

Teaching Efficacy in Inclusive Education (IE) in Indonesia and other Asia, Developing Countries: a Systematic Review

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ABSTRACT

Inclusive education involving disable students has been applied in several countries including Asian countries. Nevertheless, teachers' efficacy in implementing inclusive education remains out of sight. This study aims to review systematically the role of teachers' efficacy in an inclusive education (IE) setting taking place in several Asian countries, particularly in developing countries. The search of e-literature was conducted to identify full-English peer-reviewed articles published since 2004 concerning on teachers' efficacy in teaching in inclusive programs/schools. The electronic database used were: PsycARTICLES, ERIC, Science Direct, SSCI, Springer Link, and Google Scholar. There were two studies identified using inclusive and exclusive selection criteria in this review. Teachers' teaching efficacy in inclusive education (IE) in Indonesia and Bangladesh as developing countries in Asia—including efficacy in use inclusive instruction, efficacy in managing behavior, and efficacy in collaboration—was categorized in a good condition although there were small participant in categorize had been used (N=1623 Bangladesh teacher; N=101 Indonesian teacher). Improving the measurement and research on teachers' efficacy in teaching in an inclusive program/school will require greater investment in arranging several inclusive teachers' professionalism enhancement and the increase in the number of disable students acquiring their education rights.

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1. INTRODUCTION

Education for disable children or Special Education Need (SEN) has come about due to the Individuals and Disabilities Education Improvement Act 2004 and the position paper from the Division of Early Childhood and National Association for Education [1]. As a result, education access and services for children with special needs or disable children must be the center of the attention in which they can study in their neighborhood along with other normal students.

Considering the quality in the implementation of inclusive education has led to the efforts to highlight a particular teacher's role as the main resource in applying inclusive education. In some developing countries with low-middle income, the role and existence of teachers in inclusive education has earned its spotlight if it is considered with the budgeting effectiveness and the equity of access to obtain education for children with disability across the nation. Teachers' efficacy in inclusive education services has become the key element in assessing the quality of a teacher's role.

In inclusive education context, several researchers have explored the construction of teachers' self efficacy [2-4]. The construction of teachers' self efficacy is based on Bandura's social-cognitive theory [5]. In his theory, Bandura stated that self efficacy is the individual's belief in one's own ability to organize and execute tasks through adjusted actions which provide success [6]. Self efficacy is concerned with the

judgment of “personal capability” and is usually situated in a specific domain, such as academic, social or teaching domain. According to Bandura’s insight on self efficacy from the social-cognitive perspective, the stress is in the cognitive role of regulating individuals’ behavior. In a pedagogical context, the implication of Bandura’s self efficacy theory is that self efficacy is closely related to a number of attempts done by teachers regarding their performance and ability to deal with challenging tasks [7]. These optimistic estimations of one’s efficacy are hypothesized to increase effort and persistence, and to promote accomplishment in challenging circumstances [6-7].

Teachers’ teaching efficacy consisting of teacher’s efficacy in providing effective instructions and giving special attention to students with special needs has become the focus in inclusive education context which involves students with special education need (SEN) [8-9]. Teachers’ efficacy in inclusive education, as mentioned in this review, is the teachers’ assessment regarding their personal competence in teaching a mixed class of normal and disabled students in a general education context [2-10]. In inclusive education for students with special need education (SEN) context, several critical skills that a teacher must have include providing different instruction, configuring and assigning curriculum, and adopting pedagogical methods which can fulfill the students’ needs in studying, including disabled students in the classroom [2].

Teachers’ efficacy in inclusive education has a significant impact to the success of implementing the inclusive values [11-12]. The necessity of teachers’ teaching efficacy is also displayed in several researches. A teacher who has high self efficacy in inclusive education has affected the increase of students’ achievement and positive behavior as the teacher’s skills in managing the class and displaying positive attitude towards inclusive education also increase [13-15]. A teacher who believes in one’s teaching efficacy is directly correlated to one’s students’ academic achievement [16]. Some of the teacher behavioral features that are affected by low self-efficacy eg rejection of inclusive education and low effort to involve students with special needs in regular classes [17], show emotion-focused coping that tends to lead to burnout and decreased job satisfaction in teachers [18-19].

Teachers’ efficacy in inclusive education (IE) has often been studied yet researches summarizing the teachers’ efficacy facts have nowhere to be found. The purpose of this review is to describe and criticize the teachers’ efficacy in inclusive education (IE) in Indonesia and other Asian developing countries based on the United Nations Development Programme’s category [20].

2. RESEARCH METHOD

This literature review serves to display the facts related to teachers’ efficacy in inclusive education as a part of the inclusive implementation success indicators in Asian developing countries, especially Indonesia. The search for e-database was conducted in August 2017 to identify English language peer-review articles published in the last 10 years (2007-2017) which could be downloaded in full version, as well as to provide relevant information concerning on the condition of developing countries. Meanwhile, the eligible countries listed as developing countries in Asia were based on the Human Development Index (HDI) which was set by the United Nations Development Programme [20]. This study focused on the countries with low and medium human development which, then, would be categorized as developing countries. There were 140 countries included in the category, namely Jordan, Algeria, Hongkong, China, Sri Lanka, India, Kenya, Pakistan, Bangladesh and Indonesia [20].

The electronic database used in the search included: PsycARTICLES, ERIC, Sciencedirect, SSCI, Springer Link, and Google Scholar. The keyword used to search for the relevant reports and researches were “teacher” and “efficacy” and “inclusive” and “disability” and “Indonesia”; “teacher” and “efficacy” and “inclusive” and “school” and “disability” and “developing countries” and “Asian”; “teacher” and “efficacy” and “inclusive” and “disability” and “Indonesia” and “developing countries” and “Asian”; “teacher” and “efficacy” and “inclusive” and “disability” and “Indonesia” and “developing countries” and “Asia”; “teacher” and “efficacy” and “inclusive” and “SEN” and “Indonesia” and “developing countries” and “Asian”; “teaching” and “efficacy” and “inclusive” and “disability” and “Indonesia” and “developing countries” and “Asian”; “teaching” and “efficacy” and “inclusive” and “SEN” and “Indonesia” and “developing countries” and “Asian”; “teaching” and “efficacy” and “IE” and “SEN” and “Indonesia” and “developing countries” and “Asian”. In locating the articles, combination of keywords and countries categorized as developing countries in Asia according to HDI’s classification which were Indonesia, India, Bangladesh and Vietnam was also done.

The identified articles found in the search were rechecked to determine their suitability with the purpose of this review by analyzing the abstracts firstly. Abstracts which did not provide detail relevant information would require a thorough check to find whether they were still suitable to be used in the review. Data were gathered from full-text articles which were considered relevant with the purpose of the review including the methodology’s quality applied. The inclusive criteria set in this review included whether the

articles have provided relevant information related to the depiction or measurement result of teachers' efficacy in inclusive education by using teachers as their subjects. Also, inclusive mentioned in this case is the education services provided which involved disable students or students with special needs (SEN). The selection criteria applied to the articles were:

- a. Peer reviewed studies (journal articles)
- b. Studies or reports focusing on teacher' efficacy in inclusive education (IE)
- c. Inclusion of students with disabilities in developing countries in Asian [20]

3. RESULTS AND ANALYSIS

Two studies were identified meeting the inclusive criteria which were set previously and were considered relevant with the review's vision to summarize the facts on teachers' efficacy in inclusive education (IE) in Indonesia and other Asian developing countries. Geographically, those identified studies were conducted in Indonesia, Bangladesh, and Hongkong [2], [14], [21]. Based on HDI, those three countries are categorized as the countries with low-middle human development or known as developing countries in Asia.

From three articles, there were only two of them which provided detail and clear information of the research procedures starting from research participants, instruments used and geographical description of the research [2], [14]. Based on the methodology assesment and previously mentioned consideration, the research conducted [21] in Hongkong was considered inappropriate due to the unclear measuring instrument used in the research. The contributions given by the two articles were presented in the following table.

Table 1. Summary of Studies Contributing to Evidence Based on the Teachers' Efficacy in Inclusive Education (IE) with Special Need Children in Indonesia and other Developing Countries in Asia

Author (year)	Setting	Sample Size (n)	Design	Instrument of measurement	Main findings
Ahsan, Sharma and Deppeler (2012)	Bangladesh	1623 teacher divided into two grade categories: Primary (n=890,54.8%) and secondary (n=733, 45.2%)	Exploration study on teachers' perceived teaching efficacy	Teachers' efficacy for inclusive practices scale (TIEP) developed by Sharma, et.al; which consists of 3 measuring aspects on teachers' teaching efficacy, namely: efficacy to use inclusive instruction, efficacy in managing behavior, and efficacy in collaboration. There were 18 validated items [3]	Overall, teachers' efficacy scores were in high levels. The highest scores were displayed from efficacy in managing behavior (M=5.10, SD=.58); Efficacy to use inclusive instruction (M=4.80, SD=.59); efficacy in collaboration (M=4.59, SD=.75).
Loerman, Sharma and Forlin (2013)	Canada, Australia, Hongkong, Indonesia	101 (Indonesian teachers) kindergarten level and special education	Comparative study of teaching efficacy in inclusive education from 4 countries	TIEP scale with 3 measuring aspects which were represented in 18 validated items [3]	Overall, the teachers' teaching efficacy analysis was based on 3 TEIP aspects which ranked Indonesia on the third (M4.38, SD=.60). From the 4 countries mentioned, Canada held the pole position (M=4.51, SD=.64), while the second was Australia (M=4.53, SD=.56), and Hongkong was the 4 th (M=3.93, SD=.47)

The two identified articles used teachers' efficacy instruments developed [3] by assessing the teaching efficacy in an inclusive program based on 3 aspects which were, efficacy to use inclusive instruction (EII), efficacy in managing behavior (EMB), and efficacy in collaboration (EC). In a study [14] observing 1.623 teachers of inclusive classes in Bangladesh, analysis on multiple regressions to predict the contribution of demographic variables to teaching efficacy was also conducted. The demographic variables predicted which affected teaching efficacy were level of training involved, length of training, gender, significant interaction in dealing with a person with disability, knowledge of the local legislation, confidence in teaching a student with disability. From those six variables, length of training ($\beta=-.158$, $SE=.28$) was the one with the

strongest contribution in teaching efficacy for IE. The next demographic variable which influenced teaching efficacy for IE in Bangladesh was the knowledge of local legislation on disability ($\beta=.131$, $SE=.06$) with a good level of knowledge possessed by most participants ($M=5.19$, $SD=.46$). Gender ($\beta=-.053$, $SE=.029$) was the least contributing demographic variable to teaching efficacy for IE.

Other findings [3] was the significant positive correlation ($r=.196$, $p=.01$) between teaching efficacy and teachers' attitude although the correlation value was not too high. A high score in teachers' teaching efficacy correlated positively to the attitude but negatively correlated to the concern towards IE. It has been found that teachers were less aware of the classmates' reception to the students with special needs in the classrooms and the level of stress that those students had to deal with. On the contrary, teachers concentrated more to their workload and how to provide the attention to all students in the classrooms who apparently had different condition. A study [14] highlighted the urgent need to readjust the curriculum for primary and secondary teachers in Bangladesh. Various exposures regarding the issue of inclusive education in Bangladesh provided the teachers with higher efficacy and awareness in teaching inclusive classes but it reduced their concentration. It is crucial for the government to arrange a workshop program for teachers in Bangladesh which covers the key aspects in inclusive education not merely acting as an addition to the duration of educating program given to teachers.

A study [2] also analyzed the level of teaching efficacy towards inclusive education based on the demographic variables such as: previous teaching experience, confidence level, interaction with people with disabilities, knowledge of law/ policy, and previous training in special education. Teachers having previous training in special education ($p<.001$) showed higher score in teaching efficacy that those who had no experience in such training. This also happened for those who had more confidence level, previous teaching experience, and knowledge of law/policy. Higher level of education also showed a significant influence statistically to teaching efficacy ($p\le.001$). From the hoc post test result, teachers who had only completed a secondary level of education displayed lower efficacy level in using inclusive instruction aspect rather than those with both bachelor and master level degree. From all teaching efficacy aspects which include efficacy to use inclusive instruction, managing behavior, and in collaboration, Indonesia as one of the observed developing countries ranked the third after Canada and Australia. In fact, Indonesia's level of teaching efficacy towards IE was above Hongkong's.

Overall, the facts regarding teachers' teaching efficacy towards IE involving students with special education need (SEN) in Indonesia and Bangladesh as the representatives of Asian developing countries can be considered good enough. From two identified studies involving inclusive class teachers, it can be observed that the measured teaching efficacy was the perceived-teaching efficacy. The samples provided were considered heterogeneous from kindergarten, private schools, public schools, to special education institution. More inclusive teachers' involvement would complete the reports on teaching efficacy to provide the evaluation materials towards the government's inclusive policy and the international world.

Despite the good results obtained from Indonesia and Bangladesh, it does not mean that the implementation of inclusive education has worked well and effectively. Now, the assessment on the quality of inclusive education is still developed including in Indonesia in which a teacher becomes the assessed element in the quality of implementing inclusive education. It will be appealing to recognize that the study on teachers' teaching efficacy towards IE, especially in Indonesia, has not often been conducted particularly regarding on the policy, system and background culture. A study on self efficacy based on the cross-cultural perspective conducted [22].distinguishing individualism and collectivism cultures has provided an interesting insight which can also be applied in researches concerning on teaching efficacy towards IE.

This review has found the correlation between teaching efficacy and teachers' attitude towards IE in which the role of previous teacher trainings become the significant assets in improving both aspects and assuring the success of implementing inclusive education [23-25].

4. CONCLUSION

There have not been many studies in teaching efficacy towards IE in Indonesia and other developing countries in Asia. However, there were interesting results coming from Indonesia and Bangladesh where a good quality of teaching efficacy towards IE can be found. Improving and augmenting the quality of evidence-based research on teaching efficacy towards IE will provide some sorts of evaluation materials for the implementation of inclusive education and the attempts to provide education to special education need students. It is also noted that the quantitative assessment for teaching efficacy may not be appropriate to describe the real condition of teaching efficacy towards IE in developing countries as the database which can truly depict the teaching efficacy is urgently required to evaluate the policy related to inclusive education, for example the findings in teachers' obstacles to improve their teaching efficacy. In general, this has been the

limitation for quantitative study which can provide valuable feedbacks for developing countries in order to develop indigenous teaching efficacy towards IE assessing instruments.

There were several limitations in this review. First, the strategy to browse the articles might have used specific keywords including research setting, such as Indonesia AND developing countries AND Asian, but it excluded browsing the developing countries one-by-one. Nevertheless, a thorough checking has been done in selecting the inclusive articles. Second, this review was done solely by the writer in which, ideally, this type of review should be done by more people to avoid biased. Lastly, this review limited the search only for English language articles while there is a big chance that the reports written in developing countries are not in English.

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