Factors Influencing Pre-Service Teachers' Attitudes Toward Inclusion -A Meta-Analysis Based On The Literature

Lai Zhichao and Lee Keok Cheong

Abstract – **Since the Salamanca Statement was promulgated by UNESCO in 1994, inclusive education has been widely promoted globally. With the deepening of the concept of inclusive education, it has gradually become a consensus to develop teachers' inclusive education literacy from pre-service education. What are the factors that influence pre-service teachers' attitudes toward inclusive education? what role does it play in the promotion of inclusive education? Educational researchers have conducted various empirical studies on this topic to analyze the influencing factors that affect pre-service teachers' attitudes toward inclusion. In this study, content analysis was used to analyze the factors influencing pre-service teachers' attitudes toward inclusive education using the key words "inclusive education," "pre-service teachers," "attitudes," and "influencing factors". A meta-analysis of the papers published in journals was conducted to identify the factors that influence preservice teachers' attitudes toward inclusive education in the context of inclusive education: child-related variables, educational environment-related variables, and teacher-related variables. At the same time, a comprehensive analysis of factors influencing teachers' attitudes toward inclusive education was conducted, which revealed that gender , age, teaching experience and years of study, teachers' self-efficiency, experience with special groups or people with special educational needs, modules (courses) of special education or inclusive education, stream (level) of enrollment, and teachers' level of education had a significant effect on preservice teachers' attitudes to prepare them in advance for educate all children, including children with disabilities, in a general environment.**

Keywords – **Factors, Inclusive education, Pre-service teacher, Attitude**

I. INTRODUCTION

Since the Salamanca Statement was promulgated by UNESCO in 1994, countries around the world to make a lot of policy, encourage special education needs students accept the education in normal school environment (Vislie L,2003). With the policy development and increasing opinions favouring inclusion, educational institutions are expected to apply inclusive education successfully. It not only brings great challenges to the general education system, but also urges ordinary teachers to shoulder the pressure of meeting the educational needs of all students. This also means that normal education should train every normal student to have the teaching strategy, knowledge and belief to implement integrated education (Bransford J, etal, 2005).

Lai Zhichao, Jiaying University,China & City university, Malaysia (Email address: jyxylzc@126.com)
Lee Keok Cheong, City university, Malaysia (Email address: lee.cheong@city.edu.my)

One of the primary limitations of inclusive education is the teachers' attitudes to inclusion and its requirements. These kinds of attitudes are affected by several elements, which includes the level and nature of disability of the children, the teacher's expertise with children requiring special academic needs; the faith available with their capabilities to implement inclusive activities, i.e., the readiness of teachers for combined classrooms, or the expectations towards the students irrespective of the variations among them, the courses and other educational tasks (Unianu, 2012). Previous studies have confirmed that teachers found students with behavioral or emotional disorders particularly challenging to teach within the ordinary classroom compared to the other children with disabilities (Chhabra et al., 2010).

Teachers do not sense that they are ready or equipped to educate regular students and learners with special needs. The primary cause is that they did not have sufficient schooling or training to handle those inclusive educational requirements for exceptional children (Hay et al., 2001). These results are similar to others which underline that teachers who have an open-minded perception about inclusion are more confident about their capabilities to put inclusive education into effect (Buell et al., 1999). Many mainstream teachers think that children considered "different" are not included in their duty, a concept discovered in numerous schools. The clinical-pathological model still dominates academic activity (Angelides et al., 2006). Another factor, which has a tremendous effect on the instructor's attitudes, is their experience with children having special study requirements. Those teachers with frequent interactions with individuals with disabilities have a more positive mindset toward inclusion than those with little knowledge or contact with disabled children (Forlin et al., 1999). Many teachers agreed that the successful application of inclusive activities entirely depends on the curriculum and teaching strategies used in classes with special educational needs (Ghergut, 2010).

Education provision to special needs children has increased based on moral necessity (Croll and Moses, 2000). Due to increased demands for schools to consider the special needs students, many national and non-government corporations, including the United Nations, have begun to implement rules that help children with various special needs (Forlin, 2006). Of specific consideration is how inclusive education may be excellently applied? This is a recurring concern with the inquiry of teachers' attitudes towards inclusion, as they are frontline implementers of teaching policy alternates. Forbes (2007) stated that regardless of the strict order for inclusion, there was an apparent lack of proper planning from the educational authorities. Other than that, Boyle et al. (2012) presented a lack of understanding about the definition of inclusion. Does inclusion only relate to students with

physical and intellectual disabilities? Does it include the severity of disabilities in students? Topping (2012) introduced and concluded the following concept of inclusion at length. "Inclusion has increased the concept, and it has now taken to include all the children attaining and collaborating, despite demanding situations restricting from poverty, race, social class, disability, faith, language and cultural background, gender, and smiler other characteristics."

An overview of the literature showed that the social connection of people with disabilities in the Southeast region of the world is minimal, instead of being a regular custom (Bradshaw and Mundia, 2005). In the Indian territory, there is common thinking that disability is one's future, pre-decided by God's will, or results from their past life existence. Therefore, patience towards the incapacity or disability by the affected person and circle of their relatives is highly regarded (Dalal and Pande, 1999). In other countries like Hong Kong and Singapore, there is high pressure for childcare in the Chinese communities. As a result, parents tend to face societal disgrace, leading to the development of self-stigma such as face-loss, parental misery, and self-blame (Mak and Kwok, 2010; Wong et al., 2015). There is a trend where parents hide their children from public contact in each situation.

Similarly, there are also fewer efforts and considerations on the social level to help the societal connection of people with disabilities as compared with some Western countries, where principles of human rights and equality prevail in the society (Miles and Ahuja, 2007; Miles and Singal, 2010). One of the effects of the societal attitude towards incapacity within the Southeast area is the separation of disabled people in all life activities, considering the education also separate for disabled people (Bradshaw and Mundia, 2005; Thaver and Lim, 2014). In the Asian community, disabled people are not accommodated in schools, public places, and public transport (Adnan and Hafiz, 2001). Consequently, the contact possibilities for most of the general public with disabled people are scarce (Sharma et al., 2007; Thaver and Lim, 2014), and they are frequently handled with both kindness and discriminatory behaviour (Adnan and Hafiz, 2001).

Similarly, the awareness of a welfare model remains active and influential within developed and underdeveloped countries. Human beings with disabilities are assumed to be deprived people who require special attention and help (Adnan and Hafiz, 2001). Therefore, academic course separation for disabled students in educational institutes is not unusual and has become very common. Those students are assumed to be 'extraordinary.' It is not always fair to treat them like other normal children. Many research results have proven that the educators consider disabled and autistic students in this region to require exceptional education expert instructors (Lee and Low, 2013).

Pre-service teacher training is the most likely to change teachers' negative attitude towards disabled learners, forming a firm implementation of integrated education belief in the critical period(Wilczenski F L,1992). As stated above, findings of studies regarding pre-service teachers' attitudes present a confusing picture. Teachers

seem to endorse inclusive education in general, but do not like to be involved when it concerns their own teaching practice and vary their opinion according to the type of disability. Hence, the question remains how positive regular primary schoolteachers actually are towards the inclusion of pupils with special needs. Therefore, a review study was set up to investigate: (1) factors that influence pre-service teachers' attitudes toward inclusive education (2) what role does it play in the promotion of inclusive education.

II. RESEARCH METHOD

Electronic Literature Search

To search for relevant studies, a comprehensive search was performed using 'ERIC' in March 2022. A parameter was set to find all pertinent literature, and additional limits were set to identify articles that were published in peer-reviewed journals and were written in English. In the search for articles, use the conjunction "and" to include "inclusive education" or "inclusion", With "pre-service teacher", "attitude", "teacher education", "factors" Search the literature until all possible combinations have been exhausted.

Criteria for inclusion

After all articles were excluded according to the following criteria, manual retrieval was conducted. To select relevant studies for this review, a study had to conform to the following criteria:

(1) Research objects: pre-service teachers, including normal university students (mainly pre-school education, primary education and secondary education, but excluding special education), excluding in-service teachers with teaching experience. (2) Research objectives: Mainly investigate teachers' attitudes towards inclusive education and related influencing factors. (3) Source of publication: Research reports must be published in peer-reviewed journals, excluding book chapters, research technical reports, and conference reports. (4) Target of integrated education: special educational needs.

III. RESULTS AND ANALYSIS

After applying the selection criteria, 42 studies were selected for this review. The result of the study which established relating factors influencing pre-service teachers' attitude towards inclusive education.

The inconsistency of the result about teachers' attitudes towards inclusion can be explained in terms of the variables that influence pre-service and in-service teachers' attitudes towards inclusive education. According to Avramidis and Norwich (2002), these variables can fall into three following categories:

- Child-related variables,
- Educational environment-related variables
- Teacher-related variables

Child-related variables describe the specific needs of a child. The researchers have concluded that pre-service and in-service teachers prefer to teach children with mild or moderate disabilities over children with severe disabilities

(Forlin, 1995; Hastings and Oakford, 2003). As the findings of the research reflect, pre-service teachers show a more positive attitude towards children having intellectual disabilities as compared to the children with emotional or behavioral problems (Avramidis et al., 2000; Forlin et al., 1996; Hastings and Oakford, 2003; Sharma et al., 2006). According to those outcomes, pre-service teachers prefer more to have those children with special needs in their classrooms who do not require them to make considerable changes in their teaching methods and techniques (Ward et al., 1994).

Some environmental factors fall into educational environment-related variables, impacting teachers' attitudes towards inclusive education. Following variables can be those ecological factors:

- the availability of support services,
- social-cultural background
- year level taught

Support services have been further divided into two categories by Avramidis and Norwich (2002):

- Physical variables; such as IT resources,
- Human variables, such as the availability of teaching aids and other resources.

As researchers state, physical and human supports have been found to positively impact the attitude of pre-service and in-service teachers towards inclusion (Avramidis et al., 2000; Boyle et al., 2012; Minke et al., 1996). As the studies suggest, cultural and social differences can be an essential factor affecting pre-service teachers' attitudes. According to a study conducted by Sharma et al. (2006), pre-service teachers in the western countries of Australia and Canada had more positive attitudes and emotions towards inclusive education than those in the eastern lands of Singapore and Hong Kong. A research synthesis conducted by Scruggs et al. (2011) suggests that primary teachers are more positive towards including students with special needs in conventional classrooms than secondary teachers. Hastings and Oakford (2003) surveyed 93 pre-service teachers. According to them, pre-service teachers' training to teach secondary students was more positive and supportive about including children having emotional and behavioral problems in the classroom. Teachers who received Primary pre-service teachers' training showed a less positive attitude in comparison. Avramidis and Norwich (2002) state as primary and secondary contexts differ in nature and perspective. Therefore, this inconsistency can be because of this difference in primary and secondary classrooms' climate and tendency. Researchers' literature review depicted that the primary school's climate was more inclined towards integration and incorporation while secondary schools were more organized and subject-focused. For this reason, the present research made primary pre-service teachers the centre of its focus. As before this, not enough research has been conducted in the field focusing on primary pre-service teachers' attitudes towards inclusive education.

Eventually, teacher-related variables include teachers' demographic factors such as gender, age, race, socioeconomic status, etc. These are the factors that can impact their attitudes towards inclusive education. Mainly teacher variables include

- age
- gender
- teaching experience
- education level
- frequency of contact with children having special needs
- teachers' training on special education

Outcomes obtained from the studies did not show consistency about the impact of gender on inclusive education. According to some research, female pre-service teachers are more positive towards inclusive education than male teachers (Avramidis et al., 2000; Forlin et al., 2009; Hodge and Jansma, 2000). On the other hand, some researches did not show any impact of gender on teachers' attitudes towards inclusive education (Al-Zyoudi, 2006; Carroll et al., 2003; Minke et al., 1996; Van Reusen et al., 2000). Research on age's influence on inclusion has also not shown consistent results. Forlin et al. (2009) conducted a study on teachers' attitudes in which he included 603 pre-service teachers from Australia, Canada, Hong Kong, and Singapore. He found that younger pre-service teachers were more flexible about changing their emotions towards students with special needs. At the same time, some other researchers could not find any impact of age difference on teachers' attitudes towards the idea of inclusion (Avramidis et al., 2000; Carroll et al., 2003).

Other factors like the frequency of teachers' contact with a student with special needs, years of teaching experience, and absence or presence of required qualifications have affected pre-service and in-service teachers' attitudes towards inclusive education. Interestingly some studies have found that more experienced teachers have a more negative attitude towards the idea of inclusion (Boyle et al., 2012; Soodak et al., 1998). This could be because teachers felt a lack of support, absence of appropriate resources, and peer support during their teaching career. The attitudes of 43 teachers from three secondary schools in Scotland had been studied by Boyle et al. (2012). According to the study results, colleagues' support and appropriate resources positively affect teachers' attitudes. It has also been found that the more frequent contact with the person having special needs affects teachers' attitude positively (Hastings and Graham, 1995; Hodge and Jansma, 2000; Loreman et al., 2007). This finding reflects that more regular contact with students with special needs can create more acceptance of teachers' attitudes towards inclusive education (Bradshaw and Mundia, 2005). Some studies have been conducted to identify the impact of higher qualifications on pre-service teachers' attitudes. These studies did not reveal consistent results as well. For instance, Forlin et al. (2009) conducted research and found that pre-service teachers with higher qualifications conveyed more positive attitudes towards inclusion than the teachers completing undergraduate studies. On the other hand, Carroll et al. (2003) conducted a survey and found no significant differences between pre-service teachers' attitudes who were undergraduate and those completing their postgraduate studies.

Training has also been proven to strongly impact pre-service instructors' attitudes about including students with special requirements into regular school classes. Carroll et

al. (2003) studied 220 pre-provider teachers' attitudes towards inclusive training in Australia. They found that, previous to individuals receiving special education training, they faced more pain and doubted towards disabled people. Similarly, other researchers' results have shown that exercise for special education has a superb positive effect on pre-service teachers' attitudes about inclusion (Avramidis et al., 2000; Campbell et al., 2003; Carroll et al., 2003; Forlin, 2006; Hastings and Oakford, 2003; Lancaster and Bain, 2007; Loreman et al., 2007; Sharma et al., 2006; Subban and Sharma, 2005). These studies have tested that training activities always played a crucial function in shaping pre-service teachers' attitudes closer to inclusive education.

Many pre-service instructors felt unsatisfactorily trained to teach various class students (Sharma et al., 2006). In Australia, leading authorities allow educational institutes to decide their structure for primary training courses and syllabus; due to this trend, many universities in Australia do not provide education on particular subjects as compulsory courses (Carroll et al., 2003). Federal law announced in 2005 stated that "every disabled child has the equal right to get admission in academic study and courses at the identical basis as normal students without an incapacity" (Commonwealth Government, 2006). These rules have improved the wide variety of disabled students with unique needs by being knowledgeable in regular schools (DEET, 2001). Whereas, many pre-service instructors are not getting required training on special education, which has been proved to be important in achieving positive attitudes toward inclusive education.

Age

Age has regularly been an insignificant element in measuring attitudes about inclusion (Loreman et al., 2007). For the research that has observed age to be vital, it is frequently those young instructors or in-service instructors who are fresh in jobs and have the most high-quality positive attitude about inclusion (Avramidis and Norwich, 2002). In several studies, it was concluded that the age of a teacher, male or female, has no link or concern with the attitude about inclusion (Chhabra et al., 2010; Gyimah et al., 2009; Kalyva et al., 2007). On the other side, it was found that younger teachers always feel more positive towards inclusion than old-age teachers (Ahmmed et al., 2014; Bornman and Donohue, 2013).

Gender

Many studies were conducted to describe teachers' attitudes towards inclusive education. As far as gender is concerned, ten studies concluded no difference between male and female teachers' attitudes about inclusive education. (Avramidis et al., 2000; Chhabra et al., 2010). Another ten studies also concluded that female teachers have a more positive attitude toward inclusion than male teachers (Alghazo and Gaad, 2004; Alquraini, 2012). On the other side, two studies were conducted with high school teachers, and it was concluded that male teachers have a more positive attitude towards inclusion than female teachers (Bhatnagar and Das, 2014; Ernst and Rogers, 2009). Further research on pre-service instructors has

concluded that females are more high-quality positive towards the inclusion as compared to men (Avramidis et al., 2000; Burge et al., 2008), whereas other researchers have concluded that there is no significant difference between the attitude of male and female teachers (Loreman et al., 2007; Sharma et al., 2003). The claimed proof for lady teachers being more favourable toward inclusion is that they are extra "caring" instructors (Boyle et al., 2013).

Class Level Taught and Specialization

Specialization means the expertise of teachers in a specific subject area. At the primary schooling level, students are given a professional syllabus area together with, and not restricted to, Music, Arts, and Physical Education. Provided that, are there any differences between those who study specializations, such as art subjects, and people who do not get specialism education?

Primary school teachers have been proven to have more positive attitudes (McHatton and McCray, 2007; Chiner and Cardona, 2013). At the same time, Avramidis et al. (2000) concluded that those students who take the science subject-related courses are more targeted on overall academic performance. For that reason, they have a much less effective positive attitude toward inclusion, whereas individuals who take humanities or liberal arts subjects have a more positive attitude towards inclusive education. Also, according to Chen and Lu (2006), liberal arts students of normal majors were more able to accept the integrated education of disabled students than students of other majors.

On the other hand, Kraskaa and Boyle (2014) compared the research on inclusive education attitudes of pre-service teachers in mathematics, social science, science, music, art, and business majors. They found no significant differences between different majors.Statistical analysis was carried out for each of the study variables in the questionnaire to summarize the mean and standard deviation of the respondents' ratings for each question. As can be seen from Table 3, students' overall satisfaction with the university was 3.085, and their satisfaction with the various factors of internationalization was around 3 and largely greater than 3. Relatively more satisfied were the relationship with the concept, the organization system and the funding of international cooperation, while less satisfied were the basic conditions and the relationship with the international mobility of personnel, and least satisfied was the internationalization of teaching, with the mean scores for these three factors being the factor for the average score for these three factors below 3.

Teaching experience and years of study

Variations have additionally arisen in the inclusive education training literature over the effect of the expertise of teachers. In many studies, teachers' work experience positively correlates with an inclusive attitude (Sharma et al., 2006). Other studies also concluded that principals of schools had been found more positive attitudes than teachers (Boyle et al., 2013). However, most researchers have used quasi-experimental designs, and causal links cannot be confirmed. Because of that, those teachers who already have a positive attitude towards inclusion have also participated with great willingness in training, and they also

have more concerned expertise (Saloviita, 2015). On the other hand, Hastings and Oakford (2003) and Ross-Hill (2009) confirmed no considerable differences in attitudes about inclusion regardless of preceding teaching expertise.

Boyle et al. (2013) and de Boer et al. (2011) determined that instructors who had just left university and are fresh in jobs had considerably more high-quality positive attitudes about inclusion than those within different coaching experiences. Other studies have observed that pre-service instructors have a more excellent high-quality positive attitude for inclusion in their final year than their starting years of education (Sosu et al., 2010).

Teachers' Self-Efficiency

Teachers' self-efficacy has been studied many times with the attitudinal variables. According to Bandura's (1997) theory, "self-efficacy" has been defined as "teachers' confidence in their individual and collective capability to influence students' learning" (Klassen et al., 2011). To assess this construct, the most commonly applied scale for inclusion studies is the "Teacher Efficacy to Implement Inclusive Practices Scale" (TEIP); this scale was developed by Sharma et al. (2012). According to confirmed results, there has been a positive correlation of TEIP scores with teachers' inclusive attitude (Aiello et al., 2017; Kuittinen, 2017; Yada and Savolainen, 2017). There is Another instrument, the "Teachers' Sense of Efficacy Scale" (TSES), developed by Tschannen-Moran and Hoy (2001), is used to measure the teachers' self-efficacy in more familiar terms. It has been used in only one study. Compared to TEIP, there was no association between the TSES values and attitude about inclusion of preschool, pre-service and in-service teachers. (Sari et al., 2009).

Experience in Contact with Special Groups or people with SEN

Having family members of pre-service teachers who are disabled or the pre-service teachers who have participated in volunteer service activities will affect the attitude of inclusive education of pre-service teachers. Subban and Sharma (2006) concluded that teachers having a close relationship with a disabled person had greater confidence in implementing inclusive education. This self-assurance is crucial in teachers because it regularly relates to readiness to encompass various children and disabled students (Sharma et al., 2007; Sharma et al., 2009). Contact with not the only circle of relatives; however, close contact with any disabled person would result in a more excellent high-level positive attitude for inclusion (Burge et al., 2008; Loreman et al., 2007).

Module (Courses) in special education or inclusion

Some researchers believe that inclusive education courses will improve pre-service teachers' attitudes towards inclusive education. In contrast, some other researchers hold opposite views on the positive impact of inclusive education courses on the attitude towards inclusive education.

Studies that have evolved and analyzed courses on special training and inclusive education have observed that they have improved positive attitudes towards inclusion

(Shade and Stewart, 2001; Sharma et al., 2008; Spandagou et al., 2008; Subban and Sharma, 2006). There is a strong relationship between teachers' attitudes and categories of teachers; therefore, special-education teachers usually are considered the most positive attitude group (Engelbrecht et al., 2013; Hernandez et al., 2016; Moberg, 2003; Pearson et al., 2003). Sun and Dufane (2013) believe that pre-service teachers who have learned inclusive education courses are more active than those who have not learned relevant techniques. The latest study by Wang et al. (2015) reveals that teachers' exposure to relevant knowledge of inclusive education in the pre-service education stage can prepare them ideologically and intellectually for the work of inclusive education.

One early work by Forlin and Loreman et al. (2009) proved that people with positive attitudes toward inclusive education generally had higher levels of training in special education. Reusen et al. (2000) and Forlin et al. (2009) also concluded that those teachers who had been more favourable toward inclusion typically had got a higher level of training for special education. Additionally, Sharma et al. (2009) revealed that those studying at postgraduate levels had the maximum positive attitudes about inclusion because they regularly had finished courses in special education training or inclusion. A research work by Lambe and Bones (2007) studied 125 pre-service teachers in Northern Ireland and found that novice teachers' attitudes became more positive after eight weeks of teaching practice during the internship.

Training effects have been continuously correlated positively with inclusive attitudes (Ahsan et al., 2012). Consequently, some other researchers have argued that for inclusive training to achieve success, courses on special education must be obligatory, and some type of special education workshops must be included in instructors' training (Forbes, 2007).

On the opposite hand, Carroll et al. (2003) determined that there is no significant effect of special education courses on instructors' comfort level and emotional states when handling disabled students.

Stream (Level) of enrolment

Pre-service instructors are most probably enrolled in both early childhood courses: pre-school, primary, or secondary courses. Ross-Hill (2009) concluded that secondary school teachers had been significantly much less positive towards inclusion than those who used to teach pre-school and primary school students. Whereas there were no significant differences between those teachers who used to teach introductory and pre-school, the pre-school teachers' attitude was more favourable towards inclusion. One researcher viewed that, because of the main focus on syllabus, valuation, and core subjects, the inclusion of education in secondary schools has much less possibility of success (Pearce, 2009). These results might predict that pre-school and primary school teachers could have more positive attitudes towards inclusion than high school teachers. However, there might be no significant variations among pre-school and primary school instructors' attitudes towards inclusion. On the other side, some studies have shown that the positive attitude of high school teachers is

more as compared to primary school teachers (McCormack and O' Flaherty, 2010).

Teachers' Level of Education

After a detailed review of the inclusion of disabled students in Haiti state, Wolman et al. (2006) adopted the suggestions relative to a Mixed survey with teachers in Haiti to examine the attitude of teachers toward the inclusion of disabled students. The Results of this research revealed that the teachers have a moderate level of acceptance for disabled students. As a result, teachers with a Master's Degree have a more positive attitude toward inclusion than teachers with a Bachelor's degree. This research suggested that the teachers' education level positively affects teachers' attitudes about applying inclusive education.

Other results from Gal Schreur and Engel-Yeger (2010) also provided a favourable attitude about inclusion. This research was included fifty-three female Jewish teachers, who exposed that the age, years of experience, the number of students in the class, and the number of working hours have contributed to their views on inclusive education. Another researcher (Monsen and Frederickson, 2003; Campbell et al., 2003) mentioned that, though teachers are supposed to support the application of inclusion, training and intervention are other good factors and essential to implement inclusion.

The study of Hwang and Evans (2011) included thirty-three primary school teachers from Korea. The research design was a mixture of both qualitative and quantitative research. This research aimed to maintain the attributes of teachers of general education about inclusion, their willingness to teach disabled students, and actual problems faced by them during the application of inclusion. This research declared that 41.37% of general education teachers have positive attitudes about inclusion plans, whereas 55.16% were unwilling to contribute. These results concerned a big community of teachers (89.64%), indicating a lack of training, support, and resources to apply inclusion.

Similarly, another mixed-method study was also conducted in Dubai, including regular classroom teachers teaching the students from grade one to six. Gaad and Khan (2007) stated that teachers assume students with particular educational requirements lack skills required to expertise the normal and regular classroom course material. The teachers also showed that the extra teaching burden in the traditional classroom showed difficulties in completing the students' requirements with special educational needs. Whereas, their result also showed that teachers require additional training, technical help from central administration officers, and approach to concerning services and resources as essential to meet the requirements of the students with unique education resources in the regular education system (Newton et al., 2014).

IV. LIMITATIONS AND CONCLUSION

We reviewed research published in peer-reviewed journals that examined attitudes of pre-service teachers towards inclusive education. There are two limitations to this study. The first is that inclusion criteria limit the degree to which other literature (e.g., book chapters, literature review papers) can be identified and included. The second limitation is that it takes time to change attitudes. Future research is likely to extend the post-test time point, and the academic performance of professors including students with special needs will be listed as an indicator of effectiveness evaluation after teachers who have completed teacher education training enter the teaching practice place. Despite these limitations, the findings from this literature review provide a clearer understanding of the gap, the factors that influence the attitudes of pre-service teachers towards inclusive education, and provide reference suggestions for future pre-service education courses and teacher preparation of pre-service teachers.

REFERENCES

Adnan, A. H., and I. A. Hafiz. 2001. " A Disabling Education: The Case of Disabled Learners in Malaysia." Disability and Society 16 (5): 655–669.

Ahmmed, M., Sharma, U., & Deppeler, J. (2014). Variables affecting teachers' intentions to include students with disabilities in regular primary schools in Bangladesh. Disability & Society, 29(2), 317–331. doi:10.1080/09687599.2013.796878.

Alghazo, E. M., & Naggar Gaad, E. E. (2004). General education teachers in the United Arab Emirates and their acceptance of the inclusion of students with disabilities. British Journal of Special Education, 31(2), 94–99.

Al-Zyoudi, M. (2006). Teachers' attitudes towards inclusive education in Jordanian schools.

Angelides, P., Stylianou, T., Gibbs, P. (2006). Preparing teachers for inclusive education in

Avramidis, E., & Norwich, B. (2002). " Teachers' Attitudes towards Integration/Inclusion: A Review of the Literature." European Journal of Special Needs Education 17: 129 – 147. doi: 10.1080/08856250210129056

Bornman, J., & Donohue, D. K. (2013). South African teachers' attitudes toward learners with barriers to learning: Attention-deficit and hyperactivity disorder and little or no functional speech. International Journal of Disability, Development and Education, 60(2), 5–104. doi:10.1080/1034912X.2013.786554.

Boyle, C., Topping, K., & Jindal-Snape, D. (2012). Teachers' attitudes towards inclusion in high schools. Teachers and Teaching: Theory and Practice, 19, Manuscript accepted for publication.

Boyle, C., Topping, K., Jindal-Snape, D., & Norwich, B. (2012). The importance of peer support for teaching staff when including children with special educational needs. School Psychology International, 33(2), 167–184. doi:10.1177/0143034311415783242 J.

Bradshaw, L., and L. Mundia. 2005. "Understanding Pre-service Teachers' Construct of Disability: A

Metacognitive Process.＂ Disability & Society 20 (5): 563－574. doi: 10.1080/ 09687590500156329

Bransford J,Darling Hammond L,Lepage P(2005). Introduction.Preparing teachers for a changing world: What teachers should learn and be able to do. San Francisco: Jossey Bass,1-39.

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, 143-156

Carroll, A., Forlin, C., & Jobling, A. (2003). The impact of teacher training in special education on the attitudes of Australian preservice general educators towards people with disabilities. Teacher Education Quarterly, 30(3), 65－79.

Carroll, A., Forlin, C., & Jobling, A. (2003). The impact of teacher training in special education on the attitudes of Australian preservice general educators towards people with disabilities. Teacher Education Quarterly, 30(3), 65－9.

Chhabra, S., Srivastava, R., & Srivastava, I. (2010). Inclusive education in Botswana: The

Chiner, E., & Cardona, M. C. (2013). Inclusive education in Spain: How do skills, resources, and supports affect regular education teachers＇ perceptions of inclusion? International Journal of Inclusive Education, 17(5), 526－541. doi:10.1080/13603116.2012.689864.

Commonwealth Government. (2006). Disability Standards for Education 2005. Canberra: Commonwealth of Australia.

Croll, P., & Moses, D. (2000). Ideologies and utopias: Education professionals views of inclusion.Cyprus. Teaching and Teacher Education, 22, 513-522

Dalal, A. K., and N. Pande. 1999. ＂Cultural Beliefs and Family Care of the Children with Disability. ＂ Psychology and Developing Societies 11 (1): 55－75.doi:10.1177/1044207309344690

Forbes, F. (2007). Towards inclusion: An Australian perspective. Support for Learning, 22, 66－71. doi: 10.1111/j.1467-9604.2007.00449.x

Forlin, C. (1995). Educators＇ beliefs about inclusive practices in Western Australia. British Journal of Special Education, 22(4), 179－185. doi:10.1080/0156655960430203

Forlin, C. (2006). Inclusive education in Australia ten years after Salamanca. European Journal of Psychology of Education, 21, 265－277. doi: 10.1007/BF03173415

Forlin, C., Tait, K., Carroll, A. and Jobling, A. (1999). Teacher education for diversity. Queensland Journal of Educational Research, 15, 207-225.

Ghergut, A. (2010). Analysis of inclusive education in Romania. Results from a survey conducted among teachers. Procedia Social and Behavioral Sciences, 5, 711-715

Hastings, R. P., & Graham, S. (1995). Adolescents ＇ perceptions of young people with severe learning difficulties: The effects of integration schemes and frequency of contact. Educational Psychology, 15, 149－159. doi:10.1080/0144341950150204.

Hastings, R. P., & Oakford, S. (2003). Student teachers' attitudes towards the inclusion of children with special needs.Educational Psychology,23(1),87 － 94. doi:10.1080/01443410303223

Hay, J.F., Smit, J., & Paulsen, M. (2001). Teacher preparedness for inclusive education. South African Journal of Education, 21, 213-218

Lancaster, J., & Bain, A. (2007). The design of inclusive education courses and the self efficacy of preservice teacher education students. International Journal of Disability, Development and Education, 54, 245－256. doi: 10.1080/10349120701330610.

Lee, L. W., & Low, L. M. (2013). ＂＇Unconscious＇ Inclusion of Students with Learning Disabilities in a Malaysian Mainstream Primary School: Teachers＇ Perspectives. ＂ Journal of Research in Special Educational Needs 13 (3): 218－228.

Loreman, T., Forlin, C., & Sharma, U. (2007). An international comparison of pre-service teacher attitudes towards inclusive education. Disability Studies Quarterly, 27(4). Retrieved from http://dsq-sds.org/article/view/53/53.

Mak, W. W., and Kwok, Y. T. (2010). ＂Internalization of Stigma for Parents of Children with Autism Spectrum Disorder in Hong Kong.＂ Social Science & Medicine 70 (12): 2045－2051.

McHatton, A., & McCray, E. D. (2007). Inclination toward inclusion: Perceptions of elementary and secondary education teacher candidates. Action in Teacher Education, 29(3), 25 － 32. doi:10.1080/01626620.2007.10463457.

Miles, S., and A. Ahuja. 2007. ＂Learning from Differences: Sharing International Experiences of Developments in Inclusive Education.＂ In The Sage Handbook of Special Education, edited by L. Florian, 131－145. London: Sage.

Miles, S., and N. Singal. 2010. ＂The Education for All and Inclusive Education Debate: Conflict, Contradiction or Opportunity?＂ International Journal of Inclusive Education 14 (1): 1－15.

Minke, K. M., Bear, G., Deemer, S. A., & Griffin, S. M. (1996). Teachers ＇ experiences with inclusive classrooms: Implications for special education reform. Journal of Special Education, 30(2), 152－186. doi: 10.1177/002246699603000203

Scruggs, T. E., Mastropieri, M. A., & Leins, P. (2011). Teacher attitudes towards inclusion: A synthesis of survey, comparative, and qualitative research, 1958-2010. Paper Presented at the annual meeting of the Council for Exceptional Children, April in National Harbor, MD.

Sharma, U., Forlin, C., & Loreman, T. (2007). What concerns pre-service teachers about inclusive education: An international viewpoint? KEDI Journal of Educational Policy, 4(2), 95-114.

Soodak, L. C., Podell, D. M., & Lehman, L. R. (1998). Teacher, student and school attributes as predictors of teachers' responses to inclusion. The Journal of Special Education, 31, 480 – 497. doi: 10.1177/002246699803100405.

Subban, P., & Sharma, U. (2005). Understanding educator attitudes toward the implementation of inclusive education. Disability Studies Quarterly, 25, 1 – 19.

Thaver, T., and L. Lim. 2014. "Attitudes of Pre-service Mainstream Teachers in Singapore Towards People with Disabilities and Inclusive Education." International Journal of Inclusive Education 18 (10): 1038 – 1052.

Topping, K. (2012). Conceptions of inclusion: Widening ideas. In C. Boyle & K. Topping (Eds.), What works in inclusion? (pp. 9 – 19). Milton Keynes: Open University Press.

Unianu, E. M. (2012). Teachers' Attitudes towards Inclusive Education. Social and Behavioral Sciences, 33: 900 – 904.

Van Reusen, A. K., Shoho, A. R., & Barker, K. S. (2000). High school teacher attitudes toward inclusion. The High School Journal, 84(2), 7 – 21.

Vislie L(2003). From integration to inclusion: Focusing global trends and changes in the western European societies.European Journal of Special Needs Education,18(1):17-35.

Wilczenski F L(1992).Measuring attitudes toward inclusive education.Psychology in the Schools,29(4) : 306-312.

Wilkerson, S. E. (2012). Assessing teacher attitude towar the inclusion of students with autism (Doctral dissertation). Retrieved from https://ir.library.louisville.edu/cgi/viewcontent.cgi?article=2570&context=etd.

Wong, M. E., K. K. Poon, S. Kaur, and Z. J. Ng.(2015). "Parental Perspectives and Challenges in Inclusive Education in Singapore." Asia Pacific Journal of Education 35 (1): 85 – 97.