

## **BRAC Primary School Teachers' Teaching-efficacy, Attitude, Sentiment and Concern towards Inclusion of Children with Disabilities in Regular Classrooms in Bangladesh**

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BRAC (Bangladesh Rural Advancement Committee) is the largest non-governmental organisation in Bangladesh that is involved in the provision of education to 6,74,229 children, including 25,637 children with disabilities (BEP, 2014). The aim of the research reported in this paper is to explore BRAC Primary School teachers' teaching efficacy, attitude, sentiment and concern towards the inclusion of children with disabilities in regular classrooms in order to inform future efforts and developments with inclusive education. 400 randomly selected BRAC primary school teachers from 48 districts of 7 regions of Bangladesh participated in this research. The Teacher Efficacy for Inclusive Practice (TEIP) and Sentiments, Attitudes, Concerns regarding Inclusive Education-Revised (SACIE-R) (Sharma, Loreman, & Forlin, 2012; Forlin, Loreman, & Sharma, 2011) scales were utilities in this study along with a demographic questionnaire. The results show that BRAC teachers have relatively high level of overall teaching efficacy, moderately positive attitude and generally low concern towards inclusion of children with disabilities. The study found no significant relationship between the background and demographic variables used for this study and BRAC teachers' teaching efficacy and attitude. The study also revealed a significant difference in BRAC teachers' concern based on students' disability type, and a significant positive relationship between teaching efficacy and attitude and concern. Based on the findings, the study suggests further collaboration between government and BRAC to create the conditions for higher teacher efficacy and positive attitude towards inclusion of children with disabilities providing school support, resources and extensive training opportunities.

**Keywords:** BRAC, primary schools, teaching-efficacy, attitude, sentiment, concern, inclusive education, regular school, Bangladesh

### **Introduction**

Inclusive education (IE) has gained significant attention and has come to the forefront of educational debate in countries around the world. UNESCO

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(2009) defines IE as a “process aimed to offering quality education for all while respecting diversity and different needs and abilities, characteristics, and learning expectations of the students and communities eliminating all forms of discrimination” (p. 18). Human rights movements, international declarations and conventions have made significant contributions in endorsing and promoting IE worldwide. Bangladesh, a small South Asian country with an area of 1,47,570 square kilometres and a dense population of 160 million, is committed to IE despite some enormous challenges in ensuring the rights to education for every citizen. Bangladesh is a signatory and has ratified most of the international declarations that call for inclusion, e.g. Education for All (EFA, 1990), Salamanca Statement and Framework for Action on Special Needs Education (1994), Dakar Framework for Action (2000), UN Convention of the Rights of the Child (UNCRC, 1989) UN Convention on the Rights of Persons with Disabilities (UNCRPD, 2008). The country has gone through a number of policy reforms and is taking new initiatives to promote IE where the role and support of Non-Government Organizations (NGO) is considered important in this process (Ahuja & Ibrahim, 2006; Chowdhury & Sattar, 2005; Ahsan, 2006; Ahsan & Burnip, 2007; Ahsan, 2013). As a result IE is gaining momentum progressively in Bangladesh.

Recent local academic research (Ahmed, et al., 2007; Ahmmed & Mullick, 2013a; Ahsan, 2006; Ahsan, 2013a; Ahsan, 2013b; Ahsan, Deppeler & Sharma; 2013; Ahsan, et al., 2012a; Ahsan, et al., 2012b) aims to support this process by investigating underlying support factors and barriers to the IE of children with disabilities. However, very little empirical research has been conducted in relation to NGO activities and educational provision, despite NGOs active participation in the implementation process of inclusion.

BRAC is the largest NGO in the world that supports inclusion through provision of an education to millions of children, particularly those affected by violence, displacement or discrimination and extreme poverty in rural areas as well as urban slums through BRAC primary schools (BPS) (BEP, 2014). BRAC invests targeted efforts to include children with disabilities in its mainstream primary education programme. Part of BRAC’s efforts are specifically directed to teachers’ preparation through pre-service and in-service training on disability and inclusion related issues.

International research strongly suggests that, along with legislation and resources, teachers play a key role for the successful implementation of inclusion (de Boer, Pijl & Minnaert, 2011). It is argued that attempts to include students with disabilities may be unsuccessful if teachers do not have

self-efficacy and positive attitudes towards inclusion (Avramidis & Kalyva 2007). Positive teacher attitudes are seen to contribute to more effective teaching strategies and improved learning environments, which in turn can lead to successful policy implementation and development of IE. (Avramidis & Norwich, 2002; Forlin, Loreman, & Sharma, 2011; Loreman, Earle, Sharma, & Forlin, 2007). Therefore, the main aim of this study is to establish the level of efficacy and attitude of BPS teachers towards children with disabilities. It is hoped that this research will contribute to the local evidence base of inclusive education, and that it may lead to positive future developments. The research may be of particular interest to BRAC and other policy makers in the country, as well as to the teachers themselves.

### **IE in the Context of Bangladesh**

The right to basic education for all children is enshrined in the constitution of Bangladesh. In addition, international initiatives have also influenced policy development as well as a number of policy reforms to promote IE. According to the report of the DPE and CSID (2002) only 11% of children with disabilities have access to some sort of education in Bangladesh (Ahsan & Burnip, 2007). The recent Annual Primary School Census (2013) identified that among the total enrollment of 1,95,84,972 children in all types of primary schools 1,12,444 children were disabled, which is only 0.57% of the total enrollment figures (DPE, 2013). There are 24 types (e.g. government, registered non-government, non-registered, experimental, community, madrasa, NGO) primary schools in Bangladesh which can be broadly put into three main categories- government, non-government and NGO run non-state primary schools (Sabur & Ahmed, 2010). Children with disabilities have access to many of these types of schools but in three different settings- inclusive, integrated and special (Ahsan, 2013a). All government primary schools in Bangladesh have officially become inclusive schools due to a government order to enroll children with disabilities into regular schools. In addition, there are several NGOs in Bangladesh, which run inclusive schools for children with disabilities, for example BRAC, Bangladesh Protibondhi Foundation, Centre for Rehabilitation of the Paralyzed, Underprivileged Children's Education Programme (Ahsan, 2013a).

However, there are still a large number of non-government primary schools that do not allow access to children with disabilities. Integrated schools for children with disabilities have special units in the regular school compound with resource rooms and a resource teacher (Ahsan, 2013a). Apart from inclusive and integrated placements, there are special schools for

different types of disabilities with special curricula, teaching aids and special education teachers. Despite the existence of three different types of placements, a large number of students with disabilities enroll in special schools because of the existing barriers like enrollment barriers due to negative attitudes, non-cooperation of school authorities (Ahsan & Burnip 2007; Ahuja & Ibrahim, 2006); lack of awareness and resources for disability screening (Ahsan & Burnip, 2007; DPE & CSID, 2002); large class sizes, lack of teachers' training and high dropout rates after admission (Ahuja & Ibrahim, 2006; DPE & CSID, 2002); an inaccessible environment and the lack of resources for children with disabilities (Ahuja & Ibrahim, 2006; Ahsan & Burnip, 2007; DPE & CSID, 2002; Ahmmed, Sharma, & Deppeler, 2014); etc. which are preventing them from entering inclusive school settings.

### **BRAC Primary Schools' (BPS) Practices in relation to IE**

BPS is one of 24 types of primary educational institutions of Bangladesh, which is operated by BRAC. BRAC operates 22,541 primary schools all over the country and is providing education to 6,74,229 children (female 63.20%) which is 3.4% of total primary school students (BEP, 2014). Believing that education is a key to any sustainable human development BPSs were started in 1985 in Bangladesh with a target to educate the never enrolled children from the poorer sections of communities (Nath, 2005). These schools are opened in rural and slum areas on the basis of community demand, availability of eligible students and qualified teachers (Ahmed, Ahmed, Khan, & Ahmed, 2007). BPSs are 'one room one teacher' schools with bamboo or mud walls and a tin roof (Islam, 2000). Each school has 30-33 students and 1 teacher, and runs for four years providing the full cycle of primary education (Grade I to V) to the same cohort of students with flexible class hours: three to four hours each day, six days a week, and 276 days a year (Ahmed, Ahmed, Khan, & Ahmed, 2007). The government curriculum and textbooks with a few modification and supplementary workbooks are used in BPS (Nath, 2005). After completing the course BRAC students sit for national public examination and are transferred to formal secondary schools (Nath, 2002). Once the four-year cycle is completed for one school, based on community needs, the school is re-opened for a second cycle, using the same teacher (Ahmed, Ahmed, Khan, & Ahmed, 2007). As BRAC works through empowering women, local community women with a minimum of 9 years of schooling are selected as BPS teachers. Their capacity is developed through 12 days pre-service basic training, a monthly refresher training and needs-based subject training (Khan, 1995).

As BRAC is committed to the education of marginalized groups of children it has made all its schools inclusive. BRAC addresses IE in a relatively wide framework, defining it as:

‘. . . an approach which addresses the needs of all learners in ordinary classroom situations, including learners with special needs, indigenous children, children with disabilities, girl children and poor children.’ (Charanji, 2005, p. 2 cited in Mahbub, 2008).

By establishing Children with Special Needs (CSN) unit in 2003, BRAC started including children with mild to moderate disabilities in BRAC pre-primary and primary schools. With a policy to include at least three children with disabilities in each school, BRAC provides education to children with physical, hearing, speech, visual, intellectual and multiple disabilities of mild to moderate range (Miles, Fefoame, Mulligan, & Haque, 2012). Since 2013, a total of 2,08,048 children with disabilities graduated from BPS (BEP, 2013). And, at the start of 2014, a total of 25,637 children with disabilities were enrolled in BPS which is 3.7% of the total BRAC students (BEP, 2014). BRAC employs a holistic approach in its educational programme by adopting specialized teaching-learning materials and developing special training module. Teachers receive three days in-service training on disabilities and IE which covers a range of issues on child psychology; categories and range of disabilities; educating disabled children and role of teachers; inclusion for children with disabilities; functional assessment and co-curricular activities; and community awareness raising (Dewan & Choudhury, n.d).

### **Research on Teachers’ self- efficacy attitude, sentiment, and concern towards IE**

Internationally, there are a number of studies using statistical measures to investigate teachers’ self- efficacy attitude, sentiment, and concern towards IE.

#### **Teachers’ self-efficacy for IE**

As key educational stakeholders, teachers have a critical role to play in incorporating the principles of IE (Forlin et al., 2010; Savolainen et al., 2012). Teachers’ self-efficacy is considered an important catalyst for the success of IE. It has been argued that teachers with higher self-efficacy include children with disabilities more effectively in regular classrooms (Friend & Bursuck, 2009; Sharma, Loreman, & Forlin 2012). Self-efficacy is generally defined as the belief of an individual on his/her own capabilities, which in turn triggers successful performance of target behavior to achieve expected results

(Bandura, 1997). There is evidence of teachers with high level of self-efficacy being open to new ideas and methods and being less reluctant to consider students' individual needs (Leyser, Zeiger, & Romi, 2011) and using different behavior management techniques (Woolfolk, Rosoff, & Hoy, 1990). A comparative study on 319 South African and 822 Finnish primary and secondary in-service teachers using the scales Teacher Efficacy for Inclusive Practices (TEIP) and Sentiments, Attitudes and Concerns about Inclusive Education (SACIE) revealed a higher level of self-efficacy of teachers of both countries for IE (Savolainen, et al., 2012). Among the three factors used in TEIP scale, Finnish teachers showed highest efficacy in promoting strategies of inclusion for all learners, named as Efficacy to use Inclusive Instructions and lowest efficacy in dealing with disruptive behaviours, named as Efficacy in Managing Behaviour. On the other hand, South African teachers showed highest efficacy in managing behavior and lowest efficacy in working with parents and other professionals, named as Efficacy in Collaboration (Sharma, Loreman, & Forlin, 2012). Only a few studies explored the relationship between teachers' self-efficacy and their attitude towards inclusion of children with disabilities. A study conducted by Malinen, Savolainen, and Xu (2012) involving 451 primary and middle school teachers from 132 different schools of Beijing, China, found that teachers' efficacy in collaboration significantly predicted their attitudes. Another study conducted by Weisel & Dror (2006) with 139 teachers from 17 elementary schools in Northern Israel found teachers self-efficacy as the single best predictor of their attitudes. Similar results were found by Soodak, Podell, & Lehman (1998) in their study of 188 general educators of New York.

### **Teachers' attitude, sentiment, and concern towards IE**

Teachers' attitude towards children with disabilities is considered as an important factor for initiating and sustaining inclusive practices in regular classrooms, (UNESCO, 2010). It is argued that positive attitude of a person predisposes favourable responses and negative attitude predisposes unfavourable responses (Eagly 1992 in Galović, Brojčin, & Glumbić, 2014). Therefore, researchers have a strong stand that success of inclusion of students with disabilities depends on positive attitude of teachers towards inclusion (Avramidis & Kalyva 2007; Ellins & Porter, 2005; Romi & Leyser, 2006).

Internationally, a large number of studies have been conducted on pre-service and in-service teachers' attitude, sentiment and concern towards IE. Research shows that teachers have a mixed attitude towards inclusion of children with disabilities. Changpinit, Greaves, and Frydenberg (2007)

explored the attitude and concern of 702 in-service teachers of Thailand and found that teachers who had positive attitude towards children with disabilities had lower level of concern. In contrast, a comparative study conducted on 319 South African and 822 Finnish primary and secondary teachers found that although teachers from both countries expressed positive attitude and sentiment they had much concern towards inclusion of children with disabilities (Savolainen et al., 2012). Therefore, the findings suggest that there is a complex relationship between teachers' attitude, sentiment and concern towards the inclusion of children with disabilities. In addition, there is also evidence of significant relationship between teachers' attitude and their self-efficacy. The same study (Savolainen et al. (2012) revealed an association between self-efficacy and attitude of teachers. The study found that the teachers who had more positive attitude towards children with disabilities, had greater self-belief in their own ability and therefore showed to be more supportive of the inclusion of children with disabilities. Similar results were found in another study conducted on 100 teachers of 10 inclusive primary schools in Tanzania which reported that teachers' with positive attitude towards children with disabilities had increased level of self-efficacy (Hofman & Kilimo, 2014).

Research shows that different background and demographic variables have an impact on teachers' attitude towards inclusion of children with disabilities (Avramidis, Bayliss & Burden, 2000; Forlin, Loreman, Sharma, & Earle, 2009). A survey carried out with 300 general educators of Mumbai, India, found significant difference in teachers' attitude towards children with disabilities based on age and years of teaching experience (Parasuram, 2006). The study revealed that youngest and oldest teachers and teachers with least and most years of teaching experience showed positive attitude towards children with disabilities than other groups. Similar results were found for these two variables in a survey conducted on 194 public elementary school teachers from 65 public schools of seven cities in Turkey, where IE was recently introduced in the country (Rakap & Kaczmarek, 2010). This study found slightly negative attitudes of teachers' towards students with severe disability. However, teachers showed willingness to learn new skills through training and collaboration with families to accommodate students with disabilities in regular classrooms.

### **Research on Teachers' self- efficacy attitude, sentiment, and concern towards IE in Bangladesh**

For the successful inclusion of children with disabilities in regular classroom,

a few studies have been conducted on pre-service and in-service teachers' self-efficacy and attitude towards inclusion. A study conducted on 1,623 pre-service teachers from 16 teacher training institutions of 6 regional divisions found that the teachers have a high level of teaching efficacy, moderately positive behavior, and a low level of concern towards inclusion of children with disabilities (Ahsan, Sharma, & Deppeler, 2012a). The study also revealed a significant correlation between teachers' self-efficacy and their attitude and concern. Moreover, the study also found the level and length of training, gender, interaction with people with disabilities, knowledge about policy and confidence as the significant predictor of teachers' self-efficacy; level of training and gender as the predictor of attitude and level of training, age, interaction, confidence and experience of teaching as the predictor of concern. Another study conducted on 738 in-service government primary school teachers from 4 sub-districts under Dhaka division found teacher attitudes, teacher efficacy, and perceived school support to be significant predictors of teachers' intentions to include students with disabilities in regular classrooms (Ahmed, Sharma, & Deppeler, 2014). In addition, the study also disclosed educational qualification, contact with people with disabilities, previous experience of teaching children with disabilities and school support had a significant relationship with teachers' attitude towards inclusion (Ahmed, Sharma & Deppeler, 2012).

### **Research Questions**

- What is BRAC teachers' level of efficacy, attitude, sentiment and concern towards the inclusion of children with disabilities?
- Is there any significant relationship between BRAC teachers' teaching efficacy, attitudes, sentiments and concerns towards IE and their background and demographic variables (age, gender, educational qualification, teaching experience, training, and contact with disabled people)?
- Is there any significant relationship between BRAC teachers' self-efficacy and their attitude towards the inclusion of children with disabilities?

### **Method**

Two standardized scales- Teacher Efficacy for Inclusive Practice (TEIP) and Sentiments, Attitudes, Concerns regarding Inclusive Education-Revised (SACIE-R) (Sharma, Loreman, & Forlin, 2012; Forlin, Loreman, & Sharma, 2011) - and a background and demographic questionnaire were used in this



study. The TEIP and SACIE-R have been used in previous studies in Bangladesh, and have been validated and translated in the country context (Ahsan, Sharma, & Deppeler, 2012b; Ahsan, 2013a). The translated versions of the scales were used for the present study.

### **Part one: Teacher Efficacy for Inclusive Practice (TEIP) scale**

TEIP is a Likert-type scale which was basically developed to measure pre-service teachers' perceived teaching-efficacy. This 18 item scale measures three factors of teaching efficacy- efficacy to use inclusive instruction, efficacy in collaboration and efficacy in managing behavior. Each factor consists of six items and the scale uses a forced-choice in which 1= strongly disagree, 2= disagree, 3= disagree somewhat, 4= agree somewhat, 5= agree, and 6= strongly agree. Sharma, Loreman, & Forlin (2012) reported the reliability coefficient (Cronbach's alpha) of the overall scale  $r = 0.89$ .

### **Part two: Sentiments, Attitudes, Concerns about Inclusive Education Revised (SACIE-R) scale**

SACIE-R is a 15-item Likert type scale and consists of three sub-scales: sentiment, attitude and concern; each containing 5 items. The 'sentiment' sub-scale containing all negative statements, measures how teachers feel about engaging with people with disabilities; the 'attitude' sub-scale containing all positive statements measures how teachers accept learners with different learning needs; and the 'concern' sub-scale addresses the concerns that teachers may have about IE comprising of all negative statements. The SACIE-R employs a forced-choice, with the descriptors: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. As the sentiment and concern sub-scales possess negative statements, the items of these two subscales were reverse coded before analysis so that a high score indicates positive attitudes towards IE. The subscales (sentiments, attitudes, and concerns) had reliabilities of  $r = .75$ ,  $.67$ , and  $.65$ , respectively, and the overall scale had a reliability of  $r = .74$ .

### **Part three: Background and Demographic Information**

The demographic questionnaire included questions on region, gender, age, educational qualification, length of teaching experience, presence and type of disability of the teacher or her relatives, length of experience in teaching children with disability, training on disability related issues, length of training, knowledge about local education policies and legislations.

## Participants

In the year 2014, BRAC was running 22,541 primary schools under 645 BRAC branch offices in all 64 districts of Bangladesh which are divided into 7 broad regions (BRAC, 2014). For this study, a total of 90 branch offices and 720 participants of 48 districts were recruited proportionately from all 7 regions using a simple random sampling method from the internal database of BRAC. Returns with missing responses were discounted and the final dataset included fully completed questionnaires of 400 participants from 80 branch offices, distribution presented in Table 1.

*Table 1. Sample Distribution of Branch Offices and Schools by Region*

Region	No. of Sample Branch	No. of school	Sample Percentage (%)
Khulna	17	85	21.3
Rajshahi	14	70	17.5
Rangpur	14	70	17.5
Chittagong	10	50	12.5
Sylhet	10	50	12.5
Mymensingh	10	50	12.5
Dhaka	5	25	6.3
Total	80	400	100

## Procedure

Survey questionnaires with consent form for teachers were sent to the Branch offices and collected back by post in sealed envelopes. Data from the surveys were analyzed using the Statistical Package for the Social Sciences (SPSS) version 12 for windows software. To determine the answer of first research question descriptive statistical analysis was conducted (Cohen & Holiday, 1996). From the mean scores, BRAC teachers' level of teaching-efficacy, sentiment, attitude and concern towards IE was reported. In response to second research question, ENTER method of multiple regression analysis, independent sample t-test and One-way ANOVA test were conducted (Field, 2005). Finally, to get the answer of third research question, Pearson's Product Moment Correlation was applied to find out the relationship between scores of TEIP and SACIE-R scales (Howell, 1992).

## **Ethical consideration**

British Psychological Society's Code of Human Research Ethics was followed during the study. Ethical approval for all parts of this study was provided by the Ethics Committee of the Psychology & Human Development Department of Institute of Education. Before conducting the study, permission was taken from BRAC. Participants' written consent was obtained for the survey through consent form. Participants' participation for the survey was voluntary and they were informed about the research background and allowed to withdraw any time. Efforts were made to ensure the anonymity of the participants throughout the study.

## **Findings**

### **Level of teaching-efficacy, attitude, sentiment and concern of BRAC teachers**

Analysis of the scores of TEIP and SACIE-R scales illustrates the level of teaching-efficacy, sentiment, attitude and concern of BRAC teachers. Cronbach's alpha was calculated to find out the reliability score of the scales. Result shows that Cronbach's Alpha for the overall TEIP scale for the present study sample is  $r=0.89$  which is similar to the reliability coefficient of the actual scale. Cronbach's alpha for three different factors of the scale are,  $r = 0.78$  for efficacy to use inclusive instruction,  $r= 0.76$  for efficacy in collaboration and  $r= 0.80$  for efficacy in managing behavior which falls under the acceptable range according to George & Mallery (2003).

Cronbach's alpha for the overall SAICE-R scale for the present study sample is  $r= 0.63$  and for the subscales of sentiment, attitude and concern the coefficient is  $r= 0.42, 0.64$  and  $0.60$  respectively. The reliability coefficient for SACIE-R scale is quite low for the present study sample, which falls in the minimally acceptable range according to DeVellis (2003). Since, the sentiment sub-scale has a very poor reliability score, it has been eliminated for further analysis of this study.

### **BRAC teachers' teaching-efficacy for IE**

Scores on TEIP scale depicts the teaching-efficacy of BRAC teachers. Table 2 presents the mean scores of all three factors of TEIP scales.

Table 2. *Level of Teaching Efficacy of BRAC teachers*

<b>TEIP Factors</b>	<b>Mean</b>	<b>SD</b>
Efficacy to use inclusive instruction	5.47	.50
Efficacy in collaboration	5.16	.63
Efficacy in managing behavior	5.30	.65
<b>Overall TEIP</b>	<b>5.32</b>	<b>0.51</b>

Since all three sub-scales of TEIP scale possess positive statements, higher score indicates higher teaching-efficacy of BRAC teachers. Table 2 shows that mean scores of all three sub-scales are very close to each other. The overall mean score of the teaching-efficacy of BRAC teachers on the TEIP scale is 5.32 (SD=0.51). The score 5 on the TEIP scale refers that participants “Agree” with the statements that measure their teaching-efficacy towards IE. Therefore, the result depicts that BRAC teachers possess high-level of teaching efficacy towards inclusion of children with disabilities. Scores of BRAC teachers’ self-efficacy in each of three subscales were also analysed. The mean scores of each of the sub-scales indicate that the participants also have quite similar response for all three factors of teaching-efficacy, since they ‘Agree’ with all the statements of three different sub-scales. Result shows that BRAC teachers have highest self-efficacy in using inclusive instruction, followed by efficacy in managing behavior. And, the teachers hold least efficacy in collaboration.

### **BRAC teachers’ attitude towards IE**

The Attitude subscale of the SACIE-R employs positive statements that endorse the belief that students with disabilities should be included in regular education classrooms. Higher scores on this subscale are indicative of more positive attitude of teachers about including children with disabilities in regular classrooms. Result shows that the overall mean score of the attitude subscale is 2.65 (SD=0.58). The score falls within the range of 2 refers the participants’ disagreement with the statements and the score that falls within the range of 3 indicates the agreement of participants with the statements. As the overall mean score of this sub-scale for the present study is close to value 3, it indicates that BRAC teachers somewhat ‘agree’ with the statements and possess moderately positive attitude towards IE. Results show that participants have most positive attitude towards inclusion of students who fail in exams (M= 2.92, SD= 0.81) followed by those students having problems in verbal expression (M=2.89, SD=0.87) and attention problems (M=2.88, SD=0.85). They are less favourable towards including students who need individualized

academic programs ( $M=2.36$ ,  $SD=1.0$ ) and least favourable to the inclusion of students who require communicative technology (Braille/sign language) support ( $M=2.18$ ,  $SD=1.0$ ).

### **BRAC teachers' concern about IE**

The concern subscale of SACIE-R provides negative statements about potential barriers that teachers may experience. According to the recoding of statements, higher scores on this subscale indicate less concern of the participants in this study. Result shows that the overall mean score of the concern subscale is 3.19 ( $SD=0.51$ ). A score more than the value of 3 on the concern subscale indicates that participants 'Agree' with the statements. As the items were reverse coded for the analysis, this score indicates low level of concern of teachers about IE. Therefore, BRAC teachers have less concern towards inclusion of children with disabilities. Analysis of 5 items in the concern subscale indicates that BRAC teachers are most concerned about increased workload ( $M=2.96$ ,  $SD=0.95$ ) followed by concerns to provide appropriate attention to all students ( $M=2.99$ ,  $SD=0.87$ ). The teachers show less concern about their stress level ( $M=3.15$ ,  $SD=0.82$ ), followed by concern about lack of knowledge and skills ( $M=3.22$ ,  $SD=0.84$ ) and least concern about peer acceptance ( $M=3.62$ ,  $SD=0.64$ ).

### **Effect of background and demographic variables on BRAC teachers' teaching-efficacy, and their attitude and concern**

Participants of this study have a varied background and demography. A descriptive analysis was conducted to find out whether there is any significant difference in the mean scores of BRAC teachers' teaching efficacy/ attitude/concern based on different categories of all these background and demographic variables. Results shows that differences in mean scores are very little for different categories of each background variable. However, to explore whether these differences in the mean scores are significant, One-way ANOVA test was conducted for the variables with more than two categories (e.g. age, educational qualification, monthly income, teaching experience, facilities at home, students' disability type) and independent sample t-test was conducted for the variables with only two categories (e.g. teachers' own disability, relative's disability, training and knowledge about disability related law) (Kinnear & Gray, 2004). Results show that only for one variable- students' disability type, teachers have significant difference in their mean scores on the concern scale. There is no significant difference in the mean scores of BRAC teachers' teaching-efficacy/ attitude/ concern for any other background and demographic variables. Mean scores of BRAC teachers' concern vary a little

for three different categories of the variable students' disability type: teachers who deal with one type of disability ( $M= 3.14$ ,  $SD= .51$ ,  $n= 307$ ), two types of disabilities ( $M= 3.33$ ,  $SD= .50$ ,  $n= 81$ ), and three types of disabilities ( $M= 3.30$ ,  $SD= .39$ ,  $n= 12$ ). The assumption of homogeneity of variances was found tenable for this variable using Levene's Test,  $F(2, 397)= .64$ ,  $p= .529$ . The ANOVA was significant,  $F(2, 397)= 4.78$ ,  $p= .009$ ,  $\eta^2= .02$  (Field, 2005). Therefore it can be said, teachers who deal with two types of disabilities have less concern than those who deal with one type of disability, though the actual difference in the mean scores between groups was quite small based on Cohen's (1988) conventions for interpreting effect size. However, ANOVA test also presents significant result for difference of mean scores in teaching efficacy for the variable 'facilities at home' but the assumption of homogeneity of variances was not found tenable using Levene's Test,  $F(3, 396)= 3.0$ ,  $p= .03$  (Field, 2005).

To explore whether any of these background and demographic variables have effect on BRAC teachers' teaching efficacy, and their attitude and concern; Enter method of multiple regression analysis was conducted (Field, 2005). Placing all background and demographic variables as independent variables, multiple regression was conducted thrice for three dependent variables- teaching efficacy, attitude and concern. Very surprisingly, no significant model is found for any of these background and demographic variables, which means that none of these variables is a significant predictor of BRAC teachers' teaching efficacy or attitude or concern. This finding is unlike findings of other studies conducted in the context of Bangladesh. However, this result of the present study is also supported by results of t-test mentioned earlier.

### **Relationship of BRAC teachers' self-efficacy with their attitude and concern level**

To explore the relationship between BRAC teachers' teaching efficacy and their attitude and concern, Pearson product moment correlation was conducted in two different ways (Kinnear & Gray, 2004). Firstly, the correlation was conducted to find out the relationship between the scores of overall TEIP and overall SACIE-R scale. Secondly, the correlation was conducted to find out the relationship between all factors of TEIP (instruction, collaboration and managing behavior) and all factors of SACIE-R (attitude and concern) scale. Table 3 and Table 4 presents the results of Pearson product moment correlation for the scores of these two scales.

Table 3. *Correlation between Overall TEIP and SACIE-R Scores*

<b>Overall TEIP</b>	<b>SACIE-R</b>		
	<b>Overall SACIE-R</b>	<b>Attitude</b>	<b>Concern</b>
	0.25*	0.21*	0.14*

Note: \* $p < 0.01$

The results in Table 3 show that there is a significant positive correlation between the overall scores of TEIP and SACIE-R scales. The result also indicates a significant positive relationship between BRAC teachers' teaching efficacy and their attitude and concern. Teachers who have high teaching-efficacy show positive attitude and lower level of concern (as the concern scores were reverse coded) towards IE. It can be seen from the table that out of the three constructs of SACIE-R scale, the attitude of BRAC teachers have the strongest relationship with their teaching efficacy followed by concern. However, given the value of the correlation coefficient, this relationship cannot be considered as a strong one since the coefficient of  $r < 0.30$  indicates a very weak relationship (Kinnear & Gray, 2004). A further analysis was conducted to find out the relationship of specific TEIP factors with each of the SACIE-R factors. Table 4 summarizes the result of this correlation.

Table 4. *Correlation between Individual Factors of TEIP and SACIE-R Scales*

<b>TEIP Factors</b>	<b>SACIE-R Factors</b>	
	<b>Attitude</b>	<b>Concern</b>
Efficacy in using inclusive instruction	0.22*	0.13*
Efficacy in collaboration	0.19*	0.16*
Efficacy in managing behaviour	0.14*	0.07

Note: \* $p < 0.01$

The correlation results in Table 4 depict a very weak but statistically significant positive relationship between BRAC teachers' attitude and their teaching efficacy in using inclusive instruction, collaboration and managing problem behavior. This means that teachers who feel more confident in their ability to use inclusive instructional practices and have more efficacy in collaboration and managing problem behaviour, show more positive attitude towards inclusion of children with disabilities.

Table 4 also shows a very weak but statistically significant positive relationship between BRAC teachers' concern and their teaching-efficacy related to instruction and collaboration; and there is no significant relationship between BRAC teachers' concerns and efficacy in managing problem behaviour. In other words, teachers who have more efficacy in using inclusive instruction and collaboration tend to show less concern towards the inclusion of children with disabilities.

## **Discussion**

The aim of this study was to add to the existing knowledge about BPS teachers' teaching efficacy, attitude, concern and sentiment towards inclusion of children with disabilities in regular classrooms. It was found from data analysis that BRAC teachers have higher level of self-efficacy with the highest efficacy in using inclusive instruction and lowest efficacy in collaboration. This finding is supported by a comparative study conducted on South African and Finish teachers (Savolainen et al., 2012) where Finish teachers showed their highest efficacy in using inclusive instruction and South African teachers showed their lowest efficacy in collaboration. The study of Ahsan, Sharma, & Deppeler (2012a) conducted on pre-service teachers of Bangladesh found the similar level of teaching efficacy of the participants and they showed their highest and lowest level of efficacy in managing disruptive behaviour and collaboration. An interesting fact in the case of BRAC teachers is that they generally have lower level of educational qualifications and they do not go through any academic education training. Despite this, they showed the same high level of teaching efficacy as pre-service teachers of Bangladesh. The potential causes behind this might be BRAC teachers' active experience of working with children with disabilities and having relatively better school environment with class-sizes of 30 students only. This might also be the reason of their highest efficacy in using inclusive instruction. However, the finding of lowest efficacy in collaboration of BRAC teachers' is not unexpected, as they do not have the scope to work in collaboration and consult with other colleagues or professionals on common educational concerns related to children with disabilities. This finding related to teaching efficacy of BRAC teachers might take the attention of BRAC management and policy makers of Bangladesh. If BRAC can manage collaboration of teachers with other colleagues or professionals, this might increase their teaching-efficacy. Another significant finding is that inclusion friendly school environments can increase teachers' self-efficacy despite having low level of educational qualifications.



The study found a moderately positive attitude and less concern in BRAC teachers towards inclusion of children with disabilities which is consistent with the findings of the study conducted with Thai teachers (Changpinit, Greaves, & Frydenberg, 2007) and Bangladeshi pre-service teachers (Ahsan, Sharma, & Deppeler, 2012a). However, this finding is in contrast with the findings in Serbia (Kalyva, Gojkovic, & Tskiris, 2007) and Turkey where teachers' possessed negative attitude towards inclusion (Rakap & Kaczmarek, 2010).

In this study, BRAC teachers' showed similar attitude and concern as the pre-service teachers of Bangladesh. Research shows that BRAC teachers receive good amount of in-school support (Nath & Chowdhury, 2000). Therefore, in-school support and high self-efficacy might be possible reasons for their positive attitude and less concern as these factors were found to be strong predictors of teachers' attitude in many studies (Ahmmed, Sharma, & Deppeler, 2012; Malinen, Savolainen, & Xu, 2012; Weisel & Dror, 2006).

This study also shows, BRAC teachers have least positive attitude towards students who require communicative technology: this is similar to what was found in pre-service teachers' study in Bangladesh. As BRAC teachers do not receive any training on using Braille or sign language, their least positive attitude towards such children is not unexpected. However, this finding suggests that more training should be considered and put in place to enhance teachers' skills in communicative technology.

BRAC teachers' were found to be most concerned about their workload and least concerned about peer acceptance, which also needs the attention of BRAC management.

In response to the second research question, this study did not find any significant difference in BRAC teachers' teaching efficacy and attitude based on the background and demographic variables included in this study. This finding is in contrast with the studies conducted on in-service teachers of Finland, South Africa, India and Lebanon which found significant differences in teachers' attitude based on students' types of disabilities (Avarmidis, Bayliss, & Burden, 2000; Khochen & Radford, 2012; Parasuram, 2006) and the studies of Serbia, Turkey and Tanzania that found differences based on teachers' experience of working with children with disabilities (Hofman & Kilimo, 2014; Kalyva, Gojkovic, & Tskiris, 2007; Rakap & Kaczmarek, 2010). However, the results of this study are similar to few other studies for the variables like age, years of teaching experience and educational qualification (Avarmidis, Bayliss, & Burden, 2000; Galović, Brojčín, & Glumbić, 2014).

This study's findings for teaching efficacy are in unison with most of the international studies reviewed. However, studies carried on pre-service and in-service teachers in Bangladesh found significant difference in teachers' teaching efficacy based on level and length of training, gender, contact with people with disabilities, knowledge of policy and confidence level (Ahsan, Sharma, & Deppeler, 2012a) and in attitude based on level of training, gender, educational qualification, contact with people with disabilities, previous experience of teaching children with disabilities and school support (Ahmmed, Sharma, & Deppeler, 2012; Ahsan, Sharma, & Deppeler, 2012a). The differences in findings with BRAC teachers may be explained by the fact that all BRAC teachers undergo the same initial teaching preparation and subsequent training and these may be significant factors shaping their attitude and self-efficacy. Both local and international studies showed evidence for the impact of training on these two constructs in teachers (Buell, et al., 1999; Forlin, et al., 2010; Ahsan, Sharma, & Deppeler, 2012a). Therefore, this study recommends further research into the effect of BRAC teachers' training components. Such further research might be useful to policy makers in relation to teacher education for inclusion in Bangladesh in general.

This study also found significant differences in teachers' concern based on students' disability type which is not consistent with the findings of any of the reviewed literature. In response to the third research question, this study found significant positive relationship of BRAC teachers' teaching efficacy with their attitude and concern which is supported by the studies conducted on teachers of Beijing, Israel, Finland and South Africa (Amog & Shechtman, 2007; Malinen, Savolainen, & Xu, 2012; Savolainen, et al., 2012). This result is also supported by two other studies conducted in Bangladesh. However, the result shows strongest relationship between teachers' efficacy in using inclusive instruction and attitude, and between efficacy in collaboration and concern. This finding may be useful to BRAC management in planning for enhanced preparation of teachers for inclusion.

Evidently, the overall results of this study have a number of practical implications for BRAC management and other educational policy-makers. Collaboration between the Government in Bangladesh and BRAC in providing school support, resources and teacher training opportunities may bring about positive results in enhancing teachers' efficacy and attitude for the inclusion of disabled children.

### **Limitations and further research**

This study has a number of limitations. First and foremost, the findings have to

be treated with caution. Although standardized measures are widely used to research attitudes, beliefs, concerns and self-efficacy in relation to inclusion across contexts, inclusion may be interpreted differently in different local and national contexts. Further research would need to consider alternative designs that would enable consideration of the educational and broader cultural and educational policy context in shaping attitudes, sentiments, concerns and self-efficacy. Further qualitative research based on the findings of this study can be conducted on BRAC teachers in order to gain a more in-depth insight of their beliefs about inclusion and to identify existing challenges. However, this wasn't possible because of time constraints.

In agreement with Sharma, Moore & Sonawane (2009) it has to be noted that in attitudinal studies of the type used here, caution needs to be exercised in the interpretation of the findings as being indicative of actual classroom behaviours of participants, as scales produce only 'pencil and paper self-report'.

In relation to the specific instruments used, it has to be noted that the SACIE-R scale used to measure teachers' attitude, did not have sufficient reliability for the sentiment sub-scale for the present sample and the scores of this sub-scale were eliminated from data analysis. Therefore, the findings of BRAC teachers' overall attitude need to be considered cautiously.

Data for this study were collected through postal survey; hence it was not possible to find out whether there has been any kind of peripheral influence on the participants while providing their response. Such a possibility might have created some bias in the result of the study.

Further research comparing BRAC and government school teachers' efficacy and attitude, and factors that work as predictors of these constructs may be beneficial for future developments with teacher education and inclusion of children with disabilities. Finally, as this study found moderately positive attitude and high teaching efficacy of BRAC teachers, it would be interesting to conduct further research involving with BRAC schools' students to see the impact of teachers' beliefs and attitudes on their students.

## **Conclusion**

In summary, BRAC teachers have a high level of teaching efficacy towards IE where they show highest level of efficacy in using inclusive instruction and least level of efficacy in collaboration. Moreover, between two constructs of attitude and concern, BRAC teachers have moderately positive

attitude towards inclusion of children with disabilities and they are less concerned about including these children in regular classroom. Interestingly, not any of the background and demographic variables used for this study have impact on BRAC teachers' teaching-efficacy, their attitude and concern towards inclusion of children with disabilities. However, there is a significant difference in the mean scores of BRAC teachers' concern based on the only variable students' disability type. It was also found that there is a significant positive relationship between BRAC teachers' teaching-efficacy and their attitude and concern. Based on the findings of the study it is recommended that more concentration should be given on collaboration of BRAC teachers with professionals. Training should be redesigned and initiated to enhance teachers' skills in communicative technology, teaching efficacy and attitude. Overall, collaboration with government can bring effective results to inform future efforts and developments with inclusive education within BRAC's provision and in Bangladesh.

### Notes on contributors

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### References

- Ahmed, M., Ahmed, K. S., Khan, N. I., & Ahmed, R. (2007). *Access to Education in Bangladesh: Country Analytic Review of Primary and Secondary Education*. Dhaka: BRAC University Institute of Educational Development .
- Ahmed, M., & Mullick, J. (2013a). Implementing inclusive education in primary schools in Bangladesh: recommended strategies. *Educational Research for Policy and Practice*, 13, 167-180.
- Ahmed, M., Sharma, U., & Deppeler, J. (2012). Variables affecting teachers' attitudes towards inclusive education in Bangladesh. *Journal of Research in Special Educational Needs*, 12 (3), 132-140.
- Ahmed, M., Sharma, U., & Deppeler, J. (2013b). Impact of demographic variables and school support on teacher efficacy in inclusive classrooms in Bangladesh. *International Journal of Diversity in Education*, 12 (2), 1-14.

- Ahmed, 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.
- Ahsan, M. T. (2006). Inclusive education acts and policies in some selected countries including Bangladesh: A review. *Bangladesh Education Journal, 5* (1), 53-68.
- Ahsan, M. T. (2006). Inclusive education acts and policies in some selected countries including Bangladesh: A review. *Bangladesh Education Journal, 5* (1), 53-68.
- Ahsan, M. T. (2013a). *National Baseline Study for Developing a model of inclusive education in Bangladesh project based on secondary data*. Quality Primary Education Programme. Dhaka: Plan Bangladesh.
- Ahsan, M. T. (2013b). *Ensuring Right to Education: An in-depth study to explore educationally excluded children*. Dhaka: Plan Bangladesh.
- Ahsan, M. T., & Burnip, L. (2007). Inclusive Education in Bangladesh. *Australasian Journal of Special education, 31* (1), 61-71.
- Ahsan, M. T., & Mullick, J. (2013). The Journey towards inclusive education in Bangladesh: Lessons learned. *Prospects, 43*, 151-164.
- Ahsan, M. T., Deppeler, J. M., & Sharma, U. (2013). Predicting pre-service teachers' preparedness for inclusive education: Bangladeshi pre-service teachers' attitudes and perceived teaching-efficacy for inclusive education. *Cambridge Journal of Education, 43* (4), 517-535.
- Ahsan, M. T., Sharma, U., & Deppeler, J. (2012b). Challenges to prepare pre-service teachers for inclusive education in Bangladesh: Beliefs of higher educational institutional heads. *Asia Pacific Journal of Education, 32* (2), 241-257.
- Ahsan, M. T., Sharma, U., & Deppeler, J. M. (2012a). Exploring Pre-Service Teachers' Perceived Teaching-Efficacy, Attitudes and Concerns about Inclusive Education in Bangladesh. *International Journal of Whole Schooling, 8* (2), 1-20.
- Ahuja, A., & Ibrahim, M. (2006). *A Assessment of Inclusive Education in Bangladesh*. Dhaka: UNESCO.
- Amog, O., & Shechtman, Z. (2007). Teachers' democratic and efficacy beliefs and styles of coping with behavioural problems of pupil with special needs. *European Journal of Special Needs Education, 22* (2), 115-129.

- Avarmidis, E., & Kalyva, E. (2007). The Influence of Teaching Experience and Professional Development on Greek Teachers' Attitudes towards Inclusion. *European Journal of Special Needs Education, 22* (4), 367-389.
- Avarmidis, E., Bayliss, P., & Burden, R. (2000). A Survey into Mainstream Teachers' Attitudes Towards the Inclusion of Children with Special Educational Needs in the Ordinary School in one Local Education Authority. *Educational Psychology: An International Journal of Experimental Educational Psychology, 20* (2), 191-211.
- Avramidis, E., & Norwich, B. (2002). Teachers' attitude towards integration / inclusion: a review of the literature. *European Journal of Special Needs Education, 17* (2), 139-147.
- Bandura, A. (1997). *Self-Efficacy: the Exercise of Control*. New York: W. H. Freeman & Company.
- BEP. (2013). *CSN- At a Glance Report*. Dhaka: BRAC.
- BEP. (2014). *At a Glance Report*. Dhaka: BRAC .
- Changpinit, S., Greaves, D., & Frydenberg, E. (2007). Attitudes, knowledge, concern and coping strategies regarding inclusive education in community of Thai educators. *The 1st International Conference on Educational Reform*. Thailand: Mahasarakham University.
- Chowdhury, A. M., & Sattar, M. G. (2005 ). Building Governance for Fighting Poverty: Role of NGOs in Bangladesh. In S. Rao, *Guidelines for Good Governance* (pp. 129-138). Retrieved from [http://research.brac.net/publications/good\\_governance.pdf](http://research.brac.net/publications/good_governance.pdf)
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. New York: Lawrence Erlbaum .
- Cohen, L., & Holiday, M. (1996). *Practical Statistics for Students: An Introductory Text*. London: Paul Chapman Publishing Ltd.
- Czaja, R., & Blair, J. (2005). *Designing Surveys: A Guide to Decisions and Procedures* (2nd ed.). London: Sage Publication.
- de Boer, A , Pijl S.J. & Minnaert, A. (2011) Regular primary schoolteachers' attitudes towards inclusive education: a review of the literature, *International Journal of Inclusive Education, 15* (3), 331-353.
- DeVellis, R. F. (2003). *Scale development* (2nd ed.). CA: Sage.
- Dewan, L., & Choudhury, A. C. (n.d). Disability related Handout for using in

Workshops. Dhaka: BRAC Education Programme.

- DPE & CSID. (2002). *Educating children in difficult circumstances: Children with disabilities*. Dhaka: CSID.
- DPE. (2013). *Annual Primary School Census 2013*. Dhaka: Ministry of Primary and Mass Education.
- Ellins, J., & Porter, J. (2005). Departmental Differences in Attitudes to Special Educational Needs in the Secondary School. *British Journal of Special Education*, 32 (4), 188-195.
- Field, A. (2005). *Discovering Statistics using Statistics* (2nd ed.). London: Sage Publication.
- Forlin, C., Cedillo, I. G., Romero-Contreras, S., Fletcher, T., & Hernández, H. J. (2010). Inclusion in Mexico: ensuring supportive attitudes by newly graduated teachers. *International Journal of Inclusive Education*, 14 (7), 723-739.
- Forlin, C., Earle, C., Loreman, T., & Sharma, U. (2011). The sentiments, attitudes, and concerns about inclusive education revised (SACIE-R) scale for measuring pre-service teachers' perception about inclusion. *Exceptionality Education International*, 21 (3), 50-65.
- Forlin, C., Loreman, T., & Sharma, U. (2011). The Sentiments, Attitudes, and Concerns about Inclusive Education Revised (SACIE-R) Scale for Measuring Pre-Service Teachers' Perceptions about Inclusive Education. *Exceptionality Education International*, 21 (3), 50-65.
- Forlin, C., Loreman, T., Sharma, U., & Earle, C. (2009). Demographic differences in changing pre-service teachers' attitudes, sentiments and concerns about inclusive education. *International Journal of Inclusive Education*, 13 (2), 195-209.
- Friend, M., & Bursuck, W. D. (2009). *Including students with special needs: A practical guide fro classroom teachers* (5th ed.). Boston MA: Pearson.
- García-Suaza, A. F., Guataquí, J. C., Guerra, J. A., & Maldonado, D. (2009). Beyond the Mincer Equation: The Internal Rate of Return to Higher Education in Colombia.
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Boston : Allyn & Bacon.
- Guskey, T. R., & Passaro, P. D. (1994). Teacher efficacy: A study of construct dimensions. *American Educational Research Journal*, 31 (3), 627-643.

- Hofman, R. H., & Kilimo, J. S. (2014). Teachers' Attitude and Self-Efficacy Towards Inclusion of Pupils with Disabilities in Tanzanian Schools. *Journal of Education and Training, 1* (2), 177-198.
- Howell, D. C. (1992). *Statistical Methods for Psychology* (3rd ed.). California: Duxbury.
- Imam, S. R., & Khan, K. A. (1998). *An Analysis of Classroom Culture of BRAC Schools*. Dhaka: BRAC Research and Evaluation Division.
- Jaeger, R. M. (1984). *Sampling Education and the Social Sciences*. London: Longman.
- Kalyva, E., Gojkovic, D., & Tskiris, V. (2007). Serbian Teachers' Attitude towards Inclusion. *International Journal of Special Education, 22* (3).
- Khan, A. H., Chowdhury, S. N., Bari, N., Hasan, R., Hasan, M., & Asma, A. (2004). *Promoting Education of Children with Disabilities through BRAC Non-formal Education Approach*. Dhaka: Centre for Services and Information on Disability.
- Khan, M. K. (1995). *Why NFPE teacher dropout?* Dhaka: Research and Evaluation Division, BRAC.
- Khochen, M., & Radford, J. (2012). Attitude of teachers and headteachers towards inclusion in Lebanon. *International Journal of Inclusive Education, 16* (2), 139-153.
- Kinney, P. R., & Gray, C. D. (2004). *SPSS 12 Made Simple*. East Sussex: Psychology Press.
- Leyser, Y., Zeiger, T., & Romi, S. (2011). Changes in Self-efficacy of Prospective Special and General Education Teachers: Implication for Inclusive Education. *International Journal of Disability, Development and Education, 58* (3), 241-255.
- Lim, L., & Ireland, R. (2001). Inclusive Education. *International Journal of Disability, Development and Education, 43* (3), 313-316.
- Loreman, T., Earle, C., Sharma, U., & Forlin, C. (2007). The Development of an Instrument for Measuring Pre-service Teachers' Sentiments, Attitudes and Concerns about Inclusive Education. *International Journal of Special Education, 22* (2), 150-159.
- Mahub, T. (2008). Inclusive Education at a BRAC school- perspectives from the children. *British Journal of Special Education, 35* (1), 33-41.
- Malinen, O.-P., Savolainen, H., & Xu, J. (2012). Beijing in-service teachers'



self-efficacy and attitudes towards inclusive education. *Teaching and Teacher Education*, 28, 526-534.

- Miles, S., Fefoame, G. O., Mulligan, D., & Haque, Z. (2012). Education for diversity: the role of networking in resisting disabled people's marginalisation in Bangladesh. *Compare: A Journal of Comparative and International Education*, 42 (2), 283-302.
- Mullick, J., Deppeler, J., & Sharma, U. (2012b). Leadership practice structures in regular primary schools involved in inclusive education reform in Bangladesh. *The International Journal of Learning*, 18 (11), 67-82.
- Mullick, J., Sharma, U., & Deppeler, J. (2012a). School teachers' perception about distributed leadership practices for inclusive education in primary schools in Bangladesh. *School Leadership & management*, 33 (2), 151-168.
- Nath, S. R. (2005). *Reaching Primary Education at the Doorstep of the Poor: The BRAC Experience*. Dhaka: Research and Evaluation Division, BRAC.
- Nath, S. R., & Chowdhury, A. M. (2000). *School without a head teacher: one teacher primary school in Bangladesh*. Dhaka: Research and Evaluation Division, BRAC.
- Parasuram, K. (2006). Variables that affect teachers' attitudes towards disability and inclusive education in Mumbai, India. *Disability & Society*, 21 (3), 231-242.
- Rahaman, M., & Sutherland, D. (2011). Inclusive Education Practice for Secondary School Students with Disability in Bangladesh. *International Conference of Education, Research and Innovation*, (pp. 785-799). Madrid.
- Rakap, S., & Kaczmarek, L. (2010). Teachers' attitude towards inclusion in Turkey. *European Journal of Special Needs Education*, 25 (1), 59-75.
- Robson, C. (2002). *Real World Research* (2nd ed.). Oxford: Blackwell Publishing.
- Romi, S., & Leyser, Y. (2006). Exploring inclusion preservice training needs: a study of variables associated with attitudes and self-efficacy beliefs. *European Journal of Special Needs Education*, 21 (1), 85-105.
- Rose, P. (2009). NGO provision of basic education: alternative or complementary service delivery to support access to excluded? *Compare*, 39 (2), 219-233.

- Ross-Hill, R. (2009). Teacher attitude towards inclusion practices and special needs education. *Journal of Research in Special Educational Needs*, 9 (3), 188-198.
- Sabur, Z. U., & Ahmed, M. (2010). Multiple Providers and access to primary education: The case of Bangladesh. *Prospects*, 40, 393-415.
- Sarı, H., Çeliköz, N., & Seçer, Z. (2009). An Analysis of Pre-school Teachers' and Student Teachers' Attitude to Inclusion and their Self-efficacy. *International Journal of Special Education*, 24 (3), 29-44.
- Savolainen, H., Engelbrecht, P., Nel, M., & Malinen, O.-P. (2012). Understanding teachers' attitudes and self-efficacy in inclusive education: implications for pre-service and in-service teacher education, *European Journal of Special Needs Education*. *European Journal of Special Needs Education*, 27 (1), 51-68.
- Sharma, U., Forlin, C., Loreman, T., & Earle, C. (2006). Pre-service teachers' attitudes, concerns and sentiments about inclusive education: An international comparison of the novice pre-service teachers. *International Journal of Special Education*, 21, 80-93.
- Sharma, U., Loreman, T., & Forlin, C. (2012). Measuring teacher efficacy to implement inclusive practices. *Journal of Research in Special Educational Needs*, 12 (1), 12-21.
- 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 (4), 480-497.
- UNESCO. (1994). *Salamanca statement and framework for action on special educational needs*. Paris: United Nations .
- UNESCO. (2009). *Inclusive education: The way of future*. Paris: UNESCO.
- UNESCO. (2010). *Reaching the Marginalized*. Paris: UNESCO.
- Weisel, A., & Dror, O. (2006). School climate, sense of efficacy and Israeli teachers' attitudes towards inclusion of students with special needs. *Education, Citizenship and Social Justice*, 1 (2), 157-174.
- WHO. (2012). *World Report on Disability*. World Health Organization.
- Woolfolk, A. E., Rosoff, B., & Hoy, W. K. (1990). Teachers' sense of efficacy and their beliefs about managing students. *Teaching and Teacher Education*, 6, 137-148.