscious ways." In this definition, the

author highlighted three components of attitude: cognitive component (beliefs), affective component (feelings, their decisions and judgments) and behavioral component (choice to act) (Triandis, 1971) that can apply to a teacher's attitude towards special education. Thus, teacher's attitude about special education is not limited to their own state of mind, but may elicit certain overt behavior in relation to special education, which could range from extremely positive to extremely negative. Studying what influences a teacher's attitude about special education and how these factors influence a teacher can be an efficient way to strengthen teacher's positive attitude towards special education, promote positive teaching activity, and help maintain a healthy relationship between students and teachers. Researchers have pointed out that a teacher's attitude is one of the most crucial variables in the success of inclusion projects (Richard & Zanna, 2003). Research in the area of inclusion indicates that teachers' beliefs, attitudes, and actions are what create the environment in which children and young people are required to learn (Ainscow & Sandill, 2010). In particular, educators' positive attitudes towards inclusive education may allow and encourage practices that will guarantee, to a great degree, a successful inclusion of all students (Sharma et al., 2006).

Limited research has been done in both China and other parts of the world to find factors related with teachers' attitudes towards special education. After searching for 'factors that affect teacher's attitude about special education' on CNKI.net (China National Knowledge Infrastructure), no studies were found that discuss the exact same topic and population with this current study. Searching on ERIC and Education Source yielded the same results. One possible reason maybe that in Western society, the majority of children with disabilities no longer study in special education schools and thus eliminates the ground for researching attitudes about special education. However, as an indispensable part of Chinese special

education system, teacher's attitude about special education still remains a significant topic for Chinese researchers. The research foundation for the current study is past findings of teachers' attitudes about inclusive education and similar research concerning Chinese pre-service teachers' attitudes about special education, which are summarized in the last section.

II. Method

A. Participants

A total of 3,485 special education school teachers participated in the study (See Table A1 in appendix). In order to select the participants, a multistage stratified random sampling with the combination of a cluster sampling method was used. Based on major economic and educational indicators, 29 of China's provinces including direct-controlled municipalities and autonomous region, except Tibet autonomous region, Xinjiang Uyghur autonomous region, Hong Kong special administrative region, Macao special administrative region and Taiwan, were divided into nine levels (Min, 2006).² At the first stage, one area was randomly selected in each level(except at the second level, Shanghai was purposefully selected). At the second stage, a stratified random sampling method was then used to select schools within the nine areas based on four different special education school types: schools for the deaf, schools for the blind, schools for intellectual disabilities, and comprehensive schools. In the end, a total of 126 special education schools were selected and all 3,485 teachers working within these schools were invited to participate, which accounted for 8.8% of the national total of 39,650 special education teachers (Ministry of Education, 2010). About a third of them worked in educationally developed areas, and slightly more than a third of them worked in educationally medium-developed areas. As for their educational qualification, 55.9% of them got bachelor's degrees while 39.8% of them did not receive higher education degrees.

B. Measures

² For China, the level of educational development of different areas is largely determined by its local economic development level.

A survey was developed to collect information from special education teachers in China. It consisted of five sections with a total of 118 questions. Section one sought general demographic information of each participant. Section two involved teaching and evaluation statements about daily teaching activities and methods of student and teaching evaluation. The third section was about training and professional development, which included questions about teacher's preparation, different types of training and academic education received after being a special education teacher, and the influence of these trainings. The fourth part was about working and living conditions, which sought to provide insight on teacher's perception about themselves, their own career, school leaders, colleagues and their field. The last part was about their attitude and opinion towards special education, including 56 statements regarding teacher's attitude about the value and effect of special education, children with disabilities, special education curriculum and teaching. The data in this section was later used to calculate the mean score of teachers' attitudes. Out of 56 statement, 9 were negatively worded, and the remaining 47 were positively worded. Participants were asked to respond using a 4-point Likert type scale with anchors Strongly Agree (1) to Strongly Disagree (4). A higher score on the scale was suggestive of a more negative attitude towards special education. An example of the statement is 'I think the work of special education is worthy and valuable'.

1. Data Analysis

This study sets out to fill the research gap of factors that affect Chinese special education teachers' attitudes about special education under the current context of a juxtaposition of special education schools and the Learning in Regular Classroom (LRC) movement. I used previous studies that analyzed teachers' attitudes about inclusive education as references to

guide the direction of this study. These studies showed that the variables that could predict a teacher's attitude can be classified into three categories: child, teacher, and school. I then rearranged and added other related variables and further divided them into four groups: demographic variables, professional characters, affective variables and support variable. The study employed a large nationally representative data set from *the Study of Professional Development Status of Chinese Special Education Teacher* collected by the collaborative team of East China Normal University, from which I gained access to the data. The data was collected in 2010. Independent samples *t*-test, linear multiple regression, one-way between-groups analysis of variance (ANOVA) and Pearson correlation coefficients were used to analyze the data with SPSS 20.

III. Results

A. Demographics of the Participants

Out of 3,485 participants (22 missing), female participants accounted for 73.4% (n=2,557) (See Table A1 in appendix). As of 2010, 75.72% of the participants were from 25 to 44 years-old, and the age range of the teachers who participated in the study was 16 to 65 years old, with a mean age of 36 years old (see Table 3). According to Min's (2006) *Report on China's education and human resource development*, the locations of the schools where teachers work was classified into three groups: comparatively developed areas, medium-developed areas and underdeveloped areas. 34.69% (n=1,209) of the teacher worked in comparatively developed areas (Beijing, Shanghai or Jiangsu province), 39.83% (n=1,388) of them worked in medium-developed areas (Shandong, Liaoning, Hubei and Anhui province), and 25.48% (n=888) of the teachers worked in underdeveloped areas (Guangxi, Guizhou province) (see Table A1 in appendix). In regards to teacher's educational qualification, 55.90% (n=1,948) had a bachelor's degree as their final degree, 3.07% (n=107) acquired a master's degree or higher, and the remaining 39.77% (n=1,386) received an associate degree or below (44 missing) (See Table A1 in appendix). Years of teaching experience in special education varied from less than a year to 41 years with a mean of 10.97 years (see Table 3). As of 2010, about 51.91% had been teaching in the field for more than 10 years (78 missing) (See Table A1 in appendix).

Table 2

Total mean of attitude score of Demographic variables

Demographic variables	Total mean of attitude score	SD
-----------------------	------------------------------	----

Gender			
Female		1.89	0.32
Male		1.92	0.33
Workplace			
Comparatively developed area		1.90	0.31
Medium-developed area		1.88	0.33
Underdeveloped area		1.92	0.35
Educational Qualification			
Associate degree or under		1.91	0.33
Bachelor's degree		1.89	0.32
Graduate degree		1.94	0.29

Note. Mean response range from 1 (strongly agree), to 2 (agree), to 3 (disagree), to 4 (strongly disagree).

Table 3

Descriptive Statistic of Influencing Variables

Variables	<i>M</i>	<i>SD</i>	Skewness
Age	36.15	8.37	-0.54
The length of teaching in SPE ED	10.97	7.42	-0.59
The length of training	2.49	1.09	0.02
Perceived teaching skills	3.77	0.67	-0.42
Knowledge in special education	11.38	2.27	-0.53
Self efficacy	2.63	0.37	0.31
Teaching efficacy	2.17	0.52	0.16
Emotional support	3.36	0.78	-0.45

Sense of achievement	2.68	0.77	-0.56
----------------------	------	------	-------

B. Results of Independent t-test

Independent *t*-test was employed to examine whether female teachers and male teachers held significantly different attitudes to special education. The result showed that there is a statistically significant difference in mean attitude scores between males ($M = 1.92$, $SD = 0.33$) and females ($M = 1.89$, $SD = 0.32$), $t(3088) = 2.80$, $p < 0.01$, two-tailed (See Table 2). I used the same method to check whether position category, namely public school teachers and non-public school teachers had a statistically significant difference in mean scores of attitudes. The result indicated a statistically significant difference in mean attitude scores for public school teachers ($M = 1.90$, $SD = 0.33$) and non-public school teachers ($M = 1.84$, $SD = 0.32$) (see Table 4), $t(3105) = -2.24$, $p = 0.03$, two-tailed.

C. Results of ANOVA

One-way between-groups ANOVA was conducted respectively to determine how demographic variables would pose effect on teachers' attitudes, whether Chinese teachers with different educational qualifications (associate degree or under, bachelor's degree, and graduate degree) and in different workplace (comparatively developed area, medium-developed area, and underdeveloped area) would differ from each other on their attitude to special education. The ANOVA result showed that there was not a statistically significant difference in attitude scores among the three degree conditions: $F(2, 3063) = 2.32$, $p = 0.10$. For workplace variable, a significant violation of the Levene test for homogeneity of variance

was found: $F(2, 3104) = 6.28, p < 0.01$. Welch's F test was then used, and the result showed a statistically significant difference in mean attitude scores among the three workplace locations: $F(2, 1829) = 4.27, p = 0.01$. Post-hoc tests were conducted using the Games-Howell test indicated that the mean score for teachers who worked in medium-developed areas ($M = 1.88, SD = 0.33$) was significantly different from those who worked in underdeveloped areas ($M = 1.92, SD = 0.35$). The mean score for teachers who worked in educationally developed areas did not differ significantly from the other two groups.

As to examine the relationship between teacher's professional character and their attitudes about special education, I used the same method to see whether teacher's major in university and the kind of special education school the teachers' taught in cause attitude change. Majors were divided into three groups: Group 1: special education major; Group 2: majors related with special education; Group 3: other majors. The result showed that there was not a statistically significant difference in mean attitude scores among the three groups: $F(2, 3104) = 0.84, p = 0.43$, two-tailed. Whether the kind of special education school they taught in caused a difference in attitude was then checked using ANOVA, there were altogether four types of special education schools: Group 1: School for the deaf; Group 2: School for the blind; Group 3: School for the intellectual disability; Group 4: Comprehensive special education school. The result did not show a statistically significant difference in attitude scores among the four groups: $F(3, 3105) = 1.84, p = 0.14$, two-tailed.

D. Results of Pearson Correlation

In order to examine if two other demographic variables---age and length of teaching experience in special education of the participants were significantly associated with their

attitudes towards special education, the Pearson correlation coefficient was calculated. The results showed a non-significant association for both variables.

I used the same method to examine if the other three professional character variables----self-perceived teaching skill, in-service training and knowledge about special education would pose an effect on teachers' attitudes about special education. The results showed significant associations of these three variables with attitude. A significant but small negative correlation was found between teaching skills and attitude ($r = -0.18$, $n = 2994$, $p < 0.01$, two-tailed). Higher perceived teaching skill levels was associated with lower score of teachers' negative attitudes towards special education. The length of in-service training was also negatively correlated with teachers' attitudes ($r = -0.10$, $n = 2973$, $p < 0.01$, two-tailed), with longer in-service training hours associated with lower mean attitude score (more positive attitude). Weak positive correlation was found between mean self-perceived knowledge about special education (basic theory, history, laws and regulations and basic medical knowledge) and attitude ($r = 0.17$, $n = 2817$, $p < 0.01$, two-tailed), with poorer perceived knowledge in the area of special education was associated with a higher mean attitude score (more negative attitude).

In order to assess if the three affective variables----self-efficacy level, teaching efficacy level and sense of achievement could be predicted from teachers' attitudes about special education, Pearson correlations were performed. The results showed significant associations of these three variables with attitude. A significant correlation was found between teacher's self-efficacy and attitude ($r = -0.09$, $n = 2993$, $p < 0.01$, two-tailed). This was a small negative correlation; higher self-efficacy level was associated with a lower mean attitude (more positive attitude). The teaching efficacy level was significantly correlated with

teachers' attitudes ($r = 0.39$, $n = 3040$, $p < 0.01$, two-tailed). The r^2 was .15, thus, about 15% of the variance in teachers' attitudes about special education could be predicted from their teaching efficacy level, this was a moderate correlation. There was a tendency for teachers with a higher teaching efficacy level to hold a more positive attitude towards special education. A negative correlation was also found between teacher's sense of achievement of being a special education teacher and negative attitude towards special education ($r = -0.32$, $n = 3074$, $p < 0.01$, two-tailed). The r^2 was .10, thus, about 10% of the variance in teachers' attitudes about special education could be predicted from their teaching efficacy level, this was a moderate correlation. Higher sense of achievement level of being a special education teacher was associated with a lower mean attitude score (more positive attitude).

The same calculation was performed to assess whether teacher's attitude about special education could be predicted from the support they gained. The result showed a significant association of the level of support with attitude. A weak negative correlation was found between teacher's self-efficacy and mean attitude score about special education ($r = -0.19$, $n = 3078$, $p < 0.01$, two-tailed). A higher level of support was associated with a lower mean attitude score (more positive attitude).

Table 4

Descriptive Statistic of Professional Character Variables and Mean Attitude Score

Professional Character variables	Numbers	Percentage	Total mean of attitude score
Position Category			
Public school	2,907	93.56	1.90

Non-public school	200	6.44	1.84
Major			
Special education	919	29.58	1.91
Related with special education	1,002	32.25	1.89
Other	1,186	38.17	1.89
Kind of school they work in			
School for the deaf	723	23.27	1.87
School for the blind	223	7.18	1.89
School for the intellectual disability	472	15.19	1.89
Comprehensive special education school	1,689	54.36	1.91

Note. Mean response range from 1 (strongly agree), to 2 (agree), to 3 (disagree), to 4 (strongly disagree).

The results of independent *t*-test and one-way ANOVA showed that teacher's attitude about special education do differ significantly based on their gender, workplace and position category. Linear multiple regressions were then conducted based on each of these three variables to see the contribution of the other independent variables (e.g. age, educational qualification, the length of teaching in special education, self-efficacy, teaching efficacy, sense of achievement, perceived level of support, perceived teaching skill, perceived knowledge in special education) in predicting participants' attitudes, and how their contribution varied in different groups.

E. Results of Linear Multiple Regression

The aforementioned nine independent variables were used in linear multiple regression analysis to predict teacher's attitude based on gender. The result showed that for male teachers, five variables, including level of support ($p < 0.01$), perceived teaching skills ($p < 0.01$), sense of achievement ($p < 0.01$), self-efficacy ($p < 0.01$) and teaching efficacy ($p < 0.01$) contributed significantly to the prediction of male teachers' attitudes towards special education. The model reached statistical significance ($p < 0.01$). The values of *R Square* and *Adjusted R Square* were 0.31 and 0.30, respectively, which indicated that about 30% of the variance on male teachers' attitudes could be explained by these five variables. For female teachers, level of support ($p < 0.01$), the length of training ($p < 0.01$), perceived teaching skills ($p < 0.01$), sense of achievement ($p < 0.01$), knowledge of special education ($p < 0.01$), self-efficacy ($p < 0.01$), teaching efficacy ($p < 0.01$) contributed significantly to the prediction of female teachers' attitudes towards special education. The summary of the regression analysis indicated that the model reached statistical significance ($p < 0.01$). The values of R Square and Adjusted R Square were both 0.36, which indicated that about 36% of the variance on female teachers' attitudes could be explained by these seven variables.

When using the nine variables to evaluate teachers' attitudes about special education based on teachers' workplace, the result was as followed. For teachers who worked in educationally developed areas, emotional support ($p < 0.01$), the length of training ($p = 0.01$), sense of achievement ($p < 0.01$), teaching efficacy ($p < 0.01$), self-efficacy ($p < 0.01$) and knowledge about special education ($p < 0.01$) were found significantly contribute to the prediction of teachers' attitudes towards special education. The model also reached statistical significance ($p < 0.01$). The values of *R Square* and *Adjusted R Square* were 0.39 and 0.37, respectively, which indicated that about 37% of the variance on attitudes of teachers who

worked in educationally developed area could be explained by these six variables. For teachers who worked in educationally medium-developed areas, emotional support ($p < 0.01$), the length of training ($p < 0.01$), sense of achievement ($p < 0.01$), teaching efficacy ($p < 0.01$), self-efficacy ($p < 0.01$) and perceived teaching skill ($p < 0.01$) were found to significantly contribute to the prediction of teachers' attitudes towards special education. This model reached statistical significance ($p < 0.01$). The values of *R Square* and *Adjusted R Square* were 0.36 and 0.35, respectively, which indicated that about 35% of the variance on attitude of teachers who worked in educationally medium-developed areas could be explained by these six variables. For teachers worked in educationally underdeveloped areas, emotional support ($p < 0.01$), sense of achievement ($p < 0.01$), self-efficacy ($p < 0.01$), teaching efficacy ($p < 0.01$) and perceived teaching skill ($p < 0.01$) were found significantly contributed to the prediction of teachers' attitudes towards special education. The summary of regression analysis indicated that the model has reached statistical significance ($p < 0.01$). The values of *R Square* and *Adjusted R Square* were 0.35 and 0.34, respectively, which indicated that about 34% of the variance on attitudes of teachers who worked in educationally underdeveloped areas could be explained by these five variables.

Regarding teacher's position category, when using the same nine variables to evaluate teachers' attitudes about special education using multiple linear regression, the result was as followed. For teachers who worked in public schools, eight out of the nine variables, including emotional support ($p < 0.01$), the length of training ($p < 0.01$), sense of achievement ($p < 0.01$), teaching efficacy ($p < 0.01$), self-efficacy ($p < 0.01$) and knowledge about special education ($p < 0.01$), self-efficacy level ($p < 0.01$) and age ($p < 0.02$) were found significantly contribute to the prediction of teachers' attitudes towards special

education. The summary of the regression analysis indicated that the model has reached statistical significance ($p < 0.01$). The values of *R Square* and *Adjusted R Square* were 0.35 and 0.34, respectively, which indicated that about 34% of the variance on attitudes of teachers who worked in public school could be explained by these eight variables. For teachers who worked in non-public schools, three out of the nine variables, including emotional support ($p < 0.01$), sense of achievement ($p < 0.01$), teaching efficacy ($p < 0.01$) were found to significantly contribute to the prediction of teachers' attitudes towards special education. The summary of the regression analysis indicated that the model has reached statistical significance ($p < 0.01$). The values of *R Square* and *Adjusted R Square* were 0.41 and 0.36, respectively, which indicated that at least about 36% of the variance on attitudes of teachers who worked in non-public schools could be explained by these three variables.

IV: Discussion

A. Influencing Factors on Teacher's Attitudes

The paper investigated the impact of several demographic, professional character, affective and support variables of Chinese teachers on their attitudes about special education. The results showed that teachers' attitudes about special education were significantly different based on gender, workplace and position category.

To be more specific, this study showed that attitudes of female teachers towards special education were slightly more positive ($M = 1.89$) than the attitudes of their male counterparts ($M = 1.92$) (See Table 2). This result coincides with Zhang & Sheng's research (2005) and Zhang & Li's study (2014) that gender influences future Chinese special education teachers' attitudes about special education. This study further extends the influence of gender on attitudes about special education from the group of future special education teachers into in-service special education teachers. One possible reason to explain this phenomenon may be that the current Chinese society still holds the traditional view that teacher is an ideal profession for females, not for males, and when this stereotype combined with people's misunderstanding and ignorance about special education, it is possible for male students to feel less positive about special education compared with their female counterparts.

Workplace was also found associated with teachers' attitudes. Previous studies of Guo & Shi (2004) and Zhang & Sheng (2005) used the variable, birthplace, namely whether students are from urban or rural made a significant difference in students' level of understanding about special education, with urban students knew more than students from rural areas in general. In the present study, the variable of workplace was adopted. It is an interesting result that teachers who worked in educationally medium-developed areas were the most positive

group ($M = 1.88$), and were significantly different from those who worked in educationally underdeveloped areas, while those who worked in educationally developed areas ($M = 1.90$) and underdeveloped areas ($M = 1.92$) did not hold significantly different views about special education. One possible explanation may be that educationally developed areas in China are almost equivalent to economically developed areas. Teachers who work in these areas may enjoy abundant educational resources, while at the same time, they face more pressures and difficulties. Firstly, with big population base comes with more students with disabilities compared with the other two areas, and this could lead to enlarged class sizes and potentially increases the possibility of teacher burnout. Secondly, parents of children with disabilities, especially those with severe disabilities, may move to big cities to seek better education for their children, which may potentially increase teacher's pressure level and lead to a negative attitude about special education. Thirdly, the living cost of big cities is relatively higher compared with the other two areas. According to the result of the survey, the average salary of teachers in educationally developed areas was about 3,000 RMB per month (as of 2010), which was lower than the average monthly wage of 4,201 RMB if we took Beijing as an example. Teachers may feel that their work is not valued by the society, which may lead to a lower evaluation of special education.

Another interesting finding is that non-public school teachers ($M = 1.84$) hold slightly more positive attitudes about special education when compared with public school teachers ($M = 1.90$) (See Table two). One possible reason is that the sample size for non-public school teachers is too small compared with the group of public school teachers, especially when considering there are several kinds of positions under the non-public school teacher category, including private school teachers ($N = 24$), substitute teachers ($N = 67$), re-employed teachers

($N = 6$) and volunteer teachers ($N = 10$), etc. The mean attitude score of the non-public teacher group may not be representative of this entire group, and requires future investigation with a larger sample size of non-public school teachers.

I also found out that teachers' attitudes about special education did not differ significantly based on the kind of school they worked in, their educational qualification or major. Former research has shown that teachers from different kinds of special education schools hold different views towards inclusive education (Peng, 2003). Although not statistically significant, teachers who worked in schools for the deaf got the lowest mean score on teacher's negative attitude about special education, while teachers who worked in comprehensive special education schools got the highest mean score. This is in line with previous research of inclusive education which concluded that teachers have a higher level of acceptance for children with sensory difficulties and physical difficulties for the reason that they need less support in school (Wei et al., 2001; Evans & Lunt, 2002; Forlin & Chambers, 2011; Chen et al., 2006). With a higher acceptance rate of children they worked with, a more positive attitude about special education may be formed.

Educational qualifications were found related to teachers' attitudes about inclusive education (Parasuram, 2006), but in the present study, there was no difference in attitude between teachers who held an associate degree or under, and those who graduated from university or who acquired Master's degree or above. This result may seem quite unexpected, but the fact is that the power of educational qualifications has often been exaggerated. Former research has shown that the achievement of a higher qualification made no difference to the overall attitudes or concerns about inclusion (Forlin & Chambers, 2011). Other

research has shown that the students of teachers with graduate degree perform no better than those with a bachelor's degree (Boyd et al., 2007).

Another interesting finding is that major did not pose effect on teachers' attitudes about special education. The mean score of the three subgroups varies from 1.89 to 1.91, which means that teachers, in general, agree with the items that positively worded about special education, no matter what their major was in university. One possible reason maybe that the mean age of the participants is 36 years old, which means that it has been more than 10 years since they graduated from university. The effect of major may be gradually decreased during these years. For researchers who are interested in the effect of major on attitude, one way to improve the design of the research is to limit participants to those who are newly graduated or just entered the field for less than five years.

Among all the predicting variables, the level of support, sense of achievement and perceived teaching efficacy were stably remained significant in predicting teachers' attitudes about special education based on gender, workplace and position category in the regression analysis. The result implies that it is highly important for teachers to first, believe their power in helping with their student's study and even changing their life for the better; second, learn to enjoy and appreciate every progress their students made during the whole learning process, no matter how tiny it might be, and gradually accumulate the sense of achievement in work; third, feel that they are supported and understood by people around them when they feel depressed or burnout. In fact, the support variable is so important that for beginning special education teachers, one of the most important actions that schools can take to prevent high attrition rate is to provide support during these vulnerable first years (Billingsley, 2004). Lack of support from administrators is one of the most frequently cited reasons for special

education teachers leaving the classroom (Whittaker, 2003). Regarding the sense of achievement and perceived teaching efficacy, it has long been known that teacher's belief is an important predictor and determinant of teaching practices (Brownell & Pajares, 1999). Former research regarding the area of inclusive education has shown that general education teachers who believe that they were successful in teaching students with learning and behavior problems may be more willing to include these students in their classroom (Brownell & Pajares, 1999). Actions need to be taken to promote teachers' teaching efficacy by establishing an efficient communication mechanism between new teachers, veteran teachers, where teachers could discuss with each other the difficulties they encountered in teaching, share efficiently teaching methods, experiences and educational resources, while supporting each other emotionally.

An unexpected outcome was a lack of gain in positive attitude with the increasing years of teaching in special education. This is the only independent variable that was not related to teachers' attitudes about special education in any regression models. This result echoes with Wei and Yuen's (2000) research, which yielded the same result.

The study also examined how would the nine independent variables influence teachers' attitudes based on gender using multiple linear regression. The result reveals that besides the three aforementioned variables, perceived teaching skills and self-efficacy level do work for both genders in predicting their attitudes about special education. For both female and male teachers, higher perceived teaching skills and self-efficacy level are associated with a more positive attitude about special education. Since a teacher's behaviour in class is likely to be influenced by their own efficacy expectations and their belief that what they do will be effective (Forlin & Chambers, 2011), a higher self-efficacy level could facilitate a better

classroom performance of the teacher. Former research about inclusive education has shown that there was a strong positive relationship between understanding inclusion and the belief that teachers can influence students (Buell et al., 1999). This result suggests that first, it is important for teachers to feel that they are capable of teaching special education classes with enough skills and technique to cater to various educational needs and be in control of the whole class and second, believe in themselves as a person who are confident and optimistic both in life and when facing difficulties. Secondly, schools should try to include teachers in the process of decision making, listening to teacher's opinion before implementing new policies or school regulations so as to make teachers feel that they are valued and counted as important members of the school, which could help increase their self-efficacy level. The length of training and knowledge about special education which were not found correlated with teacher's attitude for male teachers could significantly predict female teachers' attitudes about special education. In former research about inclusive education, researchers have found that the greater their knowledge base the more positive they were towards inclusion and the less concerned they were about it (Forlin & Chambers, 2011). Another variable, training was also found positively related with the attitude about inclusive education in former research (Peng, 2003). The present research extends the findings from inclusive education to the field of special education. Longer training and more knowledge about special education correlate with a slightly more positive attitude for female teachers.

The same model was also applied when doing multiple linear regression based on teachers' workplace. For teachers who worked in educationally developed areas, about 37% of the variance in teachers' attitudes about special education could be explained by the model, which is also the biggest percentage explained among the three groups. The variable---

knowledge about special education was found statistically significant only for teachers who worked in this area, but not the other two. Another variable---perceived teaching skills was found statistically significant for teachers who worked in educationally medium-developed areas and underdeveloped areas, but not for those who worked in educationally developed areas. An in-depth study examining the knowledge base of teachers who work in different areas as well as doing interviews about how they perceive their teaching skills may shed better light on these results.

For teachers who worked in public schools, eight out of the nine variables were found associated with their attitudes about special education. What worth our particular attention is that the variable---age, which was not found related to the dependent variable in other regression analyses, was negatively correlated with the mean attitude score for public school teachers, although the magnitude of this variable is small. It implies that older teachers are more likely to hold a more negative attitude towards special education. For teachers who worked in non-public schools, 41% of the variance of their attitudes towards special education could be explained by the model. The three core independent variables (level of support, sense of achievement and teaching efficacy) were found significantly associated with their attitudes toward special education.

To sum up, this research provides preliminary evidence regarding factors that would influence Chinese teachers' attitudes about special education. Within the category of teacher's demographic variables, gender, workplace, do pose effect on teacher's attitude about special education. Female teachers hold a more positive attitude about special education compared with male school teachers. For public school teachers, age is negatively correlated with their mean attitude score on special education. However, educational

qualification and length of special education do not pose effect on their attitudes about special education. Within the category of professional characters, position category does influence teacher's attitude about special education. Teaching skills, in-service training and knowledge of special education are positively correlated with teachers' attitudes about special education. However, major and the kind of special education school they work in do not pose effect on their attitude about special education. Affective variables, including self-efficacy level, teaching efficacy level and sense of achievement and support variable are positively correlated with teachers' attitudes toward special education.

B. Limitations

Several limitations are apparent in this study. I did not participate in the process of design, distribution and collection of the survey, with only access to the finished version of the survey and the database. When doing research based on survey and database developed by other people, it implies a higher possibility of misunderstanding of what other people try to know when designing questions and items. It takes more time and effort for me to decode the theme of different sections and be familiar with the layout of the survey. In addition, the data was self-reported, and there was no control over the authenticity of the answers given by the teachers. All of these may have impacted on outcomes and further study is warranted to tease out exactly which variable(s) contribute the most for a positive attitude towards special education. Further, when a number of ANOVAs are conducted on the data the error rate may inflate. Finally, the data reporting significant effects have small effect sizes, making it difficult to rationalize their actual influence on teachers' attitudes about special education.

C. Implications

The initial findings of the current study have important implications for school leaders, teacher educators, and researchers. For school leaders, positive attitude about special education which is linked with teacher's self-efficacy, teaching efficacy and sense of achievement could be facilitated within school by establishing an active communication mechanism between new teachers, veteran teachers and school leaders, where new teachers could discuss teaching techniques with veteran teachers and work collaboratively to design teaching plan for specific students, sharing student's daily progress with each other or providing support when feeling depressed or burnout. The role of school leaders in this is to include teacher's opinion in the decision-making process and build a school culture that empowers teachers. This study further shows that offering support is not only important for beginning special education teachers but also vital for veteran special education teachers as well, in order to establish positive attitudes about special education among all teachers. This support, in the Chinese context, could mean teachers receiving advice and help from colleagues and school administrators when facing difficulties, as well as gaining emotional support from their family members and children's parents. Another important aspect of support is that teachers are fully supported in classroom. Teachers will feel supported when 1) they are equipped with enough knowledge and skills to teach children with disabilities before they enter the classroom; 2) they are provided with the necessary teaching materials and instruments to teach children with disabilities according to their own educational needs when teachers are in the classroom; 3) other personnel is ready to help in class when teachers feel burnout (e.g. a teaching assistant or a para-professional). Another thing that could be achieved within the realm of school is to provide teachers with enough opportunities for

professional development since the length of training, teaching skills and knowledge about special education are also positively correlated with the formation of a positive attitude. As discussed above, special education teachers who worked in educationally developed areas may experience extra stress from both work and life compared with teachers who worked in the other two areas, which may negatively influence their attitude about special education. School leaders of this particular area need to pay attention to teacher's stress level periodically and discuss with them what might cause an elevation of stress level so as to work out different plans to help release or alleviate their stress, and facilitate a healthier attitude about their work.

For teacher educators, they need to pay attention to the gender difference that existed in attitude about special education within male and female students, and be cautious about how it might influence their future career path. The influence of gender on teachers' attitudes about special education extended from student life to their career life suggests that the formation of different attitudes about special education may take place long before people start working in the field. With males tend to hold a slightly more negative view towards special education as a university student, they are likely to carry this attitude when they start to be a special education teacher. By designing programs and courses that could help male students balance out the concerns about special education and establish a more positive attitude about special education, it might attract more male students to become future special education teachers. Teacher educators might also consider increasing both the hours and times of training for female teachers which could also enrich their knowledge base about special education at the same time.

For researchers, much remains to be learned about what other factors may predict attitude about special education, and why some predictors work differently within different subgroups. The current study used a nationally representative quantitative data. Future research should include direct observation and in-depth interview with a smaller sample size to examine how factors like teaching skills and knowledge base affect teachers' attitudes about special education.

References

1. Ahmmed, M., Sharma, U., & Deppeler, J. (2012). Variables affecting teachers' attitudes towards inclusive education in bangladesh. *Journal of Research in Special Educational Needs*, 12(3), 132-140. Retrieved from <http://search.proquest.com/docview/1037907370?accountid=14522>
2. Allan, J., & Slee, R. (2008). Doing inclusive education research. Retrieved from <http://storre.stir.ac.uk/handle/1893/1003>
3. Ainscow, M. (2005). Developing inclusive education systems: what are the levers for change? *Journal of Educational Change*, 6(2), 109–124.
4. Ainscow, M., & Sandill, A. (2010). Developing inclusive education systems: the role of organisational cultures and leadership. *International Journal of Inclusive Education*, 14(4), 401–416.
5. Ainscow, M., Booth, T., Dyson, A., Farrell, P., Frankham, J., Gallannaugh, F., Howes, A., & Smith, R. (2006). *Improving schools, developing inclusion*. London: Routledge.
6. Artiles, A. J., Kozleski, E. B., Dorn, S., & Christensen, C. (2006). Learning in Inclusive Education Research: Re-Mediating Theory and Methods with a Transformative Agenda. *Review of Research in Education*, 30, 65–108. Retrieved from <http://www.jstor.org/stable/4129770>
7. Avramidis, E. & Kalyva, E. (2007) 'The influence of teaching experience and professional development on Greek teachers' attitudes towards inclusion.' *European Journal of Special Needs Education*, 22 (4), 367–389.
8. Barton, L. (1997). Inclusive education: romantic, subversive or realistic? *International Journal of Inclusive Education*, 1(3), 231–242.
9. Beijing Educational Committee (2013). *Management of Learning in Regular Classrooms for Children and Adolescents with Disabilities in Beijing*. Retrieved from

<http://www.bdpf.org.cn/zxpd/zyzz/2013/201301/c16341/content.html>

10. Beijing Educational Committee (2013). *Tentative Management of Learning in Regular Classrooms for Children and Adolescents with Disabilities in Beijing*. Retrieved from <http://school.3xy.com.cn/School/100407/Article/64226>

11. Billingsley, B. S. (2004). Promoting teacher quality and retention in special education. *Journal of Learning Disabilities*, 37(5), 370-376. Retrieved from <http://search.proquest.com/docview/62137008?accountid=14522>

12. Boyd, D., Daniel Goldhaber, Lankford, H., & Wyckoff, J. (2007). The Effect of Certification and Preparation on Teacher Quality. *The Future of Children*, 17(1), 45-68. Retrieved from <http://www.jstor.org/stable/4150019>

13. Brady, K. & Woolfson, L. (2008) 'What teacher factors influence their attributions for children's difficulties in learning?' *The British Journal of Educational Psychology*, 78, 527-544.

14. Brownell, M. T., & Pajares, F. (1999). Teacher efficacy and perceived success in mainstreaming students with learning and behavior problems. *Teacher Education & Special Education the Journal of the Teacher Education Division of the Council for Exceptional Children*, 22(3), 154-164.

15. Brownell, M. T., Sindelar, P. T., Bishop, A. G., Langley, L. K., & Seo, S. (2002). *Special education teacher supply and teacher quality: The problems, the solutions* Retrieved from <http://search.proquest.com/docview/62217303?accountid=14522>

16. Buell, M. J., Hallam, R., Gamel-McCormick, M., & Scheer, S. (1999). A survey of general and special education teachers' perceptions and inservice needs concerning inclusion. *International Journal of Disability, Development and Education*, 46(2), 143-

156. Retrieved from <http://search.proquest.com/docview/62387132?accountid=14522>
17. Bussue, A. A. (2015). Predictors of teacher attitude toward inclusion in st. kitts and nevis (Order No. AAI3646837). Available from PsycINFO. (1724426412; 2015-99190-069). Retrieved from <http://search.proquest.com/docview/1724426412?accountid=14522>
18. Chai, J. & Wang J. An Investigation into Special Education Teachers' Career Identity and Job Satisfaction. *Chinese Journal of Special Education*, 11, 8-14.
19. Chen, Y. (1996). Making Special Education Compulsory and Inclusive in China. *Cambridge Journal of Education*, 26(1), 47-58.
20. Chen, G.H., Zhang Y., Shi Y., Wang L & Wu Y.Y. (2006). A Review of Attitudinal Researches on Learning in Regular Classes in Mainland China. *Chinese Journal of Special Education*, 12, 27-32.
21. Chris Forlin & Dianne Chambers (2011) Teacher Preparation for Inclusive Education: Increasing Knowledge but Raising Concerns, *Asia-Pacific Journal of Teacher Education*, 39:1, 17-32, DOI: 10.1080/1359866X.2010.540850
22. Chun Zhang, c., & Biying, H. (2015). Inclusion as an Approach and Process for Promoting Acceptance and Success: Comparative Perspectives between the United States and China. *International Journal Of Early Childhood Special Education*, 7(2), 238-250.
23. Collinson Vivienne (2012). Sources of teachers' values and attitudes, *Teacher Development*, 16:3, 321-344, DOI: 10.1080/13664530.2012.688675
24. Dorothy Zhang & Vicky G. Spencer (2015). Addressing the Needs of Students with Autism and Other Disabilities in China: Perspectives from the Field, *International*

Journal of Disability, Development and Education, 62:2, 168-181, DOI:
10.1080/1034912X.2014.998175

25. Dyson, A., Gallannaugh, F., & Millward, A. (2002, September). Making space in the standards agenda: Developing inclusive practices in schools. Paper presented at the European Conference on Educational Research. Lisbon, Portugal.

26. Dianne L. Ferguson (2008). International trends in inclusive education: the continuing challenge to teach each one and everyone, *European Journal of Special Needs Education*, 23:2, 109-120, DOI: 10.1080/08856250801946236

27. Eleweke, C. J., & Rodda, M. (2002). The challenge of enhancing inclusive education in developing countries. *International Journal of Inclusive Education*, 6(2), 113–126. <http://doi.org/10.1080/13603110110067190>

28. Florian, L. (2008). INCLUSION: Special or inclusive education: future trends. *British Journal of Special Education*, 35(4), 202–208.

29. Forlin, C., & Chambers, D. (2011). Teacher preparation for inclusive education: Increasing knowledge but raising concerns. *Asia-Pacific Journal of Teacher Education*, 39(1), 17–32.

30. Forlin C., Loreman T, Sharma U. & Earle C. (2009). Demographic differences in changing pre-service teachers' attitudes, sentiments and concerns about inclusive education, *International Journal of Inclusive Education*, 13:2, 195-209, DOI:10.1080/13603110701365356

31. Guo H.Y. & Yao R. (2006). An Investigation on Current Situations of Learning in Regular Classroom in Primary Schools in Hebei Province. *Chinese Journal of Special Education*, 71, 15-17.

32. Guo H.Y. & Shi X.C. (2004). A Survey on Special Normal Education Students' Attitudes towards Special Education in Hebei Province. *Chinese Journal of Special Education*, 52, 74-77.
33. Jennifer Evans & Ingrid Lunt (2002). Inclusive education: are there limits?, *European Journal of Special Needs Education*, 17:1, 1-14, DOI: 10.1080/08856250110098980
34. Lai H.Q. (2014). Providing Appropriate Education for Every Child with Disability. *Journal of Modern Special Education*, 55-57.
35. Li Xiu. (2012). An Investigation into Quanzhou Normal University Students' Attitudes Towards Children with Special Needs Learning in Regular Class. *Journal of Quanzhou Normal University*, 30, 128-133.
36. Liu Wang (2007). Positive Psychological Character of Special Education Teachers and Its Influence on Outcome Variables. *Chinese Journal of Special Education*, 81, 67-71.
37. Meng Deng & Holdsworth J.C. (2007). From unconscious to conscious inclusion: meeting special education needs in West China, *Disability & Society*, 22:5, 507-522, DOI: 10.1080/09687590701427644
38. Meng Deng & Kim Fong Poon-McBrayer (2004). Inclusive Education in China: Conceptualisation and Realisation, *Asia Pacific Journal of Education*, 24:2, 143-156, DOI:10.1080/02188791.2004.10600206
39. Ministry of Education (2010). The National Medium and Long-term Plan on Education Reform and Development (2010-2020). Retrieved from http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/moe_838/201008/93704.htm

1

40. Min Weifang (2006). Report on China's education and human resource development, Peking University Press.

41. Minjong Youn (2016). Learning more than expected: The influence of teachers' attitudes on children's learning outcomes, *Early Child Development and Care*, 186:4,578-595, DOI: 10.1080/03004430.2015.1046856

42. Ministry of Education (2015). Mid-stage Assessment of The National Medium and Long-term Plan on Education Reform and Development, Special Education Project Assessment Report. Retrieved from http://www.moe.edu.cn/jyb_xwfb/xw_fbh/moe_2069/xwfbh_2015n/xwfb_151130/151130_sfcl/201511/t20151130_221728.html

43. Office of National Statistics. (2007). The Second National Sample Survey on Disability. Retrived from <http://www.stats.gov.cn/tjsj/ndsj/shehui/2006/html/fu3.htm>

44. Parasuram, K. (2006) 'Variables that affect teachers' attitudes towards disability and inclusive education in Mumbai, India.' *Disability and Society*, 21 (3), 231-242.

45. Peng X.G. (2003). The Study on Teachers' Attitude toward Integration Handicapped Students, *Chinese Journal of Special Education*, 38, 10-15.

46. Peng X.G. (2012). The Current Situation and Future Suggestion of LRC for Chinese children with disability. *A Journal of Modern Special Education*, 19-21.

47. Podell, D. M. & Tournaki, N. (2007) 'General and special educators' predictions of student success as a function of learner characteristics and teacher experience.' *Teacher Education and Special Education*, 30 (4), pp. 249-63.

48. Richard P. Hastings & Suzanna Oakford (2003). Student Teachers' Attitudes

- Towards the Inclusion of Children with Special Needs, *Educational Psychology*, 23:1, 87-94, DOI: 10.1080/01443410303223
49. Shade, R. A., & Stewart, R. (2010). General education and special education preservice teachers' attitudes toward inclusion. *Preventing School Failure*, 46(1), 37-41.
50. Sharma, U., Forlin, C., Loreman, T., & Earle, C. (2006). Pre-service teachers' attitudes, concerns and sentiments about inclusive education: an international comparison of the novice pre-service teacher. *International Journal of Special Education*, 21(21), 80-93.
51. State Council General Office (2014). The Special Education Promotion Plan (2014-2016). Retrived from http://www.gov.cn/xxgk/pub/govpublic/mrlm/201401/t20140118_66612.html
52. Tang R. (2015). The Analysis for the Current Situation of Inclusive Education for Students with disability in Rural Area. *Xueyuan*. 13, 157-158.
53. Triandis, Harry Charalambos. (1971). *Attitude and attitude change*. New York : John Wiley & Sons, Inc.
54. Wang J.Y. & Wang Y. (2012). Research on Special Education Teachers' Vocational Identity. *Journal of Educational Studies*, 1, 90-96.
55. Wang J.Y. & Wang H. (2013). On the Factors Affecting Professional Identity of Special Education Teachers. *Chinese Journal of Special Education*,1, 52-57.
56. Wang H.X., Peng Xin and Wang Y.J. (2011). An Investigation Report on the Present Integrated Education in Primary Schools in Haidian District, Beijing. *Chinese Journal of Special Education*, 130, 37-41.
57. Wei X.M., Yuan W.D. and Liu Q.L. (2001). A Comparative Study on Teachers'

Attitudes towards School Pupils with Special Needs. *Journal of Beijing Normal University*, 163, 34-39.

58. Wei X.M. and Yuen M.T. (2000). An Investigation into Teachers' Attitudes to Special Needs in the Primary School and Special School. *Chinese Journal of Special Education*, 27, 31-33.

59. Xiao, F. (2005). Mainstreaming in China: History. Actuality. Perspectives. *Chinese Journal of Special Education*, 57, 3-7.

60. Yang H. L., & Wang, H. B. (1994). Special education in China. *The Journal of Special Education*, 28, 93–105.

61. Wang Yan & Mu Guanglun (2014). Revisiting the Trajectories of Special Teacher Education in China through Policy and Practice, *International Journal of Disability, Development and Education*, 61:4, 346-361, DOI: 10.1080/1034912X.2014.955792

62. Whitaker, S. D. (2003). Needs of beginning special education teachers: Implications for teacher education. *Teacher Education and Special Education*, 26(2), 106-117.

Retrieved from <http://search.proquest.com/docview/62178458?accountid=14522>

63. Chen Yunying (1996). Making Special Education Compulsory and Inclusive in China, *Cambridge Journal of Education*, 26:1, 47-58, DOI:

10.1080/0305764960260104

64. United States Department of Education, Office of Special Education and Rehabilitative Services. History: Twenty-Five Years of Progress in Educating Children With Disabilities Through IDEA. Date of Publication Unknown.

<http://www.ed.gov/policy/special/leg/idea/history.pdf>

65. Zhao X.H. (2013). An Overview of Educational Placements of Children with

Disabilities in China in the Past 25 Years —Focusing on the Development of Policies Involving Inclusive Education. *Chinese Journal of Special Education*, 153, 23-29.

66. Zhang Qian & Li Huan (2014). A Survey into Undergraduate Normal Students' Attitudes towards Special Education—Taking Southwest University as an Example. *Journal of Bijie University*, 32, 72-77.

67. Zhang M.L. & Sheng Y.J. (2005). A Survey on Special Normal Education Students' Work Values and Their Attitudes towards Special Education—Taking Nanjing Technical College of Special Education as Example. *Chinese Journal of Special Education*, 63, 91-95.

Appendix A

Table A1

Descriptive Statistics of Participant's Demographic Variables

Demographic variables	Numbers	Percentage
Gender		
Female	2,557	73.37
Male	906	26.00
Missing	22	0.63
Age		
16-24	185	5.31
25-34	1,408	40.40
35-44	1,231	35.32
45-65	566	16.24
Missing	95	2.73
Workplace		
Comparatively developed area	1,209	34.69
Medium-developed area	1,388	39.83
Underdeveloped area	888	25.48
Educational Qualification		
Associate degree or under	1,386	39.77
Bachelor's degree	1,948	55.90
Graduate degree	107	3.07
Missing	44	1.26
Years of Teaching in Special Education		

0-9	1,598	45.85
10-19	1,344	38.57
20-29	411	11.79
30-41	54	1.55
Missing	78	2.24
