

**SOCIAL INCLUSION: TEACHERS AS FACILITATORS IN PEER ACCEPTANCE OF STUDENTS WITH DISABILITIES IN REGULAR CLASSROOMS IN TAMIL NADU, INDIA**

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*This study examined the impact of classroom teachers' attitudes towards inclusive education, teachers' self-efficacy and classroom practices on the social status of students with disabilities in inclusive classrooms in Tamil Nadu, India. Questionnaires, interviews and classroom observations were employed to gather data. The data analysis included descriptive statistics and regression analysis. Findings showed that in the context of the Inter-group Contact Theory, teachers' classroom practices influenced the social status of students with disabilities in regular classrooms. The study's findings also showed that the social status of students with disabilities was similar to that of their peers without disabilities. The implication of these findings are that teachers can make a difference in the social inclusion experiences of students and that such inclusion may also allow for better school outcomes that are associated with increased peer interaction amongst students with and without disabilities.*

The concept of inclusive education gained significant international acclaim when The United Nations promoted the idea of 'Education for All' at a conference in Thailand in 1990. A policy statement on inclusive education stemming from the 1994 Salamanca conference challenged all nations, schools and educators to provide access to education for all students, including students with special needs.

In some parts of India, the cultural perception to sometimes view disability as a 'curse' or a result of past deeds makes the individual responsible and therefore viewed as a misfortune that cannot be changed (Alur, 2002). However, an attempt to shift these notions was made in line with the demands of the Salamanca statement. A major emphasis of The Indian Equal Opportunities and Rights of Persons with Disabilities ACT 1995, rule 26, was the education of children with disabilities in regular schools. The legislation supported the inclusion of children with disabilities up to the age of 18 years in general classrooms. This marked a new era in the education of such students in India.

One of the main philosophies underpinning the inclusive education agenda is human rights and this implies that peer acceptance ought to be one of the primary outcomes of schooling in order to foster dignity and better quality of life for students with disabilities. In the U.S. and other OECD countries, inclusion has been strongly advocated not only because of academic benefits but also for the presumed social benefits to students with disabilities (Fisher, Roach, & Frey, 2002). Thomas, Walker, and Webb (1998) noted that mere geographical inclusion by itself does not foster these benefits and schools have to do more to support the process. The capacity of inclusive classrooms to promote and succeed with generating the social benefits of inclusion depends on the enhanced opportunities that lie in the educational setting to develop a sense of classroom community and friendships within a heterogeneous group of peers (Favvaza & Odom, 1997; Nakken & Pijl, 2002; Parvi & Monda-Amaya, 2001). Thus, classroom teachers play a vital role in facilitating positive interactions between students with and without disabilities (Brown, Odom, & Conroy, 2001; Harrower, 1999; Klingner & Vaughn, 1999; Salend, 2001). However, in order for teachers to effectively facilitate such positive interactions, they need to have a

positive disposition or attitudes towards students with disabilities and strong sense of self-efficacy. These variables have been found to be linked to good classroom practices, in terms of facilitating interactions (Cook, 2001) and using adaptive instruction (Kuyini & Desai, 2007). Further, teacher self-efficacy (conceptualised as self-perception of competence rather than actual level of competence) has been reported to be a strong predictor of classroom practices (Henson, Kogan & Vacha-Haase, 2001; Tschannen-Moran & Hoy, 2001). Finally, there is a link between teacher practices and social status of students with disabilities in general education classrooms (Fuchs, Fuchs, Mathes, & Martinez, 2002; Utley, Reddy, Dequadri, Mortweet, & Bowman, 2001).

These factors are bound to have profound effects on how peers accept and interact in the classroom and on the creation of classroom accommodative practices that shape the social status (acceptance or rejection) of students with disabilities among their peers without disabilities in the regular classroom (Briggs, Johnson, Shepherd, & Sedbrook, 2002; Downing, Eichinger & Williams, 1997; Harrower, 1999; Lumpe, Czerniak, & Haney, 1998).

In India, the existence of general negative attitudes towards disabilities among sections of the population (Alur, 2002) and less positive attitudes among teachers in inclusive schools (Sharma, 2001), are more likely to affect the attitudes of students without disabilities towards their peers with disabilities, as well as those of teachers towards such students. And these collectively could influence interactional patterns in inclusive classrooms and thereby generate more or less social accepting classroom conditions. Therefore, these elements (teachers' attitudes, self-efficacy and classroom practices for social inclusion) have the potential to impact significantly on the interactional patterns as well as the accommodative practices of teachers in inclusive classrooms in India.

#### *Aims of study*

The aims of this study were to explore whether the classroom practices of the teachers influenced positive peer interaction between students with and without disabilities. Additionally, the study sought to determine whether the variables of teachers' attitudes towards students with disabilities and teachers' self-efficacy were significantly related to classroom practices to foster social inclusion.

#### *The theoretical framework that guided this study*

This study was framed upon Allport's (1954) Theory of Intergroup Contact. The theory predicts that social acceptance or rejection of (in this case) students with disabilities by peers without disabilities in the regular classrooms depends upon the classroom practices.

There is a common belief that merely assembling diverse groups of people together facilitates acceptance of each other. However, Allport (1954) concluded that it is not so simple and that there is a formula for successful acceptance under specified conditions of contact. Allport (1954) held that positive effects of intergroup contact occur only in situations marked by four optimal conditions addressed below:

*Equal Status:* Allport stressed equal status within the situation where heterogeneous groups are in physical proximity to each other. It is important that both groups – minority and majority groups, expect and perceive equal status coming into the situation (Allport, 1954; Bizman & Amir, 1984; Pettigrew, 1998).

*Common Goals:* Along with contact or physical proximity, an active, goal-oriented effort should be present for prejudice reduction. In striving to win (athletic teams, for example), interracial teams need each other to achieve their goal (Pettigrew, 1998). Goal accomplishments together further the process towards acceptance of the minority members in the group (Allport, 1954; Bizman & Amir, 1984; Pettigrew, 1998). *Intergroup Cooperation:* attainment of common goals must be an interdependent effort without intergroup competition (Allport, 1954; Bizman & Amir, 1984; Pettigrew, 1998). *Support of Authorities, Law or Customs:* Finally, explicit social sanctions foster acceptance within the intergroup contact more readily and have more positive effects (Allport, 1954; Bizman & Amir, 1984; Pettigrew, 1998). Authority support establishes norms of acceptance (Pettigrew, 1998).

Allport's formula continues to receive support across a variety of situations, groups and society (Favvaza & Odom, 1997; Kennedy, 2001; McClenahan, Cairns, et al., 1996; Pettigrew, 1998; Schwartz & Simmons, 2001). The theory has been used by researchers in the field of inclusive education and has been concluded that the type of regular social interaction is an essential determinant in successful inclusion of these students rather than their mere physical presence (Nakken & Pijl, 2002). Allport's

(1954) factor of *Support of Authorities* is evidenced by the endorsement of laws and legislations on the move towards inclusive education, and teachers as the direct authority figures within the classrooms have more power to facilitate positive social interaction between students with and without disabilities in these classrooms (Hamre-Nietupski, et al., 1994; Korinek, et al., 1999; Pavri, 2004). The other three conditions (Allport, 1954) - *equal status*, *common goals* and *intergroup cooperation* - can be fulfilled by providing interdependent tasks to students in the inclusive classroom. Thus, according to the Theory of Intergroup Contact (Allport, 1954) classroom practices provide the nature and quality of interactions that affect the acceptance or rejection of students with disabilities by their non-disabled peers.

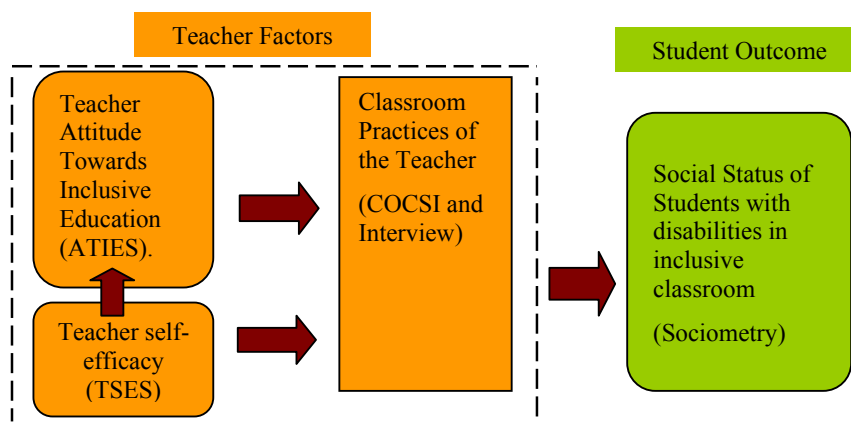
The classroom practices range from traditional teaching practice, where the teacher leaves the students to accommodate themselves socially and there is emphasis on mastery learning (Clarke, 2006; Dyer, 2000; Goodlad, 1984; Grover & Singh, 2002) to non-traditional teaching practice, where peer tutoring, cooperative learning, awareness creating among students without disabilities about their disabled peers and deliberate facilitation of interaction between the two groups by the teacher are seen (Delano, 2000; Hamre-Nietupski et al., 1994; Korinek, et al., 1999; Pavri & Monda-Amaya, 2001; Sapon-Shevin & Schniedewind, 1989; Stainback & Stainback, 1990).

The above findings point to the role of the teachers' own acceptance of students with disabilities and ability to establish an understanding of equal status among students with and without disabilities (Colley, 2000; Favazza & Odom, 1997; Korinek et al., 1999; Nougaret, Scruggs & Mastropieri, 2005; Salend, 2001; York et al., 1992). Therefore, one can conclude – in line with Allport's (1954) theory of intergroup contact – that classroom practices, which facilitate contact between the two groups of students given the *equal status* condition in an interdependent manner (satisfying Allport's *common goals* and *intergroup cooperation* conditions) are most conducive for social inclusion and depend on the teacher as a facilitator and *authority figure*. As such, teacher factors such as the teachers' own attitude and self-efficacy become pertinent.

Research from developing and developed countries suggests that a relationship exists between teachers' attitudes towards inclusive education and classroom practices (Cook, 2001; Cook, Tankersley, Cook & Landrum, 2000; Elliot, 2008; Kuyini & Desai, 2007; Van Reusen, Shoho, & Baker, 2001). Likewise, previous research (Carlson, Lee, & Schroll, 2004; Briggs, et al., 2002; Henson, et al., 2001; Muijs & Reynolds, 2002; Soodak, Podell & Lehman, 1998; Stanovich & Jordon, 2002; Subban & Sharma, 2006) links teacher attitudes and classroom behaviours or practices to teachers' perception of their own teaching efficacy. These elements of self-efficacy, teachers' attitudes towards inclusive education and their classroom practices have been taken into account in this investigation while considering the success of the inclusive classroom as measured by the social status of students with disabilities.

#### *Study model and research hypothesis*

The model adopted for this study hypothesised that teacher factors (attitudes towards students with disabilities, self-efficacy and classroom practices) are related to the social status of students with disabilities in regular classroom. Additionally, the model hypothesised that there is a relationship between the teacher factors such as the attitudes towards students with disabilities, self-efficacy and classroom practices of the teacher. Figure 1 below gives an overview of the model.



### Figure 1. The Model of the Study

*The research questions were:*

What attitudes do teachers hold towards the inclusion of students with disabilities into regular classrooms?, What self-efficacy beliefs do the teachers hold about teaching students with disabilities in inclusive classrooms?, What teaching practices do teachers use to support the social inclusion of students with disabilities?, Do students with disabilities have the same social status as those without disabilities in the classrooms investigated? and What is the relationship between the teachers' background variables (such as gender and teaching experience) and their scores on the measures of Attitude Towards Inclusive Education, Teachers' Self-Efficacy and Classroom Practices? The research hypotheses were: Teachers' attitude, teacher self-efficacy, and classroom practices, together with teacher background variables (such as gender and teaching experience) will predict the social status of students with disabilities in regular classrooms (Hypothesis 1) and Teachers' attitudes, teacher self-efficacy and classroom practices – will predict the social status of students with disabilities in regular classrooms (Hypothesis 2).

### Method

Data were collected from a sample of 93 primary school teachers and a total of 923 students from 3rd grade to 6th grade from the district of Ramnad, Tamil Nadu, India. The schools from which the data were collected were all Panchayat Union Schools (public schools). The district of Ramnad is divided into 11 blocks and was subjected to a multi-stage cluster sampling procedure in the selection of schools for the study. Each block/unit was considered as a cluster. Therefore a sample drawn from these clusters is considered a worthy representative of the district (Miller & Salkind, 2002). In selecting the schools from these 11 blocks, a key selection criterion was whether or not teachers had received training in inclusive education. At the time of the data collection, the SSA had covered four blocks in training teachers for inclusion. From these four blocks, two blocks were selected to include in the study. The decision to select these two blocks was influenced by a need to ensure equal representation of schoolteachers who had been trained in inclusion and also to facilitate travel between schools in close proximity using alternative means of transportation to the schools. From each of these two blocks, five schools were randomly selected and teachers were invited to participate in the study. Eight classrooms from each of the five schools (N=40) were selected for observation of classroom teaching and administration of the social status of students. The student participants were derived from the 40 classrooms, which were all taught by teachers trained in inclusive education.

### Instrumentation

The study employed a combination of survey questionnaires and participant observation along with interviews to collect data on teacher background variables (gender, age, class level taught, number of students with and without disabilities in their classrooms, their training level and years of teaching experience); attitudes toward inclusive education; self-efficacy to implement inclusive practices; classroom teaching practices and reflection on the practices.

In the model explained in Figure 1, each of the variables was measured by using different instruments. The instruments included: The Attitudes Toward Inclusive Education Scale (ATIES); Teachers' Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Hoy (2001); Classroom Observation Checklist for Social Inclusion (COCSI); The Interview Schedule for Inclusive Teachers and A Sociometric Measure: How I Feel Toward Others (Agard, Veldman, Kaufman & Semmel, 1978).

*The Attitudes Toward Inclusive Education Scale (ATIES).* This scale was developed by Wilczenski (1995) to measure attitudes towards inclusive education on 4 dimensions of academic, psychological, social and behavioural aspects and needs of students with disabilities. This instrument was translated into Tamil and was validated by a panel of 4 experts in the field in India. Examples of items are illustrated as below:

Students, whose academic achievement is one year below the other students in the same grade, should be in regular classes; and Students who cannot read standard print and need to use Braille should be in regular classes. These items were rated on a 6-point Likert-type classification from Strongly Disagree (1) to Strongly Agree (6).

The reliability of the original scale was 0.92 and the translated scale used in this study was found have a Cronbach's Alpha coefficient of 0.83. This is found to be consistent with the reliability coefficient of 0.80 obtained in another Indian study by Sharma (2001) when ATIES was translated into Hindi.

*Teachers' Sense of Efficacy Scale (TSES).* This scale was developed by Tschannen-Moran and Hoy (2001). This scale was also translated and validated for its Tamil version. The scale comprises of 24 items. It measures teacher efficacy on 3 dimensions of efficacy: student engagement, instructional strategies, and classroom management. Participants had to rate each item on a 9 point Likert-scale with anchors at 1 - nothing, 3 - Very little, 5 - some influence, 7 - Quite a bit, and 9 - a great deal (Tschannen-Moran & Hoy, 2001). The reliability coefficient of the original TSES is 0.94. The reliability coefficient of the translated TSES long form in this study was found to be 0.95. Examples of items from this scale are illustrated below:

How much can you do to control disruptive behaviour in the classroom? and How much can you do to adjust your lessons to the proper level for individual students? These items were rated on the 9-point classification as explained above.

*Classroom Observation Checklist for Social Inclusion (COCSI).* This checklist was developed by the researcher and includes a list of teaching behaviours recognised in literature as behaviours that enhance student participation, learning and positive interaction among students in inclusive classrooms (Kuyini, 2004; Mastropieri & Scruggs, 2000; Stainback & Stainback, 1990; Thompson, et al., 1993). It contained 31 items with three subscales - Basic Instruction (8 items), Facilitative Interaction (14 items), and Facilitative Instruction (9 items). Items in the checklist were scored on the basis of three classifications: 'Fully in Evidence' (scored 2), 'Partly in Evidence' (scored 1) and 'Not in Evidence' (scored 0). The checklist included items such as: Positions, handles and moves child in a functional and age appropriate manner (2, 1, 0); Students with disabilities are called upon to answer questions in teacher-led activities (2, 1, 0); Provides both individual and group instruction (2, 1, 0). The checklist was validated by four experts in the field of special education in Tamil Nadu and then subjected to a reliability analysis. The panel of experts included a special education teacher, two university professors and Ministry of education official. The main goal of the panel was to check for content validity and also to advice on the wording of items before the and after piloting. The results of the reliability analysis showed that the checklist had a Cronbach's Alpha Coefficient of 0.92, indicating that it was a reliable instrument.

*The Interview Schedule for Inclusive Teachers.* The study used a semi-structured interview schedule. The interview schedule was used to draw out the teachers' own rationale behind the behaviours that were evidenced or not evidenced during the classroom observation sessions undertaken prior to the interviews. The interview schedule, which comprised six items pertaining to social inclusion of students with disabilities in regular classrooms, was used by the investigator in the local language. The items included questions such as 'What are the strategies you use for social inclusion of students with disabilities in classroom?', 'Why do you think these strategies will help in the successful social inclusion of students with disabilities in your classroom?' and 'What do you do to create awareness among children without disabilities about the children with disabilities in your classroom?'.

*A Sociometric Measure: How I Feel Toward Others.* This Sociometric Measure is a Peer Rating measure for student participants. It was developed by Agard, Veldman, Kaufman and Semmel (1978 as cited by Fuchs, et al., 2002) and used by various researchers such as Coben and Zigmond (1986), Fuchs, et al. (2002) and Roberts and Zuberick (1992). It involved students rating every other student in the class in terms of how much he/she liked each other student. Students were presented with a class roster with four circles next to each name. Each circle contained a smiling face, straight mouth face, frowning face and a question mark. The respondent indicated his/her response by choosing one of the faces in accordance with the following: 1) the smiling face is marked for students, the rater likes (Positive); 2) the straight mouth face if selected for students, the rater is indifferent toward (Neutral); 3) the frowning face is chosen for students, the rater dislikes (Negative); and 4) the question mark is selected for the students, the rater does not know. This provided the status of each student with disability in the classrooms.

#### *Data Collection Procedure*

In keeping with the guidelines set out by The University of Melbourne, and in accordance with its ethical approval process, permission was sought from the Education for All program director for the district of Ramnad. Letters seeking permission from Principals of the selected schools were sent out and consent forms were obtained from all participants.

The process of data collection was done in a systematic fashion. First, the questionnaires for teachers (ATIES, TSES and background questionnaire) were administered. The selected 40 classrooms were then observed for two 30-minute sessions using the COCSI observation checklist, and then interviewed about

their teaching. These two activities were followed by Sociometric data collection from students using the Peer Rating Technique 'How I feel towards others' by Agard, et al., (1978 as cited by Fuchs, et al., 2002). Data was obtained from 12 classrooms of the 40 classrooms observed on this measure. Many of the teachers did not collect the data before the end of school term and after follow up letters and emails to the teachers to collect the data, only 18 of the 40 classrooms returned data. After going through the data, it was observed that only data from 12 classrooms were comprehensive enough to show any meaningful picture of the social relations in the classroom. Thus the results for this aspect of the study are based on the 12 classrooms.

### Results

The results of this study are reported in line with the research questions and hypotheses. The results of research questions 1, 2, 3, 4 and 5 are presented first and then followed by the findings for hypothesis 1 and 2.

The results for question one (teachers attitudes toward inclusive education) showed that the attitudes of the teachers ( $N = 93$ ) were positive with an ATIES Mean of 4.12 ( $SD = 0.73$ ) on the 6 point Likert-type scale. The mean score suggests that the teacher participants in the study generally held positive attitudes towards inclusive education.

The results for question two (Teacher Self-efficacy) also showed a TSES Mean score of 7.72 ( $SD = 0.96$ ). This mean score on a 9-point Likert scale indicated high self-efficacy beliefs on the following specific teacher skills that promote inclusive education. Teachers reported high scores on items such as 'Helping student's value learning'; 'Getting students to believe that they can do well in school'; 'Helping students to follow classroom rules' (which formed part of the student engagement subscale. The results however, showed moderate scores on the instructional strategies and classroom management subscales.

The results for question three showed that teachers were using more teaching practices associated with Basic Instructional Strategies and a little less of Facilitative interaction and Facilitative instruction (See Table 1 below).

**Table 1. Mean Percentage of Full Evident Items in COCSI Sub-scales**

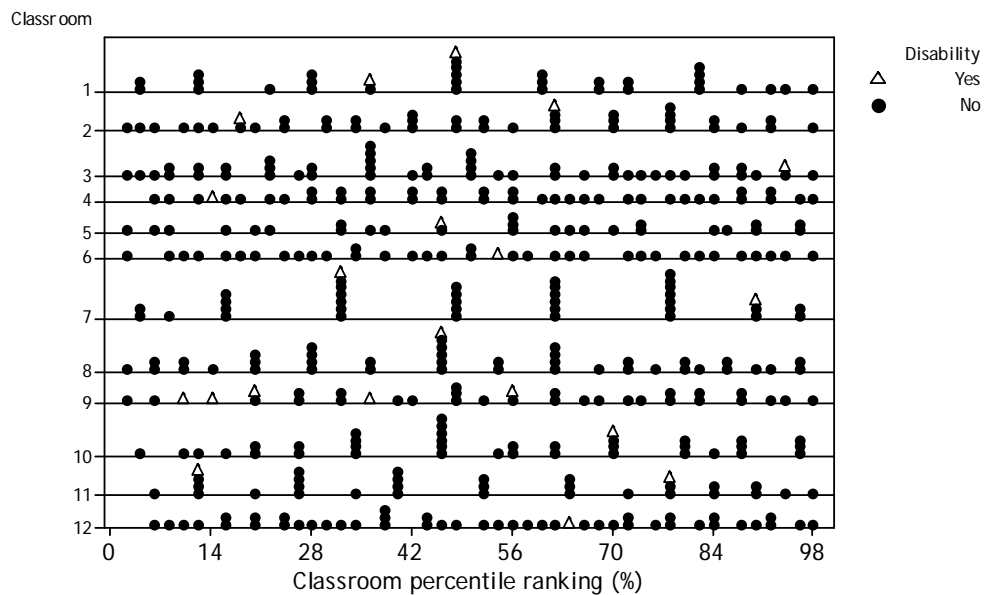
Classroom practice (COCSI Sub-Scales)	Average percentage
Basic instructional strategies	29.1%
Facilitative interaction strategies	19.5%
Facilitative instructional strategies	18.6%

The results for question four (The social status of students with disabilities in inclusive classrooms) showed that students with and without disabilities were not too different in social status based upon peer rating. To explain the position of students' social status within individual classrooms, a percentile ranking of the mean social status scores obtained by each student participant was calculated. The following dot-plot shows the percentile ranking of the social status for all students in each of the 12 classrooms.

The below Figure 2 shows the social status of students with and without disabilities in each of the 12 classrooms. The figure suggests that the social status of students with disabilities (represented by the triangles) is similarly spread out as that of students without disabilities (represented by the dots). It is clear that students who are at the lower end of the scale comprise both students with and without disabilities while it is clear that there are students with disabilities who are in the higher end of the social status percentile scale. For example, in classroom 3, there was only one student with disability and this student held a high percentile ranking.

In exploring the relationship between the teacher background variables such as gender, number of students with disabilities in classroom, and training in Inclusive education, and their scores on the measures of attitude towards inclusive education, teachers' self-efficacy and classroom practices (research question five), only one teacher background variable was significantly related to classroom practices. The background variable of 'number of students with disabilities in the classroom' had a  $p$ -value of 0.04 against COCSI mean scores. Teachers were found to be scoring higher in classroom practices when there was only one student with disabilities in their classrooms ( $M = 24.3$ ,  $SD = 10.1$ ).

Teachers with more than three students with disabilities in their classrooms displayed the least effective classroom practices ( $M = 11.9$ ,  $SD = 11.6$ ). Likewise, the age of the teachers also reflected a direct influence on the classroom practices of the teacher. The mean COCSI score was lowest for teachers who were in the age group of 51-60 years ( $M = 15.9$ ,  $SD = 9.9$ ,  $p = 0.04$ ). There were no significant correlations between teachers' attitudes, teachers' self-efficacy and the other variables.



**Figure 2. Dot-plot of Percentile Ranking of Social Status of All Students in 12 Classrooms**

The hypothesis that *teacher attitude, teacher self-efficacy, and classroom practices, together with the teacher background variables (such as gender and teaching experience) will predict the social status of students with disabilities in regular classrooms* was tested by employing a multiple regression analysis where all variables were considered in predicting the social status of students with disabilities. In doing this, only two of the subscales of the classroom practices scale (COCSI) significantly predicted the social status of students with disabilities. They were COCSI –Basic instruction and COCSI Facilitative Instruction (see Table 2). The remaining teacher variables were shown not to predict social status of students with disabilities.

**Table 2. Regression model summary: Teacher Variables as Predictor of Social Status of Students with Disabilities**

	Coef	SE Coef	<i>p</i>
Constant	0.4830	0.1237	
COCSI Basic Instruction subscale	-0.04859	0.01869	0.029
COCSI Facilitative Instruction subscale	0.08437	0.01869	0.001
R Square = 69.8%			
Adjusted R Square = 63.0%			

The two COCSI subscales shown in Table 2 explained 63% of social status of students with disabilities in regular classrooms. Thus, it can be shown that teachers' classroom practices of basic instruction (for example; arranging instructional environment to accommodate the needs of all students, clarity in presentation, and scanning and circulating frequently), and facilitative instruction (for example; providing both individual and group instruction, accommodation of students' attention span, and

allowing students with disabilities to respond) were the strongest predictors of social status of students with disabilities in regular classrooms when all the teacher variables of attitudes, self-efficacy and background factors were considered.

To test the second hypothesis that *teacher attitude, teacher self-efficacy and classroom practices, will predict the social status of students with disabilities in regular classrooms*, a multiple regression analysis procedure involving all of the teacher variables (ATIES, TSES and COCSI) – except teachers' background variables – was used. When the background variables of the teachers were omitted from the regression equation, the effect of classroom practices (COCSI scores) was once again evident. Table 3 gives the correlation of the COCSI with social status of students with disabilities in regular classrooms.

**Table 3. Correlation of COCSI with Social Status of Students with Disabilities**

Classroom Practice (COCSI)	Correlation with Social Status	p-value
Basic Instructional Strategies	-0.059	0.9
Facilitative Interactions	0.592	0.04*
Facilitative Instruction	0.686	0.01*
Total COCSI Score	0.548	0.07

\* $p < 0.05$

Table 3 above demonstrates that though the total COCSI score was not significant ( $p = 0.07$ ), two of the subscales of COCSI - Facilitative Interaction and Facilitative Instruction were positively correlated ( $p = 0.04$  and  $p = 0.01$  respectively) with social status of students with disabilities. This shows that the teachers' classroom practices on facilitative interaction strategies and facilitative instruction strategies had a direct influence on the social status of students with disabilities in regular classrooms. This also showed that the teachers' attitudes toward inclusive education (ATIES) and teachers' self-efficacy (TSES) did not have any predictive power over the social status of students with disabilities.

### Discussion

The study showed that teachers had positive attitudes towards inclusive education and reported high self efficacy scores on skills and actions that would support inclusive schooling. The results showing positive attitudes toward inclusive education mirrors results from a New Delhi study by Sharma (2001) in the field. The high self-efficacy scores related to the findings of Graham et al., (2003) in the US and Romi and Leyser (2006) in Israel and Palestine.

The most significant finding of the study was that, in the context of The Intergroup Contact Theory, teachers' classroom practices predicted the social inclusion of students with disabilities in regular classrooms. Teachers' attitudes towards inclusive education and self-efficacy were not significant influences on the social status of students with disabilities in regular classrooms. The results of this study are in accordance with previous research by Roberts and Zuberick (1992) who found teachers' attitudes towards inclusion were not significantly related to the social acceptance or rejection of students with disabilities. While the findings of the present study show teachers' self-efficacy to be unrelated to students' social status in inclusive classrooms, a review of literature revealed no other studies on this question. Replication of this finding could be helpful in future research. The fact that social status was predicted by teachers' classroom practices including facilitative instruction mirrors the findings of Fuchs, et al. (2002) and Utley et al. (2001), who studied the effects of peer tutoring (a form of facilitative interaction) on social status). The authors found that students with disabilities in peer tutoring programs classes were more socially accepted than their counterparts, and enjoyed the same social standing as most non- disabled classmates. A key implication of this finding is that teacher behaviour is an important component of the effort to facilitate social inclusion. It also implies that teachers can make a difference in the social inclusion experiences of students with disabilities and that such inclusion, through increased peer interaction, may foster more learning opportunities and potentially better school outcomes for



students with disabilities. Although this finding relates specifically to the context of Tamil Nadu, it may also apply to other areas in India with similar socio-cultural environments and school practices.

The findings of the study also showed similar ranges of social status for students with and without disabilities in regular classrooms (refer to Figure.3). These findings agree with earlier studies (Bakker & Bosman, 2003; Hall & McGregor, 2000; Kemp & Carter, 2002) and may be an exception to the norm in many contexts around the world where attitudes toward people with disabilities are less positive. However, the finding may not be surprising in this study region (Tamil Nadu, India) when one takes into consideration the cultural context whereby all students came from their own small villages and had been growing up together as playmates in the same location. These shared experiences of students with and without disabilities could have generated a natural social inclusion orientation among the students, with or without effective classroom practices of the teachers. This was particularly reflected in the interviews. One teacher's comment captured what most of these teachers felt:

*...it is the students without disabilities in my class who tell me if I have misunderstood the students with disability (hearing impairment) and give me information on the child. Especially, during the beginning of the year, it took me sometime to adapt to the child with disability in my class. The students without disabilities already knew the child better than me and they helped the child at class-work. There was no need for me to prepare or specially talk to these students about the child with disability. They already know and are very helpful to each other.*

This seems to be unique to this particular culture in India where there are no public welfare agencies or institution-based care services taking care of children with disabilities, but there exists, rather, an attitude more or less bound by a moral sense of *duty* in the structure of family and community (Clarke, 2006; Alur, 2001). One advantage of such a societal attitude is that people are more socially and culturally dependent on the community and this could lead to a natural or casual inclusion of children with disabilities in the community and schools (Alur, 2001).

The teachers in the study also found to be using more basic instructional strategies and that the presence of students with disabilities in the classroom influenced teacher practices. There was a significant difference in the mean scores of teachers' classroom practices due to the number of students with disabilities in the classroom. Teachers were found to be scoring higher in classroom practices when there was only one student with disabilities in their classrooms. Teachers with more than three students with disabilities in their classrooms displayed the least effective classroom practices. This suggested that the greater the number of students with disabilities in the classroom the less the evidence was of teachers' effective classroom practices on social inclusion. Similar findings were reflected by Graham et al. (2003) who found a positive correlation with adaptive instruction for struggling writers and percentage of students with disabilities in their classroom. Correspondingly, Kavoori (2002) in relating the success of inclusive classrooms in New Delhi stressed that it is dependent on the number of students with disabilities in the regular classroom. The need for extra time and additional responsibilities imposed on teachers by the increase in number of students with disabilities in classroom is expected to affect teaching processes. This may reflect the reality that each student with a disability has different needs and calls for more work in terms of adapting instruction. And such a conclusion is supported by the teachers' responses during interviews. Some teachers reported in the interviews that large class-sizes was a burden and limited their classroom practices. As these classroom teachers were solely responsible for the classrooms without any teacher assistants, in their classroom practices were more likely to be constrained. The successful use of teacher aides in classrooms within the state of Victoria, Australia could be a helpful model to follow in Indian classrooms and policy makers in India should consider this approach to supporting teachers.

### **Conclusion**

This study provided some support for the Intergroup Contact Theory (Allport, 1954) where the acceptance of students with disabilities in regular classrooms is contingent on the teachers' classroom practices. The results from this study showed the classroom practices of the teacher had greater predictive power than other variables (such as teachers' attitude towards inclusive education or teachers' self efficacy) on the social status of students with disabilities in regular classrooms. This implies that although studies (Loreman, Forlin & Sharma, 2007; Tschannen-Moran & Hoy, 2001) point to the positive role of teacher attitudes and teachers self-efficacy in the successful inclusion of students with disabilities, these factors (attitudes and self-efficacy) need to be translated into teaching practices at the classroom level that support such students.

The results of this study also showed that students with disabilities were well accepted by their peers in the inclusive classrooms where teachers were using facilitative teaching practices. The implications of these findings point to the potential for successful social outcomes of inclusive education when teacher classroom practices are inclusive. It further suggests that a natural inclusion process may be created when students live and grow in close proximity as a community.

In terms of teachers as agents of social facilitation, the study suggests that teacher behaviour is an important component of the effort to facilitate social inclusion. Although this study cannot be generalised across India, the implication of the findings are that teachers can make a difference in the social inclusion experiences of students with disabilities and that such inclusion may also allow for better school outcomes that are associated with increased peer interaction. For policy makers and teacher training institutions, the findings imply that they need to think of ways to enhance schools' and teachers' capacities to facilitate social inclusion. This can be done through refining teacher inclusive skills and the creation of school and classroom environments that foster equality, common goals and inter-group cooperation among students (Allport, 1954). Since positive teacher attitudes are also linked to good teaching practices (Cook, 2001; Elliot, 2008; Kuyini & Desai, 2007) policy makers would also need to provide the school supports and resources that engender positive teacher attitudes, which also enhance inclusive teaching practices. Finally local school districts have a chance to promote a natural transition from community inclusion to school inclusion for children / students with disabilities.

This study was limited to Tamil Nadu and it not clear whether the findings would be replicated in districts across India with similar conditions. Therefore, further research is needed to investigate teachers' attitudes, self-efficacy and practices with regard to social inclusion of students with disabilities. It will also be relevant to investigate the similarities and differences in teachers' attitudes, self-efficacy and practices within and across different, regions, school districts, and contexts such as rural, urban and remote.

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