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Training Needs for Implementing Early Childhood Inclusion in China

Abstract

This article focuses on assessing Chinese early childhood teachers' training needs for working with special needs children in regular classrooms in light of China's national policy requiring inclusive practices. The researcher recruited teachers from inclusion pilot kindergartens in Beijing to participate in the study. MANOVA results indicate that teacher perceptions of training needs did not differ in comparing their level of education, years of teaching experience, or class size. Descriptive statistics from the four subscales of the training needs survey data and interviews with special education teachers, principals, and early childhood teachers indicate that the teachers had the greatest need for training in the following areas: behavior management, the process of implementing individualized education plans, inclusion strategies, and communicating with parents and families. Finally the article discusses implications and recommendations for teacher preparation and future research.

Key words: Training needs, early childhood inclusion, Chinese kindergarten, children with disabilities

Introduction to Early Childhood Inclusion in China

The facilitation of early childhood inclusion in the Chinese social-cultural context has challenged all stakeholders, including the policy makers, administrators, special education teachers, regular classroom teachers, and parents of children both with and without disabilities (Hu, 2009; Li, 2007). Unlike in the U.S., there is no program such as Head Start or Early Steps that provides educational services to young children with special needs or those who come from economically disadvantaged families. In fact, public education in China is not K (or P)-12; it starts with grade one and lasts for nine years. Early childhood facilities that serve children ages three to six are called kindergartens in China. While the majority of children attend three-year kindergarten

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programs, a large number of children in rural China attend a one-year Kindergarten class administered by public primary schools (Zhao & Hu, 2008). Regardless of whether the Kindergarten classes last for three years or one year, a majority of these programs have not considered including children with disabilities in either urban or rural China, mainly due to the lack of resources and trained staff to deliver the services (Li, 2007; Liu & Zeng, 2007; Zhou, 2006). Therefore, a study of early childhood inclusion is long overdue in China and this research focuses on assessing Chinese early childhood teachers' training needs for working with special needs children in regular classrooms. In order to gain a better understanding of the context, the following sections provide background information on challenges, legislative movements, and current developments in providing services for children with disabilities at the preschool level.

Due to the lack of resources and trained staff, children in China from birth to six years of age with special needs do not have guaranteed opportunities to receive free and public education until they reach their elementary years. When raising a child with a disability, Chinese parents take the major responsibilities in funding the child's early intervention (EI) and early childhood special education (ECSE) services. Recently, some developed cities like Beijing have initiated policies to encourage parents to send their children with disabilities for EI/ECSE and related services by offering partial reimbursement. The maximum amount available for reimbursement per family is 500 yuan (\$75) monthly (Beijing Disabled People's Federation, 2008). EI and ECSE services are provided through two main avenues: public agencies (i.e., state hospital, special education schools, institutions for people with disabilities, and disabled people's federation) and private agencies (Liu & Zeng, 2007). Whether private or public, most of these facilities charge tuition that exceeds regular early childhood care. However, fees vary based on the quality and nature of the service; they can range from five hundred yuan (\$75) to five thousand yuan (\$750) or more per month. The government provides a limited amount of services to children with disabilities and their families in developed areas and even fewer choices in rural China (Ellsworth & Chung, 2007; Li, 2007). When services are available, most are rehabilitative in nature for children with physical disabilities, speech therapy for deaf children, or behavioral training for children with autism and are delivered in segregated settings (Liu & Zeng, 2007).

Challenges that parents of young children with disabilities face are beyond financial burdens. A lack of EI and ECSE services might force parents to travel thousands of miles from less developed cities or rural communities to big cities like Beijing and Shanghai in order to seek such services. In fact, many parents have to abandon their jobs in order to accompany a child enrolled at an agency for treatment. Millions of parents throughout China are waiting for the day that kindergartens will be able to provide educational services for children with disabilities.

Legislation

Realizing the desperate need for quality early care of children with disabilities and their families, the Chinese government responded with national legislation and followed the world trend in how to best serve this population. In 1990, the United Nations

Educational, Scientific and Cultural Organization (UNESCO) declared every child's entitlement to a basic education and participation in the community. In 1994, UNESCO held the world conference on special education and called on all member countries to review educational policies and activate inclusive education. Furthermore, in 2000, these member countries committed to serve vulnerable and disadvantaged children by signing the Dakar Framework for Action (UNESCO, 2000). As a result, many countries started to initiate and implement national education regulations regarding special education and inclusive education (e.g., Ali, Mustapha, & Jelas, 2006; Angelides, & Michailidou, 2007; Dart, 2007).

Influenced by the global movement in inclusive education reform, the Chinese government realized the importance and efficacy of EI and ECSE and started to actively seek solutions to initiate inclusion at the preschool level. In 1990, *The Protection of Disabled Person's Law* specifically called for a national effort to build quality preschool programs and provide services to young children with disabilities (National People's Congress, 1990). It was the first time China encouraged regular kindergartens to admit children with disabilities who are capable of receiving a typical education. In 1994, *the Educational Guidelines for People with Disabilities* further specified public agencies that will provide care, rehabilitation, and education for children with disabilities (National Education Committee of the People's Republic of China, 1994). The government continued to support early childhood inclusion through the *Ninth Five-Year Plan* (1996-2000) (National Education Committee of the People's Republic of China & Disabled Person's Federation of the People's Republic of China, 1996) and *Tenth Five-Year Plan* (2001-2005) (National People's Congress, 2001), during which the objective of universalizing early childhood education for children with disabilities was proposed. However, enrollment of children with disabilities in regular kindergartens was very low. The current *Eleventh Five-Year Plan* (2006-2010) attempts to increase enrollment (National People's Congress, 2006). Chinese officials anticipated that more and more children with disabilities are going to start their early childhood education in regular kindergartens in the near future as a result of the implementation of these national laws.

Current Situation of Early Childhood Inclusion

Currently, however, these goals are not being met. There are very few kindergartens considering enrolling children with disabilities in developed cities like Beijing, Nanjing, and Shanghai (Li, 2007; Zhou, 2006). A survey conducted in the Hebei province revealed that none of the regular kindergartens had enrolled any children with disabilities (Jiao et al., 2004). In an effort to reach inclusion goals, the Beijing Municipal Commission of Education (BMCE) appointed 18 top-quality kindergartens in Beijing in 2007 as inclusion pilot schools. When the researcher visited these schools in summer 2008, directors reported frequently turning away children with disabilities due to a critical shortage of professionally trained early childhood special education teachers, regular education teachers, and resources available to recruit, train, and retain these professionals. In limited surveys (Hu, 2009; Li, 2007; Yan, 2008; Zhang, 2003; Zhang, 2006; Zhou, 2006) conducted to investigate teachers and directors' attitudes toward inclusion and their perceived challenges in Chinese kindergarten settings, teachers

consistently reported that their lack of knowledge and skills prevent them from initiating and continuing services for this population.

These results echoed previous studies in the U.S. that teachers' lack of training is the number one barrier to inclusion (e.g., Booth & Kelly, 1998; Brennan et al., 2001; Mulvihill, Shear, & Vanhorn, 2002; Palsha & Wesley, 1998; Wolery et al., 1993). Unlike in the U.S., where programs to prepare teachers to work with children with disabilities are abundant, China currently has no schools that exclusively train teachers to work with this population at inclusive preschool settings (Liu & Zeng, 2007).

Clearly, innovations of and legislative demand for inclusive education pose a great challenge to teacher education in preparing qualified early childhood teachers and local school districts to systematically implement professional development activities that target teachers' training needs (Wang, 2008). Zuo and Wang (2008) believe that early childhood teacher education reform is the fundamental solution to meet the ethical and legal demands of preschool inclusion. Zhou (2008) conducted case studies in pilot inclusion kindergartens in Shanghai to develop strategies to include children with problem behaviors (e.g., autism spectrum disorders) in regular classrooms. Wang and Shen (2009) conducted observations and interviews in one inclusive kindergarten in Sichuan and found that "energy constraints" due to are the number one factor that limits the effectiveness of inclusion.

Overall, research on early childhood inclusion is limited to examining teachers' attitude toward inclusion through survey methodology (Li, 2007; Yan, 2008; Zhang, 2003; Zhou, 2006). No research until today, utilizing either a quantitative or a qualitative methodological approach, has assessed early childhood teachers' training needs to promote the inclusion of children with disabilities in regular classrooms. Therefore, the purpose of this study is to assess early childhood teachers' perceived training needs in Beijing, China, through multiple perspectives. Specifically, this study assesses the influences of teachers' highest level of education, years of teaching experience, and class size on their training needs. Additionally, the study explores the needs by interviewing directors who are in the process of integrating inclusive practices and teachers who have worked with children with disabilities in a regular classroom. Findings from the study can provide specific implications for both in-service and pre-service teacher preparation in order to implement national laws of preschool inclusion and deliver services for millions of eligible children with disabilities.

Methods

Participants

Two hundred and seventy-six teachers from 12 inclusion pilot kindergartens participated in the survey. Out of the 276 responses from the survey, information regarding their educational background reveals the following distribution of degrees: four-year Bachelor's degree (41.3%), two- or three-year college degree (42.8%), degree from teachers' training schools (12.3%), and a high school diploma (3.6%). In addition,

10.9% of teacher worked in classrooms of fewer than 25 students, 26.4% in classrooms of between 25 and 30 students, 34.4% between 30 and 35 students, and 22.5% in classrooms of 35 students or more. Moreover, 21.4% of teachers had more than 19 years of teaching experience, 39.9% had between 7 and 19 years of experience, and 36.2% had less than 7 years of experience.

Instrument

Originally developed by Buysse, Wesley, and Keyes in 1998, the *Self-Assessment of Training and Information Needs-Adapted* is designed to identify general early childhood teachers' needs for training and information regarding inclusive practices. This instrument is based on a comprehensive review of the literature and on three sets of professional competencies: the Division of Early Childhood (DEC), the National Association for the Education of Young Children (NAEYC), and North Carolina Early Childhood and Early Intervention Professional Competencies. Revisions of the instrument were made based on review and evaluation conducted by 72 early childhood and special education professionals. Based on a sample of 164 teachers, Cronbach's alpha reliability scores for each subscale were as follows: (a) knowledge of special needs (.82), (b) training related to special needs (.90), (c) knowledge of typical child development (.96), and (d) training related to typical child development (.98). The items on the first scale are measured on a 5-point Likert scale ranging from 1 (very little confidence/great need) to 5 (great confidence/very little need). Buysse emailed researcher the adapted version of this instrument based on research findings which have resulted in 21 item rating scale assessing knowledge, skills, and training needs in the areas of curriculum and learning, children with special needs, and professional resources.

The researcher then added five questions to the instrument addressing developmentally appropriate practices (DAP). The Chinese national early childhood curriculum guidelines published in 2001 have adopted the philosophy of DAP (Hu & Szente, 2009). DAP emphasizes teaching to individual differences, which is a new concept to many Chinese early childhood teachers (Hu & Szente). Yet this concept is important because an early childhood programs that uses developmentally appropriate practices is a high-quality and desirable program for all children, including children with disabilities (Bailey, McWilliam, Buysse, & Wesley, 1998). Moreover, adaptations and modifications based on developmentally appropriate materials, activities, and instructions can meet the needs of children with disabilities and are most appropriate and effective (Grisham-Brown, Hemmeter, & Pretti-Frontczak, 2005; Horn, Liber, Li, Sandall, & Schwartz, 2000; Pretti-Frontczak, Barr, Macy, & Carter, 2003). Therefore, assessing Chinese teachers' training needs on DAP should help determine how comfortable they feel about this new educational theory and practice.

Interviews

The author used an in-depth interview using open-ended questions to investigate training needs reported by teachers and directors in order to provide further rich evidence from multiple perspectives (Slavin, 2007). The author contacted all 18 directors of the

inclusion kindergartens to participate in this study. However, due to a breakout of the “Hand, Mouth, and Foot” diseases, the government took extreme caution to minimize the spread of disease and thus limited the availability of the directors and teachers for interview. Only three kindergartens had hired full-time special education teachers and the rest of the inclusion kindergartens were currently in preparation for opening inclusion classrooms. The lead inclusion kindergarten had hired four full-time special education teachers and almost all of its classrooms have included one to two children with disabilities. Thus, after careful consideration of the researcher’s request, twelve directors, four special education teachers and eight regular education teachers from the lead inclusion kindergarten shared their beliefs on the following question: “What type of knowledge and skills of training do you think early childhood teachers are in greatest need to learn?”

Procedures

The researcher recruited and visited 12 pilot inclusion kindergartens in summer 2008. During the visit, the researcher provided on-site consultation, distributed 350 surveys, and conducted interviews with twelve directors, four special education teachers, and eight general education teachers. With a response rate of 79%, the researcher collected a total of 276 surveys. The author entered survey data into SPSS after erasing each teacher’s name and replaced it with a number code. The researcher conducted all interviews with teachers and directors during the visit. Besides asking questions related to training needs, the complete interview also included questions related to perceptions of inclusion and perceived challenges and benefits of inclusion. In this study, the researcher drew data only from complete interviews that answered questions regarding training needs for inclusion services. The duration of complete interviews ranged anywhere from 30 minutes to one hour. The researcher used an audio recorder to save the interview data, and later transcribed them into a Microsoft Word document for further analysis. A graduate student reviewed each line of the transcription for inter-rater reliability. Small discrepancies resulting from typing mistakes were found and corrections were made. Another graduate assistant who is proficient in both English and Chinese read the data analysis results in order to ensure accuracy of translation. Minor discrepancies were identified in wording and these issues were addressed until a mutual agreement was reached.

Data Analysis

Dependent variables are the total scores of the four subscale measures of the survey: Curriculum and learning, DAP, Children with Special Needs, and Professional Resources. Independent variables include teachers’ highest level of education, years of teaching experience, and class size. Years of teaching experience were divided according to the year that marked the curriculum movement in Chinese early childhood education. Curriculum movement means infusing developmentally appropriate practices into national curriculum guideline. The researcher expected teachers who received different levels of training on individual differences among children to reflect on their training needs.

The researcher employed three one-way Multivariate Analysis of Variances (MANOVA) to assess the potential influences of highest level of education, years of teaching experience, and class size on four areas of training needs scores. This is an appropriate method to use when examining the influences of an independent variable on multiple dependent variables.

Finally, the researcher conducted data analysis of the interview information based on Glesne and Peshkin's (1992) recommendations of a progressive process in identifying patterns and themes through reading and sorting and rereading and resorting. First, comparing main ideas of responses with interview questions revealed two overall themes in kindergarten teachers' perceived training needs in: (1) knowledge about children with special needs and (2) curriculum, learning, and resources. Then, a coding system was used when reading and grouping each response under the identified theme. Rereading and regrouping coded responses revealed subthemes. Last, great attention was given to placing significant quotations within each identified subtheme. Significant quotes either represented strong opinions or repeated by multiple interviewees. When organizing coded key words under knowledge about children with disabilities, the researcher identified four subthemes: IEP, Assessment, Teaching Strategies, and Behavior Management. Participation in Learning Activities, Curriculum Modification, and Working with Parents were three subthemes identified under curriculum, learning, and resources.

Results

Descriptive Analysis

Mean and Standard Deviation. Table 1 provides descriptive statistics of training needs according to the four subscales: Curriculum and Learning, DAP, Children with Special Needs, and Professional Resources. Overall, participants in the survey reported moderate training needs (little confidence) for Curriculum and Learning, ($M = 1.98$, $SD = .63$), DAP ($M = 2.11$, $SD = .61$), Children with Disability ($M = 2.02$, $SD = .58$), and Professional Resources ($M = 2.18$, $SD = .61$). The calculation of Cronbach's alpha revealed moderate reliability for the four subscales from this study: Curriculum and Learning (.80), Developmentally Appropriate Practices (DAP) (.80), Children with Special Needs (.87), and Professional Resources (.80).

Teachers' rating on greatest need for training. The survey specifically asked teachers to choose the item that represents their greatest need under each subscale. The results showed that under training needs for "Curriculum and Learning," 32% of teachers chose, "Guide children's behavior and deal with situations in a way to help them solve their own problems and learn self-control." When asked about training needs for "DAP," 23% of teachers chose "Understand the impact of delay in one developmental area on other areas." Under training needs for "Children with Special Needs," 21% of teachers chose "Embedding Individualized Education Plan (IEP) into daily normal routines." When asked about teachers' greatest training need for "Professional Resources," 45% chose "Know how to communicate effectively with families." Additionally, 33% of

teachers chose “Know how to communicate clearly and deal with disagreements among adults in a professional way” as their perceived greatest need.

Table 1
Means and Standard Deviation on Training Needs Scores

Variables		Number of teachers	Curriculum and Learning	DAP	Children with Special Needs	Professional Resources
Years of Teaching	Not reported	7				
	0-7	100	1.9 (.67)	2.02(.6)	1.94(.55)	2.13(.65)
	7-19	110	1.95 (.60)	2.14(.65)	2.07(.65)	2.14(.60)
	>19	59	2.08 (.68)	2.23(.60)	2.04(.48)	2.31(.56)
	Total	276	1.96(.64)	2.11(.62)	2.01(.58)	2.17(.61)
Number of Students	Not reported	16				
	<35	198	1.95(.63)	2.07(.6)	1.97(.53)	2.16(.59)
	>35	62	2.07(.64)	2.16(.63)	2.08(.67)	2.22(.65)
	Total	276	1.99(.64)	2.11(.62)	2(.58)	2.18(.60)
Degree	Bachelor	114	1.92(.62)	2.14(.65)	2.01(.58)	2.16 (.60)
	Associate	118	1.94(.58)	2.07(.61)	2.04(.59)	2.19(.64)
	Mid tech	34	2.2(.90)	2.15(.58)	1.9(.51)	2.13(.53)
	High School	10	1.98(.46)	2.2(.57)	2.1(.75)	2.4(.54)
	Total	276	1.96(.64)	2.11(.62)	2.01(.58)	2.18(.61)
Total			1.98(.63)	2.11(.61)	2.02(.58)	2.18(.61)

Note: $N = 276$

MANOVA Analysis

Three separate MANOVA procedures were used as primary data analysis in determining the differences in teachers' perceived training needs based on the following variables: highest level of education, years of teaching experience, and class size. The MANOVA results indicated no statistically significant differences in areas of training needs when examining teachers' highest level of education ($F_{16, 736} = 1.03, p > .05$), years of teaching experience, ($F_{8, 474} = 1.57, p > .05$), or class size ($F_{12, 603} = 1.25, p > .05$). Therefore, no further analysis was reported.

Knowledge about Children with Special Needs

Assessment. All special education teachers, two regular education teachers, and seven directors mentioned a need for learning techniques in assessing children with disabilities. They were concerned that their lack of knowledge of atypical child development prevented them from adequately understanding children with special needs in terms of their behavioral characteristics and educational needs. It is difficult for these teachers to interpret present levels of functioning and determine skills needed for prevention, intervention, and remediation. The four special education teachers

interviewed reported that they were unaware of any developmental, standardized, or curriculum-based assessment instruments that they could use to assess these children based on their learning characteristics. There is no school psychologist or related professional that the teachers refer these students to for evaluation. All they can do is look at a medical diagnosis from the doctor. Some advanced children's hospitals offer psychological assessment of intelligence tests that were standardized based on the western population and translated into Chinese. Director H said that she knew of one hospital that could administer the *Gesell Developmental Assessment* (Gesell & Amatruda, 1974), so she requested that all parents interested in enrolling a special needs child receive psychological evaluation from that particular agency. According to this director, she based enrollment eligibility decisions on those standardized tests. However, she said that these tests are very limited in providing guidelines for planning instruction on a daily basis. As a result, all she could do was inform the teachers to do the best they could as long as these children were safe and did not disrupt the pace of instruction too much.

IEP. Almost everyone mentioned the need to learn the IEP process and their experiences of participating in a demonstration IEP meeting. The lead kindergarten for the 18 pilot schools has been successfully introduced and implemented the IEP process. The lead kindergarten held a demonstration IEP meeting that followed a similar process based on the U.S. model and invited the rest of the school representatives during a training seminar. Parents, administrators, and both general and special education teachers were the primary IEP team members. Additionally, experts were invited to comment on assessments completed by the special education teachers and to address parental concerns. Though not required by any educational laws in China to write an IEP, teachers who observed the use of this method shared their positive beliefs that the IEP process can truly serve as a guide in meeting the needs of children with disabilities. However, many teachers and directors expressed confusion about the implementation of the IEP process and requested on-site consultations to provide specific feedback in training. Director F said: "We feel very lost when trying to conduct IEPs; we need someone to guide us through the process."

Teaching Strategies. Almost everyone brought up the need for learning instructional strategies. Some teachers reported that when they applied some common strategies to children with disabilities, these children either did not respond or responded quite differently from typical children. Teachers reported the need to learn specific strategies for teaching atypical children who are acquiring basic skills in play, reading, writing, and self-care. Teachers who worked with children with autism mentioned their need to learn strategies to help these children initiate or maintain social interactions with peers rather than spending the majority of their time playing alone or wandering off in the classroom.

Three directors, two special education teachers, and four regular teachers pointed out that teachers not only need to learn strategies to work with atypical children but they

should also learn strategies to use in an inclusive classroom. Instructional Director I commented:

“In terms of instruction, the needs of children with disabilities are different based on their disability category and the severity of the disability. Teachers need to learn specific strategies that work for individual children who might have cerebral palsy, autism, or developmental delays. In other words, we should provide support that varies based on unique characteristics of their disabilities.”

Director B commented:

“Current training always focuses on strategies for children with special needs in isolation. I think we also need strategies related to inclusive practices. How can we provide children with special needs a supportive and natural environment without disrupting typical children?”

Behavior Management. Everyone seemed to feel deeply concerned about behavioral issues frequently exhibited by children with disabilities. Special educators all acknowledged the urgent need for training in positive behavioral support and behavior management techniques to prevent problem behaviors and deal with various situations. Teachers reported the following situations as problematic and frequently occurring: when the student (1) fails to communicate needs and wants, (2) does not follow teacher’s direction, (3) refuses to participate in activities, and (4) screams, hits others, and throws items. Special education teacher A shared the following anecdote:

“I provided training on behavior management to regular education teachers, though I used very simple cases to illustrate every concept, they (regular education teachers) replied that these concepts were very difficult to understand. How likely is it for them to transfer theory into practice? I think more hands-on learning in addition to lecture is needed to help them become effective teachers in managing student behaviors. Truthfully, for those beginning teachers who are just getting used to the daily routines, teaching a class of 30 to 35 4- or 5-year old children is going to take many years of practices for them to reach that point.”

Curriculum, Learning, and Resources

Participation in learning activities. Everyone agreed that inclusion means much more than just allowing a child with disabilities to exist in the classroom physically. However, they stressed that it was extremely challenging to invite these children to participate in various large group class activities, unless the activity is exclusively designed for them in one-on-one situations. Teachers reported that learning activities, particularly group instruction, are hard for these children because their attention span is much shorter than typical children and they cannot sit still. In terms of different disabilities, teachers reported that children with autism, particularly nonverbal individuals, are the most difficult type to include in a regular class. Children with developmental delays, such as Down syndrome, are easier to include in the activities. According to four special education teachers, two regular teachers, and four directors, children with developmental delays showed great progress in all areas. Repeatedly, all special education teachers and more than half of the regular teachers expressed a desire to acquire strategies that would help them effectively engage these children in their daily routine activities, group instruction in particular.

Curriculum Modification. Four directors and all special education teachers pointed out the need for regular education teachers to learn about curriculum modification. Based on their observations, they felt that teachers lack knowledge and skills in providing environmental support, material adaptation, and prompts. For example, using a picture schedule to help students understand their routines or provide a prompt before transition may reduce the anxiety of young children with autism or other developmental delays. Special education teachers and directors reported that regular education teachers are inexperienced in determining the level of appropriateness in materials and activities, based on special needs children's level of cognitive and social emotional functioning that will stimulate their skill development. Instructional Director I reported:

"There are five domains in early childhood and we can choose a curriculum based on that. In addition, we have national curriculum guidelines and goals. However, there is no such guideline for early childhood special education. Therefore, it created many challenges for teachers in choosing materials and activities. If we totally depend on teachers coming up with educational goals, resources, and strategies, it is unrealistic and unscientific."

Working with Parents. All special education teachers, four regular teacher, and five directors stated that it was crucial for teachers to learn how to work with parents. Director A said, "Teacher preparation is the key focus while parent relationships are the key challenge." She emphasized the importance of and challenges in working with parents. Special education teachers reported most parents were highly involved in their child's program and very cooperative and supportive. Communication with parents was consistent and ongoing via face-to-face conference, phone, and email. Special education teachers felt that these parents had higher expectations of them compared to their regular education counterparts. Teachers shared their positive experiences with parents and how they had helped them gain a sense of accomplishment at the end of each day. When parents were skeptical, teachers felt stressed and experienced low self-esteem, which they believe had negatively impacted their work performance. Five directors identified the critical need for teachers to learn effective strategies to work with families. General education teacher C shared her feelings working with one parent:

"We have a kid with autism that screams a lot when he is frustrated. The mother told us that she physically disciplines him at home. But, we cannot do that as teachers. The mother said we were too nice to him and it does no good to him. We are embarrassed by the conflict because we have no other ways to solve the problem. The parents therefore do not trust us and thought we were not educating their child."

Discussion

The purpose of this study was to investigate kindergarten teachers' training needs in order to include children with disabilities in regular classrooms among pilot inclusion kindergartens in Beijing. Research findings suggest that early childhood teachers in China report the most need for more training in the areas of behavior management, the IEP process, inclusion strategies, and communicating with parents and families.

Teachers' deep concerns about behavioral issues that could arise in inclusive classes are evident from both survey and interview results. Teaching in a large class of 30 to 40 young children can be challenging to any novice or veteran teacher. Chinese early childhood teachers are more accustomed to direct instruction. Even though the National Curriculum Guideline emphasizes a child-centered approach to teaching, teachers are struggling to turn the theories into practice in their classrooms. In reality, teachers prefer teaching to a large group of students in a direct instruction format, which essentially requires youngsters to sit quietly and pay close attention to the teachers (Hu & Szente, 2009). While the majority of youngsters adapt to this teaching style, special needs children tend to get into trouble for not following directions and disrupting others by their crying, running around, throwing temper tantrums, etc. Based on the finding, the DOE should plan strategically when a child with disabilities is included in a regular classroom, such as decreasing child-teacher ratio, staffing an extra assistant, and providing professional consultation on managing challenging behaviors.

Teachers also reported a lack of strategies to teach special needs children in an inclusive classroom. Teachers understand the importance and necessity of facilitating the deficit areas of children with disabilities in the natural environment of on-going classroom activities. During the interviews, every teacher, particularly teachers of children with autism, stressed the need to learn techniques that would help these children initiate or maintain social interactions with peers. Some teachers and administrators also reported the need to learn instructional strategies that work for the inclusion of children with disabilities in regular classroom activities and routines, which is consistent with the survey findings. For instance, many teachers mentioned in their interviews the importance of using strategies to stimulate the language development of special needs children. Also, teachers reported in the survey that they want to learn "the strategies of fostering language development in the classroom." Linking to "Curriculum and Learning" where teachers emphasized the need to learn strategies that can prevent problem behaviors, it makes perfect sense that teaching communication and social skills can lead to successful prevention of problem behaviors. Based upon the finding, the DOE is encouraged to provide specialized training on strategies for the facilitation of communication and social skills in an inclusion classroom. For example, providing a series of trainings on how to systematically use the Picture Exchange Communication System (PECS) to teach children with autism spectrum disorders to communicate would meet one of the teachers' greatest needs.

The concept of inclusion implies more than physically including children with disabilities for lunch and recess; teachers struggle to include these children during large-group instruction, small-group activities, and free play. Working with special needs children requires teachers to find different ways to (1) stimulate their interests to talk to and play with each other, (2) prompt their attention to actively participate in a variety of instructional activities and peer interactions, and (3) modify the learning environment, schedule, curriculum, and materials to meet their individual needs. Based upon the data obtained in the current study, these teachers do not feel that all of these skills have been

taught to them during their teacher preparation programs. To make the matter more complicated, none of them were offered a course on awareness of different types of disabilities. Director A reflected this viewpoint when she said: “Teacher preparation is the key focus while parent relationships are the key challenge.” Reflecting upon the data, Chinese teachers are likely to view special needs children as sources of problems since they are not prepared to include them in a regular classroom. Therefore, Chinese teachers need to learn how to build a mentality that is inclusive of children with disabilities. One effective way to achieve that goal is through routinely self-assessing and identifying the existing barriers in the learning environment, curriculum, instruction, and assessment in order to design a universal learning environment that is inclusive of all types of learners and learning styles. Once the barriers are identified, making changes and adaptations to the environment, curriculum, and instruction becomes easier. Also, teachers are more likely to be successful in locating resources and using strategies that can effectively engage special needs children in a variety of settings and activities.

Every teacher talked about her need to learn the IEP process in serving children with disabilities. Many teachers and directors believe that the use of IEPs can serve as a framework in guiding the initiation and delivery of services to children with disabilities and their families. This practice is also supported by the survey findings in which teachers consistently reported the need to learn how to embed IEPs into daily normal routines. The process of an IEP starts with assessment, which requires teachers to select, administer, and interpret results from various instruments for the purpose of instructional planning. Teachers then have to use assessment results to develop goals and objectives and implement them in the setting of an inclusive classroom. In order to achieve all of these goals, teachers not only need to be familiar with different assessment techniques but also have a good understanding of the utility of a pool of assessment tools. Unfortunately, the lack of valid and practical tools in Chinese to assess children with disabilities have constrained teachers’ training opportunities. It is urgent for the DOE to designate funding and call on proposals for developing and adapting a variety of assessment tools and methods that can match the needs of the inclusion classrooms, and validating their uses through pilot implementations. Teachers should be an integrative part of the research projects to motivate them to learn how to adequately use the tools and apply the methods.

Moreover, many special education teachers stressed the importance of everyone, including parents, teachers, and administrators, working together as a team in problem solving during the inclusion process. Interestingly, in the area of “professional resources,” all special education teachers and many regular education teachers brought up the importance and challenges of working with families and collaboration between professionals. It echoed with research findings in the U.S. that working effectively with parents and other professionals is the key to facilitating successful inclusion. Looking at the interview data that indicates that teachers and directors see it as crucial for teachers to learn how to work with parents, reminds us again of the aforementioned Director A’s statement about the challenge of parent and teacher relationships. Chinese society has traditionally viewed teachers as authority figures, and parents have respected them.

However, when it comes to educating special needs children, teachers are hesitant to admit that they lack instructional expertise. For instance, teachers must not only understand the characteristics of the child but also the “structural, functional, and external characteristics of the family” to develop the best intervention plans (Johnson & Kastner, 2005, p. 507). In order to provide emotional support to families who have children with disabilities, teachers must understand the stages of emotional adjustment (Vacca & Feinberg, 2000) the families go through, as well as their stress over the years, which is much higher than parents of typical developing children (Smith, Oliver, & Innocenti, 2001). Parents, on the other hand, have traditionally taken the sole responsibility for educating children with disabilities and now they are offered this opportunity to share their duties. These are all new experiences for both teachers and parents and each party needs guidance and support in order to benefit the children to the fullest potential.

Final Remarks

Meeting the training needs of teachers in early childhood inclusive classrooms in China presents unique challenges. Findings from this study indicate that regardless of teachers’ level of education, class size, or years of teaching experience, everyone is in need of professional training in order to facilitate early childhood inclusion. There is no distinct difference in teachers’ self-reported greatest need for training in the areas of curriculum and learning, developmentally appropriate practices, or knowledge of children with disabilities. In fact, teachers identified many areas as equally important in terms of the most critical training needs. However, one major limitation of current study is that it utilized samples from pilot inclusion kindergartens in Beijing that represent high quality early childhood programs. Therefore, caution must be taken when generalizing findings because these kindergartens are not representative of early childhood programs that have received lower quality ratings in Beijing, nor do they represent kindergartens located in other regions of China, particularly those in rural China. Thus, future research must examine the training needs for inclusion of special needs children in regular kindergarten classrooms in different cities, areas (rural, suburban, and urban China), and among kindergartens of different quality levels.

Teachers reported through interviews that behavior management, the process of implementing individualized education plans, and inclusion strategies are primary training needs. This finding has significant implications for professional development as well as teacher preparation programs, as both avenues are responsible for preparing in-service and pre-service early childhood teachers for the educational innovation of including special needs children in regular classrooms. However, this study failed to examine teachers’ preferences for training delivery models. Hence, future research should look into effective training models for teachers, such as the use of coaching and on-sight consultation in order to evaluate models that work best for the application of different skills related to inclusive practices.

Qualitative analysis also indicates that educators see their predominant need is learning how to work with parents and collaborate with other professionals. This

acknowledgment of the parental role presents a challenge for promoting inclusion in the Chinese socio-cultural context that relates to people's perceptions toward disabilities. As discussed earlier, Chinese parents traditionally assume the primary role in caring for a disabled child. However, since social stigma toward disabilities widely exists in modern China, parents may be hesitant about shifting some of their responsibilities to the school. Because kindergartens have not previously welcomed children with disabilities, parents' feelings toward school may be a mixture of appreciation, distrust, and criticism. This brings up another limitation of this study in that it did not include parents in the survey and interview procedures. Parental views and expectations for inclusive practices must be addressed in future research in order to develop and refine the service delivery model of inclusion in various types of programs. To bridge the gap between teachers and parents, future research is also critical regarding how to build a collaborative problem-solving model of working with parents, teachers, and other professionals for delivering inclusive services in the Chinese socio-cultural context. Finally, through tiers of training and a collaborative problem-solving model, Chinese early childhood teachers will gain confidence in serving children with special needs in inclusive environments, and in providing a high quality program to all children.

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References

- Ali, M., Mustapha, R., & Jelas, Z. (2006). An empirical study on teachers' perceptions towards inclusive education in Malaysia. *International Journal of Special Education, 21*(3), 36-44.
- Angelides, P., & Michailidou, A. (2007). Exploring the role of 'special units' in Cyprus schools: A case study. *International Journal of Special Education, 22*(2), 86-95.
- Beijing Disabled People's Federation (2008).
关于印发北京市残疾儿童少年康复补助暂行办法实施细则的通知
[Notification regarding financial assistance for rehabilitative services for children and youth with disabilities in Beijing]. Retrieved July 20, 2009, from <http://www.elimautism.org/leadbbs/MINI/Default.asp?20-333716-0-0-0-0-0-a-.htm>
- Bailey, D. B., Jr., McWilliam, R. A., Buysse, V., & Wesley, P. W. (1998). Inclusion in the context of competing values in early childhood education. *Early Childhood Research Quarterly, 13*(1), 27-47.
- Booth, C. L., & Kelly, J. F. (1998). Child-care characteristics of infants with and without special needs: Comparisons and concerns. *Early Childhood Research Quarterly, 13*, 603-621.
- Brennan, E. M., Caplan, E., Ama, S., & Warfield, O. (2001). Child care: Inclusion as enrichment. *Focal Point, 15*(2), 46-50.
- Buysse, V., Wesley, P. W., & Keyes, L. (1998). Implementing early childhood inclusion: Barriers and support factors. *Early Childhood Research Quarterly, 13*(1), 169-184.
- Dart, G. (2007). Provision for learners with special educational needs in Botswana: A situational analysis. *International Journal of Special Education, 22*(2), 56-66.
- Ellsworth, N. J., & Chung, Z. (2007). Progress and challenges in China's special education development: Observations, reflections, and recommendations. *Remedial & Special Education, 28*(1), 58-64.
- Gesell, A., & Amatruda, C. (1974). *Developmental diagnosis* (2nd ed). New York: Harper & Row.
- Glesne, C. & Peshkin, A. (1992). *Becoming qualitative researchers: An introduction*. White Plains, NY: Longman.
- Grisham-Brown, J., Hemmeter, M. L., & Pretti-Fontczak, K. (2005). *Blended practices for teaching young children in inclusive settings*. Baltimore, MD: Brookes Publishing Company.
- Horn, E., Lieber, J., Li, S., Sandall, S., & Schwartz, I. (2000). Supporting young children's IEP goals in inclusive settings through embedded learning opportunities. *Topics in Early Childhood Special Education, 20*(4), 208-223.
- Hu. B. (2009). *Examining the general quality of early childhood education and structural variables in support of early childhood inclusion in Beijing, china*. Unpublished Ph. D. Dissertation. University of Central Florida, Florida.

- Jiao, Y., Tang, J., He, Hu., W, L., An, L. (2004). Investigation and analysis on the status of preschool special education in normal kindergartens of Hebei Province. *Chinese Journal of Special Education*, 44 (2), 91-94.
- Johnson, C. P. & Kastner, t. A. (2005). Helping families raise children with special health care needs at home. *Pediatrics*, 115(2), 507-511.
- Li, L. (2007). Parent and teachers' beliefs about preschool inclusion in P. R. China Unpublished Ph. D Dissertation . The University of North Carolina at Greenboro, North Carolina.
- Liu, S., & Zeng, F. (2007). Under the same blue sky-Special concerns in special education. *Jiao Shi Bo Lian*, 38-39.
- Mulvihill, B. A., Shear, D., & Vanhorn, M. L. (2002). Training, experience, and child care providers' perceptions of inclusion. *Early Childhood Research Quarterly*, 17, 197-215.
- National Education Committee of the People's Republic of China. (1994). *残疾人教育条例* [Educational Guidelines for Persons with Disabilities Bill]. Retrieved October 17, 2008, from http://www.law-lib.com/law/law_view.asp?id=10995
- National Education Committee of the People's Republic of China., & Disabled Person's Federation of the People's Republic of China. (1996). *残疾儿童少年义务教育“九五”实施方案* [The Ninth Five-Year Plan]. Retrieved October 17, 2008, from <http://spe-edu.net/Html/tejiaofagui/2771.htm>
- National People's Congress. (1990). *中华人民共和国残疾人保障法* [The People's Republic of China on Protection of Disabled Person's Law]. Retrieved October 7, 2008, from <http://www.spe-edu.net/Html/jiaoyufagui/2786.htm>
- National People's Congress. (2001). *关于“十五”期间进一步推进特殊教育改革和发展的意见* [The Tenth Five-Year Plan]. Retrieved October 17, 2008, from <http://www.zbslx.net/show.aspx?id=76&cid=48>
- National People's Congress. (2006). *中国残疾人事业十一五发展纲要* [The Eleventh Five-Year Plan]. Retrieved October 17, 2008, from http://www.law-lib.com/law/law_view.asp?id=160570
- Palsha, S. A., & Wesley, P. W. (1998). Improving quality in early childhood environments through On-Site consultation. *Topics in Early Childhood Special Education*, 18(4), 243-253.
- Pretti-Frontczak, K. L., Barr, D. M., Macy, M., & Carter, A. (2003). Research and resources related to activity-based intervention, embedded learning opportunities, and routines-based Instruction: An annotated bibliography, *Topics in Early Childhood Special Education*, 23(1), 29-40.
- Slavin, R. (2007). *Educational research in an age of accountability*. Boston: Allay & Bacon.
- Sandall, S. R., & Schwartz, I. S. (2002). *Building blocks for teaching preschoolers with special needs*. Baltimore: Paul H. Brookes Publishing Co.

- Smith, T. B., Oliver, M. N., & Innocenti, M. S. (2001). Parenting stress in families of children with disabilities. *American Journal of Orthopsychiatry*, 71, 257-261.
- UNESCO (1990). World Conference on Education for All, Jomtien, Thailand, 5–9 March.
- UNESCO (1994). *The Salamanca statement and framework for action on special needs*. World Conference on Special Needs Education, Access and Quality. Retrieved March 19, 2009, from <http://www.ecdgroup.com/download/gn1ssfai.pdf>
- UNESCO (2000). *The Americas—education for all in the Americas: regional framework of action*. Retrieved November 7, 2008, from http://www.unesco.org/education/efa/wef_2000/regional_frameworks/frame_americas.shtml
- Vacca, J. & Feinberg, E. (2000). Rules of engagement: Initiating and sustaining a relationship with families who have mental health disorders. *Infants and Young Children*, 13, 51-75.
- Wolery, M., Holcombe-Ligone, A., Brookfield, J., Huffman, K., Schroeder, C., Martin, C. G., et al. (1993). The extent and nature of preschool mainstreaming: A survey of general early educators. *Journal of Special Education*, 27, 222-234.
- Wang, Y. (2008). 全纳教育对幼儿教师素质提出的新挑战 [The new challenge to the quality of early childhood teachers posed by Inclusion]. *The Study of Continuing Education (in Chinese)*, 9, 71-72.
- Wang, Z. Q., Shen, R. H. (2009). 学前随班就读的困境与思考- 基于某幼儿园个案的描述与分析 [The challenge and discussion of including children with disabilities in regular classrooms-A case study]. *Journal of Chongqing Normal University Edition of Social Science*, 2, 141-147.
- Yan, L. (2007). 关于在我国推广学前全纳教育的思考 [A discussion about popularizing early childhood inclusion in China]. *Studies in Preschool Education*, 07-08(151-152), 46-52.
- Yan, L. (2008). 北京幼儿园教师全纳教育观念的调查 [An investigation of Beijing's preschool teachers' perception on inclusion]. *Studies in Preschool Education*, 5(161), 17-72.
- Zhang, L. (2006). 上海市幼教工作者融合教育观念调查 [A Survey of preschool educators' ideas about inclusive education]. *Early Childhood Education (in Chinese)*, 1, 7-8.
- Zhang, Y. (2003) 北京市学前特殊教育的调查与思考 [Observation of special education for preschool children in Beijing]. *Chinese Journal of Special Education*, 4(40), 57-62.
- Zhao, L., & Hu, X. (2008). The development of early childhood education in rural China. *International Journal of Early Years Education*, 28 (20) 197-209.

- Zhou, N. (2006). 中日幼儿园教师学前融合教育意识比较 [A comparative study on Chinese and Japanese preschool teachers' awareness of inclusive education]. *Early Childhood Education*, 352 (12), 35-37.
- Zhou, N. L. (2008). 学前融合教育的比较与实证研究 [Comparative and Field Research in Early Childhood Inclusive Education]. East China Normal University Publishing Company: Shanghai, China.
- Zuo, R. & W, W. (2008). 全纳教育视野下幼儿教师专业素养的缺失与提升 [Deficiency and improvement of preschool teachers' professional quality from the perspective of inclusive education]. *Chinese Journal of Special Education*, 96(6), 8-12.