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RESEARCH PAPERS

A Study of Teacher Influence in the Classes of
Primary School Teachers *vis-a-vis* Emotional
Intelligence and Demographic Variables

Schooling of Children Living in Slum Areas: An Analysis of 31 Selected
Households from Hyderabad and Ludhiana

Do Schools Equalise Academic Achievements to Overcome
Socio-economic Differences: A Study of Determinants of
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Risk Taking Behaviour of Parentally Accepted and
Rejected Children

RESEARCH NOTE

Skills Information Base for Technical and Vocational
Education and Training Policy

Achievement Motivation of the High School Students:
A Case Study among Different Communities of
Goalpara District of Assam

Education and Ethnic Communities: Towards
an Inclusive Framework

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एन सी ई आर टी
NCERT

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

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Announcement

Some of the forthcoming issues of IER will be special issues dedicated to specific themes. Two of these are planned to be on 'Inclusive Education' and 'Quality of School Education' including enhancement/assessment.

EDITORIAL

The present seems to be a very critical testing period in the journey of education, both globally and nationally. Various countries are looking into their achievements and shortfalls vis-a-vis the Millennium Development Goals relating to education and assessing the ground covered in their efforts to reach all and in giving the equal opportunities and experiences in education to learners with diverse backgrounds and requirements. India is also initiating steps and is soon to announce a new National Education Policy. There is a certain uneasiness as well as hurry in keeping track of enormous issues and addressing them well in educating and skilling India's youth appropriately, so that it really turns out to be a 'dividend'. There are huge needs of scaling up, not only 'reaching the unreached' but handholding, designing and delivering education having connects with society at large, including all the marginalised and 'their world'; with livelihood and unforeseen work domains which are still in the folds of future; connect of what goes in the classrooms or during curriculum transaction with actual learning and practice of what is learnt in real life and at work. A number of questions would need to be sorted out while proposing a new policy on education, such as, whether the policy provisions of common curriculum, no detention, CCE need a review; whether vocational education be a separate stream or integrated, for that matter should there at all be any streaming of subject areas in school education or should there be credit based modular courses following semester system and if so from what stage, etc. How can the marginalised and the individual on the last rung of the ladder among the marginalised can feel included, get retained and benefited. Researchers are constantly studying the system and exploring ways to respond to the concerns. It is assumed that the research based evidences will find their due place in policy revisions and drafting of new educational goals.

This issue brings to its readers four research papers and three research notes. The issue begins with a study "A Study of Teacher Influence in the Classes of Primary School Teachers *vis-a-vis* Emotional Intelligence and Demographic Variables". The findings of the study signify the importance of emotional intelligence for teaching profession. Next paper is a comparative study placed in Hyderabad and Ludhiana and looks into the Schooling of Children living in Slum Areas. It analyses the ground reality as to how much the efforts of the State have been able to reach these disadvantaged groups. The third study placed in Tamil Nadu attempts to examine whether the school education really provides an environment for inclusiveness or it creates further inequality. The fourth paper

examines the risk taking behaviour of parentally accepted and rejected children in Kashmir valley. This work assumes particular significance as the state is facing armed conflict for a long time. The first research note strongly advocates for a strong skill information base for effective Vocational Education and Training policy. While examining various aspects of education-to-work transition, it attempts to make certain policy recommendations. The next research note titled “Achievement Motivation of the High School Students: A Case Study among different Communities of Goalpara District of Assam” examines the effect of achievement motivation on the academic achievement of high school students of tribal and non-tribal communities vis-a-vis their sex and locale. The issue concludes with the research note on inclusive education among the Kadar tribes based on the experiences from the preparation and distribution of locally contextualised education material for the Kadar.

With this issue of the Indian Educational Review, I take leave from the readers as its Academic Editor. I hope the academic fraternity found the articles published in the issues in my academic editorship useful and intellectually satisfying. I will, however, remain associated as Professor in Educational Research and wish the incoming Academic Editor all the very best.

The Indian Educational Review will continue to focus its attention on contributing to the discipline of education by disseminating quality research work to its readers. We are committed to providing opportunities for sharing research experience among fellow researchers, motivating young researchers and providing inputs to all those involved in teaching, investigating and policy making. As was announced earlier, we plan to bring out some special issues of IER. Some of the forthcoming issues will be on ‘Inclusive Education’ and on ‘Quality (enhancement/assessment) of school education’. Contributions of academicians, researchers, research writers and institutions are cordially invited for the next issues, including those of the special issues. We look forward to your suggestions for bringing improvement in the quality of journal.

Poonam Agrawal
Academic Editor

Indian Educational Review

Indian Educational Review aims to enhance the theory and practice of research in education. It is a journal of opinion and research in the field of education. Contributions may comprise scholarly discussion of new issues, reports of research, reviews of researches in particular field, reports of developments, and debate on educational research generally or on specific issues. Contributions are also invited reporting all kinds of empirical research in education, whether sociological, psychological, economic or organisational. The journal is intended to cover a wide range, including interdisciplinary studies.

In addition, the purpose of this journal is to provide a medium for dissemination of educational research and exchange of experiences among research workers, scholars, teacher-educators, teachers and others interested in educational research and related fields and professions.

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OFFICES OF THE PUBLICATION DIVISION, NCERT

NCERT Campus
Sri Aurobindo Marg
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POONAM AGRAWAL

A Study of Teacher Influence in the Classes of Primary School Teachers *vis-a-vis* Emotional Intelligence and Demographic Variables

GAURANG TIWARI* AND ASHA PANDEY**

ABSTRACT

Effects of Emotional Intelligence (EI) and demographic variables have been examined on teacher influence. I/D ratios of teachers as per Flanders (1970) were treated as indices of teacher influence in classroom. Study revealed that level of EI of teachers affects teacher influence (I/D ratio) significantly. Effects of demographic variables like: training, stream (art and science) and sex have been found to be insignificant. Type of school (government and private) is observed to affect teacher influence significantly and observed to moderate association between EI of teachers and teachers' I/D ratios. Due to significant effect of EI on teacher influence (I/D ratio or Indirectness/Directness) of primary school teachers, it is likely to be concluded that teacher high on emotional intelligence will exert "Indirect Teacher Influence" while teaching.

Introduction

1. Introduction

There is a paucity of studies related to emotional intelligence and teaching behaviour. But on the basis of findings of studies related to Emotional Intelligence (EI), it is likely to say that EI seems important for teaching profession. Review of researched areas related to EI brings forth that EI has been significant predictor of social quality relationship, interpersonal relationship, workplace success, motivation, teaching self-efficacy, stress and burn out, and communication effectiveness. If findings of studies conducted in relation to foregoing mentioned criterion variables are reviewed, it appears that EI is likely to be important for teaching profession.

* Junior Research Fellow, Faculty of Education, Banaras Hindu University

** Professor, Faculty of Education, Banaras Hindu University.

Findings of studies which explored that EI is strongly related to and significant predictor of quality of social relationship (Brackett, Mayer and Warner, 2004; Eisenberg, Fabes, Guthrie and Rieser, 2000; Lopes, Salovey and Straus, 2002) signify the importance of Emotional intelligence in classroom teaching. Teaching bears social orientation and takes place in socio-cultural context of classroom. As such, teachers can exercise their EI dealing with students. The way teacher relates himself or herself to students; it decides the conduciveness of social-emotional climate of classroom (Flanders, 1970).

Studies which have been conducted to find out association between EI and self-efficacy as well as EI and communication effectiveness, revealed association between EI and teaching self-efficacy and between EI and communication effectiveness. Significant positive association between EI and teaching self-efficacy reveals that EI play important role in possessing positive belief about teaching capabilities. Teacher higher in EI will tend to have positive belief about his teaching capabilities (self-efficacy), because, teacher high in EI has awareness about his strength and weakness (Penrose, Perry and Ball, 2007). EI is significant predictor of teaching self-efficacy and teaching self-efficacy is one of the most important variables consistently related to positive teaching and student learning outcome (Ashton and Webb, 1986; Enochs, 1995; Gibson and Dembo, 1984; Henson, Kogan and Vacha-Haase, 2001, Podell and Soodak, 1993; Tschannen-Moran, 1998; Woolfolk and Hoy, 1990). Significant association between EI and teaching self-efficacy appears to underscore validity of theory of EI and its utility for teachers.

Communication is culmination of all EI abilities (Mayer, Salovey and Caruso, 2004). Emotional intelligence abilities like ability to perceive emotion, ability to use emotion to guide action, ability to understand emotion and ability of reflective management of emotion underlie communication effectiveness (Mayer, Salovey and Caruso, 2004). Main advocators of emotional intelligence theory argue that emotional intelligence lead to improve communication effectiveness (Mayer, Salovey and Caruso, 2004). To be emotionally and socially intelligent is to effectively understand and express oneself, to understand and relate well with others, and to successfully cope with daily demands, challenges, and pressures (Bar-On, 2002). The social awareness of EI has directly relationship with people and groups precisely and communication such as the

empathic individual can read emotional currents, picking up on nonverbal cues such as tone or facial expression (Jorfi, Yacob and Shah, 2011). The high EI individual, most centrally, can better perceive emotions, use them in thought, understand their meanings, and manage emotions better than others and tends to be more open and agreeable (Mayer, Salovey and Caruso, 2004). EI abilities decide communication effectiveness (Mayer, Salovey and Caruso, 2004), as such, EI seems important in teaching profession. EI appears to be important for teaching profession. But, it seems that individuals high on EI, is likely to use high-level capabilities to read and manage the emotions of others to manipulate their behaviour to suit that individual's interest. Dispositional tendency to emotionally manipulative behaviour immediately brings to mind the trait of Machiavellianism (Mach). For this potential manipulative/dark side of EI was examined by Austin, Farrelly and Black (2007). Austin, Farrelly, Black and Moore (2007) examined association between trait Machiavellianism (Mach) with self-report and performance EI. They found that Mach tended to correlate negatively with self-report and performance EI. Emotional manipulation was positively correlated with Mach but unrelated to EI. So, it seems erroneous to infer that individual high on EI are likely to be manipulative in interpersonal relationship.

EI is found to be strong predictor of success at work place (Cherniss, Extein, Goleman and Weissberg, 2006; Van Rooy and Viswesvaran, 2004), replication of studies in Indian setting indicate the cross-cultural validity of EI as a predictor of success at work place (Bedi, 1999; Mathur, 2000; Pradhan and Bano, 2000; Singh, 1998). These studies indicate that person high in EI can translate his potential and capabilities at work place success. EI has been found to be predictor of success at work place in Indian setting, too. It indicates the likelihood of EI as significant predictor of teaching behaviour in the Indian context, too.

2. Rationale of the Study

In a good number of studies, attempts have been made to study incremental validity of EI construct in explaining variation in criterion. Most research on the incremental validity of EI has been conducted by examining correlations with criteria concerning aspects of a successful life. There have been encouraging results regarding the incremental validity of EI explaining quality of social interactions and relations (Lopes, Brackett, Nezlek, Schutz, Sellin

and Salovey, 2004; Lopes, Salovey and Strauss, 2002), illegal drug and alcohol use, deviant behaviour, and poor relations with friends (Brackett, Mayer and Warner, 2004), social deviance and alcohol use (Brackett and Mayer, 2003), different “life skills” (Bastian, Burns and Nettelbeck, 2005), life satisfaction, and feelings of powerlessness (Law, Wong and Song, 2004; Wong and Law, 2002).

Nevertheless, it is striking that most investigators used criteria concerning life outcomes and not achievement criteria. Regarding EI as an ability that is said to predict professional success and success in life better than intelligence (Watkin, 2000), EI should be especially predictive of those criteria. The achievement criteria investigated to date in the context of the incremental validity of EI are professional success, cognitive performance, and academic achievement. In this study, attempt has been made to study the role of EI in teaching behaviour of primary school teachers.

Dynamic interchange between the mind of the teacher and individual learner is kernel of effective pedagogy. If teacher succeeds in bringing about the dynamic interchange, it might be attributed to his EI (Ergur, 2009). Dynamic interchange between the mind of teacher and his students is contingent on socio-emotional climate of the classroom (Pandey, 1981). Here, level of EI is likely to be important for teachers (Ergur, 2009). This study is to be concentrated around primary education because the first exposure of child in terms of learning and developing capabilities to relate to the external world starts at school. For the first time in their lives, children feel the need to emotionally react differently to a whole set of new relationships coming as stimuli from the environment, hitherto alien to them. The transition from dealing with informal to formal relationships along with the need to balance both, together, creates tremendous role strains in the children, thereby disturbing their hitherto undifferentiated emotional and social world.

Against this backdrop, it seems plausible that EI appears to be important for persons inducted in teaching profession. Emotionally intelligent teachers are likely to display diversified communication pattern in classroom teaching. Emotionally intelligent teachers are likely to be active in their orientation towards teaching profession. There is likelihood of conducive social-emotional climate and enriched cognitive organisation in the classes of emotionally intelligent teachers.

3. Variables of the Study

3.1. Explanatory variables

In this study emotional intelligence and demographic variables like: school type, training, sex, and stream of teachers were treated as explanatory variables for two-way ANOVA.

3.2. Criterion variable

In this study teacher influence (I/D ratio) is treated as criterion variable for two-way ANOVA.

3.3. Demographic variables

In this study, school type, training and sex of teachers have been treated as demographic variables.

4. Objectives of the Study

The major objectives of the study are:

1. To find out the effect of level of EI by sex on teacher influence in the classroom.
2. To find out the effect of level of EI by training on teacher influence in the classroom.
3. To find out the effect of level of EI by stream (art and science) on teacher influence in the classroom.
4. To find out the effect of level of EI by school type (government and private) on teacher influence in the classroom.

5. Null-Hypotheses

This study purported to test the following null hypotheses (at 0.05 level of significance):

- H₀₁**: There is no significant difference between the influence exerted in the classroom by male and female teachers having different level of EI.
- H₀₂**: There is no significant difference between the influence exerted in the classroom by trained and non-trained teachers having different level of EI.
- H₀₃**: There is no significant difference between the influence exerted in the classroom by the science and art background teachers having different level of EI.
- H₀₄**: There is no significant difference between the influence exerted in the classroom by government and private school teachers having different level of emotional intelligence.

6. Operational Definitions of the Term Used

6.1. Teaching Behaviour

In this teaching behaviour is defined as it is measured by Flanders Interaction Analysis category System (FIACs) as illustrated in Table 1.

6.2. Emotional intelligence

Emotional intelligence is the ability of an individual to appropriately and successfully respond to a vast variety of stimuli being elicited from the inner self and immediate environment. Emotional intelligence constitutes three psychological dimensions—emotional sensitivity, emotional maturity and emotional competency which motivate an individual to recognise truthfully interpret honestly and handle tactfully the dynamics of human behaviour (Singh, 2002).

Table 1
Flanders Analysis Category System.

		Categories
(a)	Teacher Talk <i>Indirect Influence</i>	1. Accepts feelings 2. Praises or encourages 3. Accepts or uses pupil ideas 4. Asks questions
	<i>Direct Influence</i>	5. Lecturing 6. Giving Directions 7. Criticising or justifying authority.
(b)	Pupil Talk <i>Response</i> <i>Initiation</i>	8. Pupil talk response 9. Pupil talk initiation
(c)	<i>Silence/Confusion</i>	10. Silence or confusion

(Flanders, 1970)

Emotional intelligence abilities contained by foregoing three psychological dimensions are given below:

6.2.1 Emotional competency

Emotional intelligence abilities which constitute this competency are:

- (a) Tackling emotional upsets
- (b) High self-esteem

- (c) Tactful response to emotional stimuli
- (d) Handling egoism

6.2.2 Emotional Maturity

Emotional intelligence abilities which constitute this competency are:

- (a) Self-awareness
- (b) Developing others
- (c) Delaying gratification
- (d) Adaptability and flexibility

6.2.3 Emotional Sensitivity

Emotional intelligence abilities which constitute this competency are:

- (a) Understanding threshold of emotional arousal
- (b) Empathy
- (c) Improving inter-personal relations
- (d) Communicability of emotions

6.3. Indirectness and Directness

As per Table 1, Indirectness implies those teacher's behaviours that expands students' freedom of action in the classroom. In the context of Flanders Interaction Analysis Category System (FIACS), it is represented by teacher statements accepting or using student's ideas or opinion, praising or encouraging students' ideas or behaviours, clarifying and accepting feelings of the pupils and asking diversifies questions.

As per Table 1, Directness refers those teacher's behaviours that restrict students' freedom of action in the classroom. These teacher behaviours are represented in FIACS by lecturing, giving directions or commands, and criticising students' ideas or behaviours (Flanders, 1970).

6.3.1 Teacher Influence

In this study, I/D (Indirectness/Directness) ratio is used as index of teacher influence. Formula to compute this ratio is:

$$\text{Indirectness}(I/D) = \frac{(\text{Categories } 1+2+3+4)}{(\text{Categories } 5+6+7)} \times 100$$

6.4. School type

School type refers government run schools and private schools. Government school further refers Central Schools run by Central

Government and Primary Schools run by U.P. Government in Varanasi District. Private schools which are affiliated to CBSE are taken in this study.

6.5. Training

In this study, trained and non-trained have been defined on the basis of B. Ed. Course pursued by teachers teaching in these schools. Teachers who have pursued B. Ed. Course have been treated as trained teachers. Teachers who have not pursued B. Ed. Course have been treated as non-trained.

6.6. Stream

In this study, stream refers science and art at graduation level.

7. Methodology

Descriptive and explanatory research methods were employed in this study.

8. Population and Sampling Technique

All the primary school teachers of Government, Government aided and private schools in Varanasi district of Uttar Pradesh, constituted the population of the study; 'Multi-stage random sampling technique' was employed for selection of sample. 91 primary school teachers were randomly drawn for this study. Sample break-up has been given in Table 2.

Table 2
Sample Break Up: As per Demographic variables of study.

Sex		Stream		School type		Training	
Male	Female	Science	Art	Government	Private	B.Ed.	Non B.Ed.
36	55	35	56	40	51	61	30
91		91		91		91	

9. Tools used

1. Flanders interaction analysis category system (FIACs)

Prior to observation of each sampled teacher by FIACs, the investigator received comprehensive training in observing teachers in classroom situations. The categories (FIACs) were memorised thoroughly. By the end of the training period the inter-observer reliability, using Scott's coefficient correlation was consistently near about 0.78. For establishing inter-

observer reliability, two observers observed the classroom by FIACS. Likewise, Scott's coefficient (r) for intra-observer reliability was computed, which was found to be 0.86. As pointed out by Ober and others (1971), an r of 0.60 is frequently established as an acceptable level (Pandey, 1981). Each of the teachers was observed for the 35 minutes.

After observing each sampled teachers, 10×10 matrices was compiled for each teacher separately. On the basis of respective 10×10 matrices, I/D ratio was computed for each sampled teachers.

- 2. The EQ Test (developed by Prof. N. K. Chadha and Dr. Dalip Singh)** was adapted in the Hindi by the investigator for the measurement of EI of primary school teachers. Reliability of the scale has been established by 'test-retest method' and 'internal consistency method'. A sample comprising 100 primary school teachers were drawn randomly. The scale was administered twice a time interval of 15 days to the same sample. Pearson product moment correlation ' r ' was computed between the two set of measures to indicate stability coefficient of the scale. The test-retest reliability was found to be 0.89. Cronbach-alpha coefficient (Index of internal consistency) was computed for each dimension of emotional intelligence-emotional sensitivity, emotional maturity and emotional competency, which found to be 0.76, 0.69 and 0.74 respectively.

Validity was determined with the help of the two techniques: (1) face validity and (2) empirical validity. Face validity is confirmed for the test as confirmed by the expert judgments. For empirical validity of the scale, it was correlated with the 'external criteria'. The external criteria taken in the present study was 'Bhattacharya Instrument of Emotional Intelligence' (BEIS-In). The validity was found to be 0.58, which indicates that the present test is valid.

10. Analysis, Results and Discussion

For studying teacher influence vis-à-vis EI of teachers, teachers were categorised in four groups.

10.1. Categorisation of teachers in different groups

On the basis of scores on 'Emotional Intelligence Test', teachers were classified into four groups; as per established norms of the test,

- Teachers who scored 285 or above were grouped as EHE (teachers having Extremely High Emotional Intelligence).

- Teachers who scored in the range of ‘250-284’ were grouped as ‘HE’ (teachers having High Emotional Intelligence).
- Teachers who scored in the range of ‘200-249’ were grouped as ‘ME’ (teachers having Moderate Emotional Intelligence).
- Teachers who scored in the range of ‘150-199’ were grouped as ‘LE’ (teachers having Low Emotional Intelligence).

10.2. Analysis, results and discussion are being presented according to objectives of the study

Objective 1: To find out the effect of level of emotional intelligence by sex on teacher influence in the classroom.

Null-hypotheses which are framed in conjunction with this objective are:

HO1: There is no significant difference between the influence exerted in the classroom by male and female teachers having different level of emotional intelligence

Under this null-hypothesis, as follows sub-null-hypotheses were framed:

H_{o1.1}: Levels of EI will not significantly affect teacher influence (I/D ratio) in the classes of male and female teachers.

H_{o1.2}: Sex of teachers will not significantly affect teacher influence (I/D ratio) in their classes.

H_{o1.3}: Levels of EI by sex of teachers will not significantly affect teacher influence (I/D ratio) in their classes.

As per Table 3, F-value (9.48) for entire model is found to be significant at 0.05 significance level. It indicates that both explanatory variables (level of EI and sex) and their interaction caused significant variation in criterion variable (I/D ratio). Value of Eta² (coefficient of determination) indicates effect size produced by foregoing explanatory variables and their interaction, which is obtained to be 44.4%, which refers that these variable and their interaction, account for 44.4% variance in I/D ratios of teachers.

Table 3
Summary of Analysis of Variance on I/D vis-à-vis Sex and Emotional Intelligence.

Source of Variance	SS	Df	MS	F	Significance	Eta squared
Corrected Model	11241.77	7	1605.97	9.48	0.05*	0.444
Emotional intelligence	9861.64	3	3287.23	19.40	0.05*	0.412

Sex	66.64	1	66.64	0.40		0.005
EI x Sex	1091.63	3	363.88	2.15		0.072
Error Variance	14067.14	83	169.48			

*Significant at 0.05 Significance level

F-value (19.40) is found to be significant at .05 significance level for df (3, 83) for main effect of EI. So, assertion made by null-hypothesis (HO1.1) that levels of EI will not significantly affect teacher influence in the classes of male and female teachers, is rejected. Alternatively, it refers that level of EI affect the I/D ratios of teachers significantly.

On the contrary to it, F-value (0.40) for main effect of sex on I/D is found to be not significant at .05 significance level for df (1, 83). It denotes that sex of teachers does not affect their I/D ratios significantly. So, null-hypothesis (HO1.2) was retained regarding its assertion that sex of teacher does not affect their I/D ratios significantly.

In addition to this, interaction effect of EI by Sex is not observed affecting I/D ratios of teachers significantly, because, F-value (2.15) for this is found to be not significant for df (3, 83). Hence, null-hypothesis (HO1.3) was retained regarding its assertion.

The fact, F-value for the interaction between the Sex by level of EI is not found significant, it indicates that the difference between the means of male and female teachers in the EHE, HE, ME and LE groups do not differ significantly from one another. With a not significant interaction effect between EI by Sex, it may be deduced that the main effect of sex i.e., the difference between the male and females, is independent of the effect of level of EI. Alternatively, it may be said that main effect due to level of EI i.e., significant difference among the mean I/D ratios for EHE, HE, ME and LE groups of teachers, is independent of the effect of sex.

As per Figure 1, it appears that mean I/D ratios of male and female primary school teachers are increasing when level of EI is observed to be increased. So, EI affects I/D ratios of teachers. On the basis of perusal of graph, it appears that male teachers have greater mean I/D ratios in three groups viz in EHE, ME and LE groups, but, this trend could not be maintained by male teachers in HE group where female teachers have greater mean I/D ratios than their counterparts. Here, it is likely to be deduced that though

interaction effect of both explanatory variables (EI by Sex) has been found insignificant, but interaction effect is perceptible for male teachers and interaction effect is found to moderate association between EI and I/D ratios of male teachers.

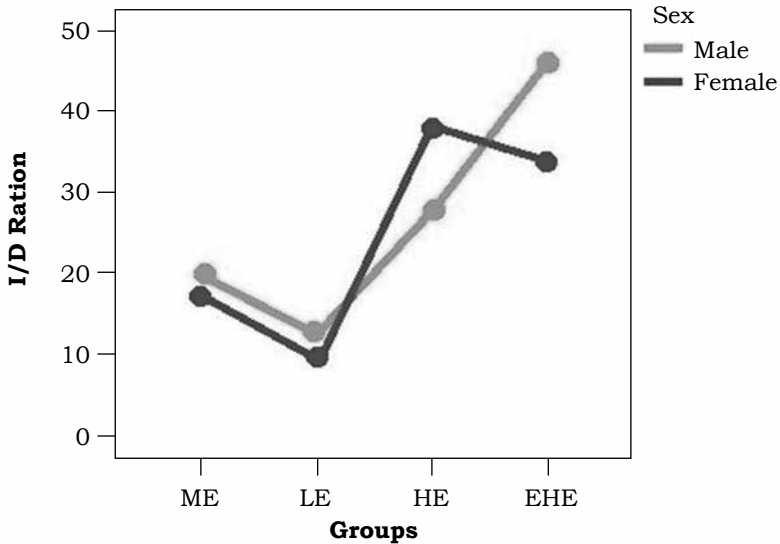


Fig 1: Graph of EI by Sex on I/D ratio

Eta^2 (coefficient of determination) for EI is 41.2 per cent indicates the effect size for EI, which refers that EI explains 41.2 per cent variance in the criterion variable (I/D ratio). On the contrary to it, sex explains only 0.5 per cent variance in I/D ratios of teachers as revealed by its Eta^2 . Interaction effect of EI by Sex as revealed by Eta^2 explains only 7.2 per cent variance in I/D ratios of teachers.

10.3.Objective 2: To find out the effect of level of EI by training on teacher influence in the classroom

Null-hypotheses framed in conjunction with this objective.

H₀₂: There is no significant difference between the influence exerted in the classroom by trained and non-trained teachers having different level of EI.

Under this null-hypothesis, as follows sub-null-hypotheses were framed:

H_{02.1}: Levels of EI will not significantly affect teacher influence (I/D ratio) in the classes of trained and non-trained teachers.

H_{02.2}: Training of teachers will not significantly affect teacher influence (I/D ratio) in their classes.

H_{02.3}: Levels of EI by training of teachers will not significantly affect teacher influence (I/D ratio) in their classes.

From Table 4, it is revealed that F-value (8.35) for entire model (effect produced by level of EI, effect produced by training and effect produced by interaction of level of EI x training) is found to be significant at 0.05 significance level for df (7, 83).

Table 4
Summary of Analysis of Variance on I/D vis-à-vis Training and EI.

Source of Variance	SS	df	MS	F	Significance	Eta squared
Corrected Model	10455.71	7	1493.67	8.35	0.05*	0.413
Emotional intelligence	7278.28	3	2426.09	13.56	0.05*	0.329
Training	17.95	1	17.95	0.10		0.001
EI x Training	345.82	3	115.27	0.64		0.023
Error Variance	14853.19	83	178.95			

*Significant at 0.05 Significance level

F-value (13.56) for effect of level of EI is found to be significant at 0.05 significance level for df (3, 83). It implies that differences in mean I/D ratios of teachers belonging to EHE, HE, ME and LE groups is likely to be produced by effect of their level of EI. So, null-hypothesis (H02.1) was rejected regarding assertion made by it.

F-value (0.10) associated with the main effect of training, is observed to be not significant at 0.05 significance level. It refers that training of primary school teachers does not affect their I/D ratios significantly. Hence, null-hypothesis (H02.2) was retained regarding assertion made by it.

F-value (0.64) associated with interaction effect of level of EI x training, is observed to be insignificant, which denotes acceptance of null-hypothesis (H02.3). Insignificant interaction effect implies that differences in mean I/D ratio of trained and not trained primary school teachers within each group i.e., EHE, HE, ME and LE are not found significant from one another. It further implies that effect produced in criterion variable (I/D ratio) by level of EI is independent from another dependent variable (training). Alternatively, effect produced in criterion variable (I/D ratio) by training is independent of level of EI of primary school teachers.

Insignificant interaction implies that training is not moderating the association between level of EI and I/D ratios of teachers. It is evident from Figure 2, that mean I/D ratios of trained and non-trained teachers are increasing, if level of EI is observed to increase in EHE, HE and ME groups. But due to insignificant interaction effect between these explanatory variables, it cannot be inferred that training is moderating the association between the level of EI and I/D ratios of teachers.

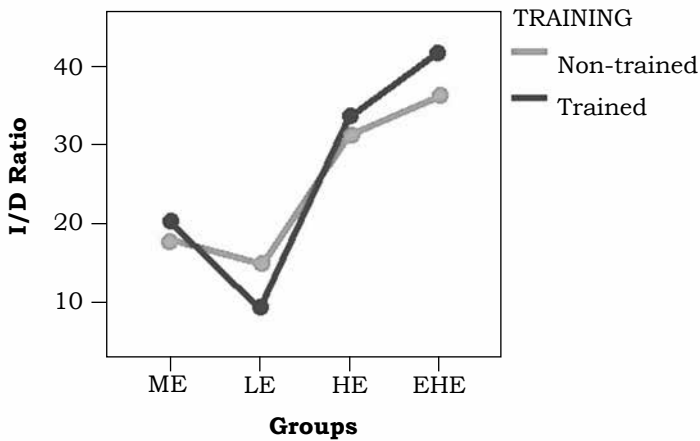


Fig 2: Graph of EI by training on I/D ratio

Except, LE group, in all groups EHE, HE and ME mean I/D ratios of trained teachers are found to be greater than mean I/D ratios of non-trained teachers, this signify interaction effect of level of EI by training of teachers, though it is not observed statistically significant. But, it is likely to be deduced that training of teachers is likely to moderate relation between EI and I/D ratios of teachers.

Eta^2 (coefficient of determination), for model is obtained to be 41.3 per cent. It refers that both variables and their interaction explain 41.3 per cent variance in criterion variable (I/D ratio). Eta^2 , for level of EI is obtained to be 32.9 per cent. It refers that level of EI explains 32.9 per cent variance in criterion variable. Training explains 0.1 per cent variance in criterion variable and interaction of level of EI x training explains 2.3 per cent variance in criterion variable (I/D ratio).

10.4. Objective 3: To find out the effect of level of EI by stream (art and science) on teacher influence in the classroom.

Null-hypotheses framed in conjunction with this objective.

H₀₃: There is no significant difference between the influence exerted in the classroom by the science and art background teachers having different level of emotional intelligence

Under this null-hypothesis, as follows sub-null-hypotheses were framed:

H_{03.1}: Levels of EI will not significantly affect teacher influence (I/D ratio) in the classes of science and art background teachers.

H_{03.2}: Stream (art or science) of teachers will not significantly affect teacher influence (I/D ratio) in their classes.

H_{03.3}: Levels of EI by stream of teachers will not significantly affect teacher influence (I/D ratio) in their classes.

As revealed from Table 5, F-value (8.60) for entire model is observed to be significant at 0.05 significance level for df (7, 83).

Table 5
Summary of Analysis of Variance on I/D vis-à-vis Stream and EI.

Source of Variance	SS	df	MS	F	Significance	Eta squared
Corrected Model	10640.36	7	1520.05	8.60	0.05*	0.420
Emotional intelligence	9540.31	3	3180.11	17.99	0.05*	0.394
Stream	217.02	1	217.02	1.23		0.015
EI x Stream	402.62	3	134.21	0.76		0.027
Error Variance	14668.00	83	176.73			

*Significant at 0.05 Significance level

F-value (17.99) for main effect of level of EI is found to be significant at 0.05 significance level for df (3, 83). So, null-hypothesis (H03.1) was rejected regarding its assertion.

F-value (1.23) is observed to be insignificant for df (1, 83), for the main effect of stream of teachers on their I/D ratios. It implies the acceptance of null-hypotheses (H03.2) regarding assertion made by it that stream of teachers does not affect their I/D ratios significantly.

F-value (0.76) for interaction effect of EI x Stream is observed to be not significant at 0.05 significance level for df (3, 83). It indicates the acceptance of null-hypotheses (H03.3). The insignificant interaction effect indicates that difference in mean I/D ratios of science stream teachers and art stream teachers for each group of teachers i.e., EHE, HE, ME and LE, do not differ significantly

from one another. In different way, it is likely to be said that the main effect of stream (Art and Science) i.e., the difference between the teachers having art background and teachers having science background, is independent of the effect of level of emotional intelligence. Alternatively, it may be said that main effect due to level of EI i.e., significant difference among the mean I/D ratios for EHE, HE, ME and LE groups of teachers, is independent of the effect of stream.

From Figure 3, it is evident that mean I/D ratios of teachers of science and art streams are increasing across all groups of teachers EHE, HE, ME and LE groups. It denotes clearly the effect of level of EI on I/D ratios of teachers. If graph is analysed from point of view of effect of stream, in all four groups, it is perceptible that in three groups viz EHE, HE and ME, mean of science stream teachers is higher than art stream teachers. But due to insignificant interaction effect between these two variables, it is likely to be inferred that demographic variable (Training) is not moderating the association between level of EI and I/D ratios of primary school teachers.

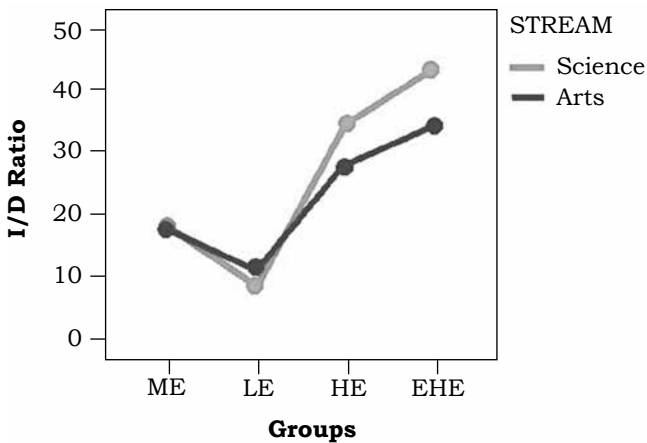


Fig 3: Graph of EI by Stream on I/D ratio

Eta^2 (coefficient of determination) for model is obtained to be 42 per cent, it refers that both explanatory variable and demographic variable and their interaction EI x Stream explain 42 per cent variance in criterion variable (I/D ratio). Emotional intelligence explains 39.4 per cent variance in criterion variable alone. Eta^2_{as} an indicator effect size produced by streams of teachers in criterion variable is obtained to be 1.5 per cent. Interaction of levels of EI by stream of teachers explained 2.7 per cent variance in criterion variable.

10.5. Objective 4: To find out the effect of level of EI by school type (government and private) on teacher influence in the classroom

Null-hypotheses framed in conjunction with this objective.

H₀₄: There is no significant difference between the influence exerted in the classroom by government and private school teachers having different level of EI.

Under this null-hypothesis, as follows sub-null-hypotheses were framed:

H_{04.1}: Levels of EI will not significantly affect teacher influence (I/D ratio) in the classes of government school teachers and private school teachers.

H_{04.2}: School type of teachers will not significantly affect teacher influence (I/D ratio) in their classes.

H_{04.3}: Levels of EI by school type of teachers will not significantly affect teacher influence (I/D ratio) in their classes.

Table 6 depicted, all F-values turn out to be significant at 0.05 level of significance. F-value (10.60) for entire model is found to be significant at 0.05 significance for df (7, 83).

F-value (21.20) for main effect of level of EI in criterion variable (I/D ratio) is observed to be significant at 0.05 level of significance for df (3, 83). It denotes rejection of null-hypothesis (H_{04.1}). It implies that differences in mean I/D ratios of teachers belonging to all four groups viz EHE, HE, ME and LE group which are observed to be significant, is likely to be due to effect produced by level of EI.

Table 6

Summary of Analysis of Variance on I/D vis-à-vis School type and EI.

Source of Variance	SS	Df	MS	F	Significance	Eta squared
Corrected Model	11943.88	7	1706.27	10.60	0.05*	0.472
Emotional intelligence	10241.43	3	3413.81	21.20	0.05*	0.434
School type	1120.06	2	560.03	3.48	0.05*	0.077
EI x School type	1213.91	2	606.96	3.77	0.05*	0.083
Error Variance	13365.02	83	161.02			

*Significant at 0.05 Significance level

F-value (3.48) for main effect produced by type of school of teachers is observed to be significant at 0.05 significance level. It implies that variation in the mean I/D ratios of primary school teachers is likely to get affected by school type (government and private). Hence, null-hypothesis (**H_{04.2}**) was rejected regarding its assertion that type of school does not affect I/D ratios of teachers significantly.

F-value (3.77) for effect produced in criterion variable by interaction of level of EI x Type of schools is found to be significant at 0.05 significance level. It indicates rejection of null-hypothesis (**H_{04.3}**). It implies that after partial out the effects produced independently from the dependent variables i.e., level of emotional intelligence and type of schools; it is observed that their interaction also produces significant effect in criterion variable (I/D ratio). Here, it is likely to be inferred that relationship between criterion variable and level of EI differs according to the type of school a second independent variable. So, type of school seems to be moderator variable. It is the variable that seems to moderate or influence the relationship between a level of EI and I/D ratio.

From Figure 4, one trend which is quite perceptible is effect of level of EI on I/D ratios of teachers of government and private type schools. Mean I/D ratios of teachers of government and private type schools are showing the tendency to increase, as, their level of EI is observed to be higher. If graph is analysed from point of view of interaction of level of EI by type of school, one noticeable trend confirms the interaction effect of both explanatory and demographic variables (level of EI and type of school). Though mean I/D ratios of teachers of each type school are increasing, but for teachers of private school in EHE group this trend stops to increase in value and is observed to be stagnant. On the contrary to it, mean ID ratios for teachers of government type school continue to show the tendency of increase in value across all groups. Hence, it is likely to be deduced that interaction effect of both variables tends to affect I/D ratios of teachers and interaction effect of both variable moderate the association between EI and I/D ratios of primary school teachers.

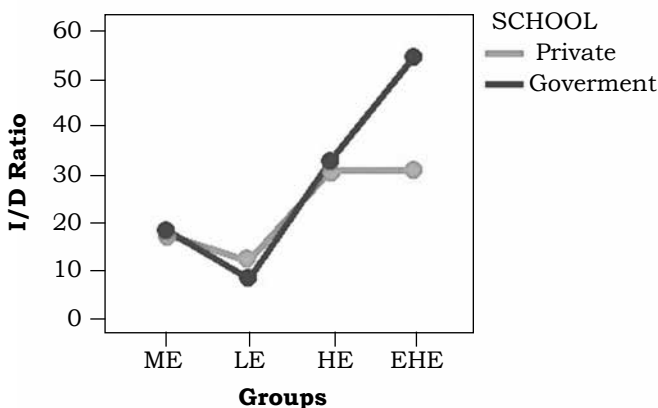


Fig 4: Graph of EI by School Type on I/D ratio

*Eta*² (coefficient of determination) for model is obtained to be 47.2 per cent which implies that these variables and their interaction explain 47.2 per cent variance in criterion variable (I/D ratio). Level of EI explains 43.4 per cent variance in criterion variable, whereas, type of schools explained 7.7 per cent variance in criterion variable. Interaction of level of EI x type of school explained 8.3 per cent variance in criterion variable (I/D ratio).

11. Discussion

Foregoing interpretations of results based on tables, revealed that EI as explanatory variables affects I/D ratios significantly. The reasons why EI affected teacher influence (I/D ratios) significantly might be due to EI abilities required for “Indirectness (I/D ratio)”. For indirect teacher influence, teacher is required:

- To recognise and read feelings and emotions of students (Category 1 of FIACs): Emotional intelligence abilities like ability to perceive emotions and ability to use emotions to facilitate thoughts and actions are essential for manifestation of teaching behaviours related to Category 1 of FIACs. These are lowest ability in the hierarchy of EI abilities (Mayer and Salovey, 1997). It implies that emotionally intelligent teachers can easily read emotions and feelings of students, and, can guide his further actions showing concern towards students.
- To praise and appreciate ideas and behaviour at cessation of pupil talk (initiation or responding) (Category 2 of FIACs): Ability to appreciate view-points and ideas of students are social

skill as model propounded by Goleman (1995). It implies that manifestation of this is dependent on EI of teachers.

- To integrate pupil ideas with classroom fabric (Category 3 of FIACs): Emotionally intelligent teacher appreciate view-points of students and further integrate students responding and initiation with classroom communication fabric (Ergur, 2009).
- To ask diversified questions (Category, 4 of FIACs): Emotionally intelligent teachers are observed to ask diversified questions, it implies narrow questions (low cognitive level questions) and thought provoking questions (high cognitive level questions) (Ergur, 2009).

These teaching behaviours must be very frequent in classroom interaction, for exerting 'Indirect teacher influence'. Emotional intelligence abilities underlie above mentioned teaching behaviours, so, these are likely to occur in classroom interaction pattern of emotionally intelligent teachers.

If teachers lacks Emotional intelligence abilities in that case likelihood of occurrence of teaching behaviours viz giving directions (Category 6 of FIACs) and criticising the ideas and behaviour of students and using extreme self-reference (Category 7 of FIACs), will tend to increase. These teaching behaviours indicate "Direct teacher influence" in classroom. Hence nature of teacher influence either Indirect or Direct is likely to be affected by level of EI of teachers. It implies that emotionally intelligent teachers will exert 'Indirect teacher influence'.

Person high on EI is efficient in social information processing or social cognition, they understand emotional and social behaviours of students and have a detailed understanding of which behaviours they should use in certain situations (based on their appraisal of others' emotional response) (Gardner and Qualter, 2007). Since, teaching behaviour is rooted in socio-cultural matrix of a situation and has an overtly social orientation (Flanders, 1970), as such, emotionally intelligent teachers are found to be in advantageous position due to its efficiency in social cognition. Only emotionally intelligent person can process information conveyed by emotions (Mayer and Salovey, 1997). After processing of information conveyed by emotions of students, if teacher show sensitivity, it refers 'Indirect influence of teachers'.

In addition to this, why emotionally intelligent teachers exerts 'Indirect teacher influence' is substantiated by findings, which revealed that people with high EI tend to be more socially

competent, to have better quality relationships, and to be viewed as more interpersonally sensitive than those lower in EI (Brackett, Rivers, Shiffman, Lerner and Salovey, 2006; Brackett, Warner and Bosco, 2005; Lopes, Brackett, Nezlek, Schutz, Sellin and Salovey, 2004; Lopes, Salovey and Straus, 2002).

Investigators have found significant association between EI and communication effectiveness. Dimensions of EI are found, associated significantly with communication effectiveness (Jorfi and Jorfi, 2011; Mayer, Salovey and Caruso, 2004; Shah, Yaccob and Jorfi, 2011). Communications is culmination of all emotional intelligence abilities; teachers higher on EI abilities are efficient in reading and recognising emotions and feelings of students and communicating emotions (Category 1), are efficient in praising, appreciating and taking the viewpoints of others (Category, 2) are efficient in integrating students' ideas in their explanation (Category, 3) (Ergur, 2009), which are sine qua non of "Indirect Teacher Influence".

Interaction effects of EI by training, EI by sex of teachers and EI by stream (art and science) of teachers are found to be not significant. Only interaction effect of EI by school type (government and private) has been proved to be significant. Moreover, main effect of school type has also been found significant. From Figure 4, it appears that teachers teaching in government schools have performed well on I/D ratio than that of their counterparts of private schools. It refers that nature of job and environment of workplace along with Emotional Intelligence affect teacher influence. Teacher teaching in government type schools are secured for their job and get satisfactory salary as compared to their counterparts in private schools (Gupta and Gehlawat, 2013). These factors along with EI affect teacher influence in classroom.

12. Conclusion

Findings signify the importance of EI for teaching profession. EI has been found to affect classroom interaction pattern significantly. Excluding school type, other demographic variables of study: Sex of teachers, Stream of teachers and training of teachers has not been observed to affect interaction pattern of teachers significantly. Findings of this study are in agreement with findings of studies which revealed that EI abilities underlie communication effectiveness.

13. Implications

Implications of findings of study are:

- Emotional intelligence abilities of teachers decide “Indirect Teacher Influence” in classroom. Teachers higher on emotional intelligence were found to exert “Indirect Teacher Influence” in classroom teaching. Indirect teaching pattern is observed to influence achievement of students (Flanders, 1970; Jangira, 1973; Lulla, 1974; Sharma, 1972). Reporting of a lot of studies bring forth that interaction patterns viz indirect interaction pattern of teachers associate positively with pupil achievement and attitude (Flanders and Simon, 1969; Gage, 1965) (as cited in Buch, 1975). Flanders (1970) discovered significant relationship between teacher influence and pupil achievement and attitudes. So by training of Emotional Intelligence of teachers likelihood of occurrence of “Indirect Teacher Influence” may be increased, which in turn, will affect achievement of students positively.
- Findings of the study stamp validity and importance of theory of emotional intelligence for teachers. Emotional intelligence is likely to enrich armoury of skills and facilitate social cognition required to be better in socio-cultural matrix of classroom interaction.
- Training of skills related to emotional intelligence will increase likelihood of occurrence of ‘Indirect’ teacher influence in classroom. Indirect teacher influence affects social-emotional climate and cognitive organisation of classroom.

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Schooling of Children Living in Slum Areas: An Analysis of Selected Households from Hyderabad and Ludhiana

SUNITA CHUGH*

ABSTRACT

Ensuring equality in education is the foundation to develop just, fair and egalitarian society. In the modern democratic societies, education is the only mechanism to transcend the barriers of social exclusion and prejudices. In fact, it is education that enables the development of people's capabilities, access to choices and exercise of freedom in information driven age. Thus addressing lack of access to and inequality in education is central to achieve social justice and by extension broader societal development. Access to education by various social, economic and other vulnerable groups needs to be continually examined to identify areas of concern. Notwithstanding high aggregates in urban areas, slums continue to be deficient in public provision of education that adversely impacts the participation. It is in this context the present paper makes an attempt to map the educational scenario of the children living in slum areas of Hyderabad and Ludhiana and analyses the ground reality in determining how much the efforts of the State have been able to reach these disadvantaged groups. It seeks to present an overview of the status of education of children of 6-17 years of age living in select slum areas. Though slums are generally deficient in the provision of public services, and households usually have low income but they are not uniform across the country. The present study contrasts the participation of children in slums located in two different cities viz., Hyderabad and Ludhiana. These two cities are quite different. The former is a modern hi-tech city with varied sources for employment and living and the later principally manufacturing city focused on hosiery. Households in slums of Hyderabad have varied occupations, higher level of education and income. Households in slums of Ludhiana are migrants primarily

* Associate Professor, NCSL, National University of Educational Planning and Administration, 17-B, Sri Aurobindo Marg, New Delhi - 110016.

from Bihar and Uttar Pradesh dependent on manufacturing and construction activities with low education and incomes. The present paper examines how this contrast manifests in the participation of children in education. The results reveal that the participation of children from slums in Hyderabad is high, more children attend private schools, study in English medium. In contrast participation of children from slums of Ludhiana in education is very low, seldom found in private schools and have to study in not so familiar language. From these findings the paper hints a few priority areas for policies.

1. Introduction

Urban India is quite diverse and fragmented with differentiation between cities and within cities. There are cities that accommodate more than 15 million and there are small cities, which are inhabited by fifty thousand people. There are cities with modern infrastructure, high level human capital competing with other global cities for investment. There are cities that are saddled with crumbling infrastructure, low productivity manufacturing. Cities are also differentiated within with exclusive echelons of living on the one side and cramped places on the side of drainage, railway track, etc. Out of its total 377 million (31.16%) urban population, roughly 93.06 million reside in slum areas, thus creating a urban divide that not only defines geographical division but also reflects poverty, malnutrition, health hazards, a host of socio-economic and educational disparities and deprivations. If education of poor urban children is not to suffer, then the need to undertake special measures cannot be overstated. Unfortunately, in the discourse on universal elementary education, and equal opportunity for secondary education, conditions faced by urban children in general and children living in slums in particular are conspicuous by their absence. At one level the perception that urban areas and children living in urban areas are having better access to education and educational infrastructure in urban areas is better than in rural areas might have led to this overlooking. At another level, perhaps even more importantly, the limited availability of data on education in urban areas particularly disaggregated by slums and non-slums, difficulties involved in collection of data from urban areas, and other practical issues like overlapping jurisdiction by multiple agencies might have also contributed to this neglect. In addition, examination of issues like assessment of access to

education in urban areas is not easy as conventional 'distance approach' is not relevant to urban areas. Further, changes taking place in urbanisation and in urban areas further compound issues confronted by poor and by those living in slums in accessing public services including education. In this context it would be interesting to know how accessible schools are to children living in slums? Whether all children living in slums are participating in schooling? Whether private schooling is complimenting or substituting public schooling? Who and what proportion of children in slums are availing private schooling?

Against this background, the present paper makes a modest attempt to identify the specific issues faced by children residing in slums. The paper is drawn from a research study which was conducted in selected slums of Hyderabad and Ludhiana focusing on the access, participation and learners' competencies dimension, cutting across all levels of school education. The paper describes the educational status of children of 6-17 years of age in select slums of both the cities. It also examines how household and individual characteristics affect whether a child goes to elementary and secondary school or not, continues and completes the elementary and secondary level of education or drops out.

2. What does the Previous Research Say?

The issues confronted by children living in slums in accessing education and the relationship of education, health status, need to work (child labour) are examined by several researches in the recent past. A few select studies are reviewed. A study conducted in eastern slums of Kolkata (Khasnabis and Chatterjee, 2007) reveals that retaining the students in a formal school is far more difficult than enrolling them particularly if the students are from very poor economic backgrounds and students belonging to disadvantaged families still do not attend classes regularly. Montgomery et al. (2007) observes while studying the educational status of children living in slums of Allahabad that educational attainment of the poor children can depend not only on the standards of living of their own families but also on the economic composition of their local surroundings. Other studies have found that the poverty and the inability of the parents to bear the education related expenditure still remains a major cause for low enrolment and high dropout rate among the children living in slum areas (Chugh, 2004; Tsujita, 2009). Banerji (2000, 2005) pointed out that the nature and quality

of schools are the determining factor rather than the financial constraints of the families. The study identifies that the children do not become literate even after attending the school for four to five years. Teachers' uncaring behaviour acts as a major push out factor for many of them. The neglect by teachers, poor teaching, discrimination, cruelty or punishment meted out by teachers become the teacher centric reasons for dropping out of schools (Govindaraju and Venkatesan, 2010). Valerie Lewis (2010) observes that despite significant progress in universal primary education, slum children lack seriously in terms of participation in secondary education. Children living in slums are more disadvantaged compared to rural and other urban children. There is also decline in their attendance resulting in their poor educational participation. Another research study supporting it further states that the guardians of the students belonging to the disadvantaged families do not assign much value to the elementary education (Khasnabis and Chatterjee, 2007). The educational background of the parents, especially of the mother, plays a key role for more successful educational biographies of children. Although the economic situation of the household has considerable influence (Bhat and Bhat, 2010), but the authors argue that the society's prevailing socio-cultural conditions also play a major role for the child's schooling opportunities too. The social construct of gender, leads to severe discrimination towards the girl child (Bhat and Bhat, 2010). Mahadevia (2009) found that in the select slums of Ahmedabad the dropout rate was higher for boys in comparison to girls as they get absorbed in the informal economy. Miller (2005) discusses the dynamics and complexities of language instruction in diverse urban context and proposes that if children are to be retained, then the schools must provide primary education in their home language and later move to the standard language. In urban areas the deployment of the teachers needs to be made on the basis of the vernacular language of the children studying in the schools. Due to the poor quality in the government schools, few researchers argue, the contribution of private sector in India especially in urban India has increased tremendously since 1990s (Kingdon, 1996; Nambissan 2012). Some researchers (Boyle et al., 2002; Lall, Dixon, Tooley 2007, Srivastava, 2007) claim that the low fee private or Budget schools are on increase and they are serving to the children of poor as well. They claim that these schools provide better quality education which has been assessed on the

basis of number of indicators like teacher regularity, class size, pupil achievement. The preference of parents to send their children to these schools is due to English as the medium of instruction and they perceive teachers are more accountable. All these factors multiply with each other to give an outcome of shifting toward non state provisions.

The present paper revisits some of the issues confronted by the children living in slums by collecting data from slums located in Hyderabad and Ludhiana, the former a metropolitan city provides employment opportunities in high end service sector and the latter a manufacturing hub where employment opportunities are concentrated in small scale manufacturing sector.

3. Methodology

Primary data was collected from the selected slums of Hyderabad and Ludhiana. Four slums from Hyderabad and three slums from Ludhiana were chosen randomly. In Hyderabad Hera Nagar, ASR Nagar and Sai Nagar, Kanka Durga Nagar, Tulja Bhawani Nagar slums were taken up situated in Guddi Malkapur in Golconda Zone, and in Ludhiana, Dr. Ambedkar colony Pakhowal road, Bihari Colony Tajpur Road, Ludhiana, Shaheed Bhagat Singh NR Balmiki Colony were the sampled slums. Field level surveys were carried out in different stages. In the first stage of the survey, complete enumeration of all households was undertaken to identify households with children in the age group of 6-17 years. Data on socio-economic and educational characteristics of the households were also collected in the first stage. Total number of 2791 households from Hyderabad and 1219 households from Ludhiana were surveyed. Information gathered from the initial survey helped in the selection of sample for the second stage. In the second stage, few households were selected on random basis which had children in the age group of 6-17 years. The detailed information on the socio-economic background, access to schooling, nature of schooling availed, expenditure borne by parents for the education of their wards in the government and private schools was collected from 706 households in Hyderabad and 622 households in Ludhiana. The present paper focuses on the analysis of the data collected from sample households (706 in Hyderabad and 622 in Ludhiana) having 6-17 years of children.

4. Profile of Sample Households and Children

4.1 Demographic Composition of Population

Slums are complex communities with residents of different religious groups sharing together the same area. Information on the population belonging to different religions was also obtained to understand the educational status of children belonging to different religions. Majority of select households in Ludhiana and Hyderabad belonged to Hindu religion, above 22 per cent belonged to Muslim religion in Hyderabad while only 1 per cent belonged to Muslims religion and around 2.3 per cent belonged to Sikh religion in Ludhiana.

In Hyderabad, around 48.5 per cent of the children belonged to OBC category 34.6 per cent to SC category whereas in Ludhiana, the proportion of SC category population is higher with 43.1 per cent in comparison to all other categories of population.

Table 1
Composition of Population by Religion, Social Category and Age of Selected Households

Particulars	Hyderabad		Ludhiana	
	Number	%	Number	%
Social Groups of Population				
Scheduled Castes	1067	34.6	1326	43.1
Scheduled Tribes	370	15.2	7	0.2
OBCs	1341	48.5	1065	34.6
General	300	9.7	678	22.1
Religious Groups of Population				
Hindu	2426	78.8	2974	96.7
Muslim	652	22.2	28	1
Sikh	-	-	74	2.3
Age Groups of Population				
0 to 5 years	291	9.5	267	8.7
6 to 14 years	901	29.3	1199	39
15 to 17 years	223	7.2	209	6.8
18 to 59 years	1369	44.5	1211	39.4
60 and above	286	9.3	190	6.2
No response	8	0.3	-	-
Total	3078	100	3076	100

In Hyderabad around 29.3 per cent children were in the age group of 6-14 years and 7.2 per cent were in 15-17 years of age

group whereas in Ludhiana around 39 per cent of children were of age 6-14 years and around 6.8 per cent children were in the age group of 15-17 which implies that in Hyderabad around 36 per cent children were of school going age till the secondary level of education and for Ludhiana these figures stand to be around 46 per cent.

4.2 Occupation of Father

It is well known that children’s educational outcomes vary sharply with their parents’ socio-economic background. Differences in outcomes with parental background emerge early at the pre-school level and are reinforced in childhood, teenage years through tertiary education. Socio-economic status depends on a combination of variables including occupation, education, income, wealth and place of residence. Occupation of father and mother affects both the income coming to the family and the time devoted to children’s development. It was found that the parents of the select households are generally engaged in informal sector with irregular income which also influences the participation of children in school. Figure 1 provides information on the occupation of the father.

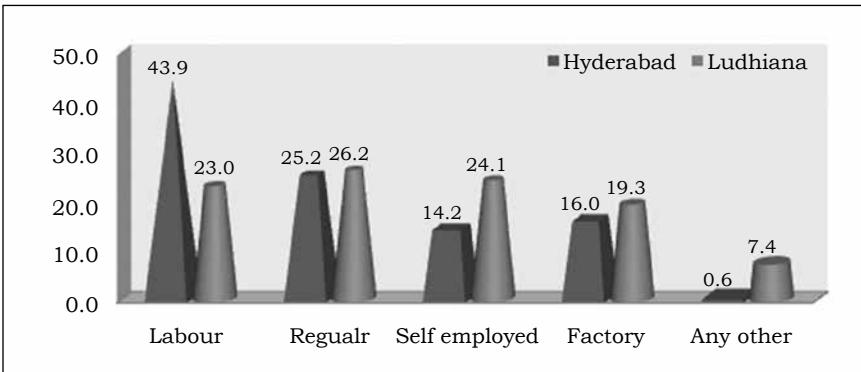


Figure 1: Occupation of the Father of Sample Children (in percentage)

Data in the above figure reveals that around 23 per cent of the fathers in Ludhiana and around 44 per cent in Hyderabad were working as a labourer in construction sites and around 26 per cent in Ludhiana and around 25 per cent in Hyderabad were occupied in regular jobs which include clerks, sweepers, peons, mali in government or private sector. Around 16 per cent of fathers in Hyderabad and 19 per cent of fathers in Ludhiana were employed

in factories. In Ludhiana they were engaged in hosiery factories and in Hyderabad in the pearl polishing and embroidery work. Around 24 per cent of the fathers in Ludhiana and 14 per cent of fathers in Hyderabad were self employed as rickshaw puller, auto-rickshaw driver, shop owners like cigarette, beetle selling. Around 8 per cent of fathers in Ludhiana were engaged in other activities such as rag picker, carpenter.

4.3 Monthly Income of the Sample Households

Household income is one of the important factors to determine the educational status of children as the parents bear the education related expenditure like stationery though the uniform, textbooks are provided by the state at the elementary level, whereas at the secondary level the household incurs expenditure towards the payment of fees, stationery, uniform and books. In addition the parents may have to pay for the private tuition fees. The income level of the households is calculated by including the total monthly income of all members of the family. The household income of the sampled households is given in Table 2.

Table 2
Monthly Income of the Sample Households

Income Range (Rupees)	Hyderabad		Ludhiana	
	Households	%	Households	%
No Response	2	0.3	3	0.5
<1000	23	3.3	37	5.9
1001-2000	43	6.1	248	39.9
2001-3000	81	11.5	106	17.0
3001-4000	363	51.4	99	15.9
4001-5000	101	14.3	37	5.9
5001-7000	75	10.6	82	13.2
7001-10000	11	1.6	8	1.3
>10000	7	1.0	2	0.3
Total	706	100	622	100

The monthly household income in Hyderabad was found to be higher in comparison to that of Ludhiana. Around 57 per cent of the households in Ludhiana were having monthly income in the range of Rs.1000- 3000 whereas in Hyderabad around only 18 per cent of the households were having monthly income in the same range. Around 51 per cent of households in Hyderabad were having

income ranging Rs. 3000-4000 per month whereas around 16 per cent of households in Ludhiana were having income in this range. Nearly 80-90 per cent of the income is spent on food items especially by the residents of Ludhiana slums. Only a small amount remains available for meeting other requirements of shelter, clothing and medicines etc. This statistics needs to be interpreted in the context of the size of the household which usually varies from 5-8 members. The figures from the field area reveal that the families find it difficult to meet the cost of education of their children with this low household income.

4.4 Educational Status of Children from Sample Households

Educational status of children (6-14) is measured in terms of whether the child is going to school, or dropped out or never attended. Data collected from the select slums of Hyderabad and Ludhiana not surprisingly indicates that not all children are in school. One can also discern patterns in participation of children in school education by socio-economic background and also between Hyderabad and Ludhiana. The proportion of children not in school (that includes both dropped out and never enrolled children) is small in Hyderabad and very high in Ludhiana. Data on educational status of children of 6-17 years is presented in Table 3 and Figure 2.

Table 3
Educational Status of Children of Sample Household

Educational Status	Hyderabad		Ludhiana	
	Numbers	%	Numbers	%
School Going	871	77.5	697	49.5
Drop-Out	157	14.0	202	14.3
Never - Enrolled	96	8.5	509	36.2
Total	1124	100	1408	100

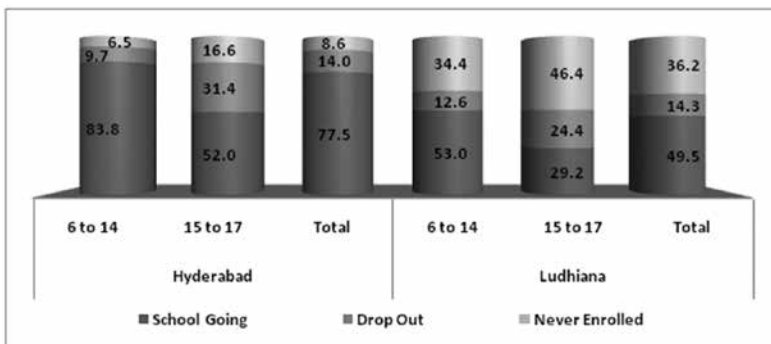


Figure 2: Educational Status of Children by Age Group (in percentage)

In Hyderabad, around 78 per cent children are attending school compared to just about 50 per cent in Ludhiana. An overwhelming proportion of children, 36 per cent are never enrolled in Ludhiana. Less than 9 per cent children have never been enrolled in Hyderabad. Educational status of children by age groups 6-14 years and 15-17 years is also given. The figures clearly reflect that percentage of children of 15-17 years attending school is very low in comparison to children of age 6-14 years. Dropout rate is also very high among children of age 15-17 years. In Hyderabad around 84 per cent children of 6-14 years of age are attending school compared to only 52 per cent children of age 15-17 years. In Ludhiana around 53 percent of children of 6-14 years of age are attending school but only 29 per cent children of age 15-17 years are attending school (Fig. 2). If we look at the dropout rate, it is found that in Hyderabad the dropout rate for the children of 6-14 years of age is around 10 percent and in Ludhiana it is around 13 per cent. The dropout rate for 15-17 years of age group in Hyderabad is as high as around 31 per cent and the figure for Ludhiana is around 24 per cent. In Ludhiana a large number of children have never been enrolled in schools even among young age cohorts.

Attendance of children in private and public school

The nature of schooling provision in urban areas is undergoing major transformation in the recent years. The public provision is declining drastically and private sector is increasing. A large proportion of urban children who attend schools are claimed to be attending private schools; both recognised as well as unrecognised. The claim that a significant proportion of children attending private schools turns out to be true only in case of Hyderabad where household income is relatively higher than Ludhiana. Further, the field experience suggests that parents could not tell whether a school is private aided or unaided or even unrecognised. But they are clear that the school is a private school and not a government school. In Ludhiana very few children were attending private school and they were all attending the school which was up to eighth standard. In Hyderabad, private schools had linkages with the government schools therefore transition to the government school was not a major problem as stated by the respondents. The detail on the nature of school attended by children is given in Table 4.

Table 4
Kind of Schools Attended: Age and Gender wise

Kind of School	Age Group of Children				Gender of the children				Total	
	6-14	%	15-17	%	Boys	%	Girls	%	Number	%
Hyderabad										
Government	534	70.7	94	81.1	332	82.8	296	71.5	628	72.2
Private	221	29.3	22	18.9	125	27.2	118	28.5	242	27.8
Total	755	100	116	100	457	100	414	100	871	100
Ludhiana										
Government	541	85.1	58	95.1	301	77.6	297	96.4	598	85.9
Private	95	14.9	3	4.9	87	22.4	11	3.6	98	14.1
Total	636	100	61	100	388	100	308	100	696	100

The proportion of children attending private school is higher in Hyderabad in comparison to Ludhiana. About 29 per cent children of age 6-14 years in Hyderabad are attending private schools while in Ludhiana around 14 per cent children from the sample households are attending the private school. Similarly around 19 percent children of 15-17 years of age group are attending private school in Hyderabad and in Ludhiana only around 5 per cent children in the corresponding age are going to private school.

It is widely reported in research studies that the gender bias exists in education, expressed in the differentiated access to public and private schools by gender. The present study hints that gender bias at least at primary level is also confounded by other factors including location. Gender differential in access to public and private schooling could not be found in Hyderabad. But in Ludhiana large gender differential could be discerned. In Ludhiana, around 22 per cent of boys compared to only 4 per cent of girls were found to be attending private schools. The variation in gender bias could be attributed to socio-cultural factors and positive attitude of families towards girls' education in Hyderabad.

Educational Attainment level of Parents and Educational Status of Children

Education of the parents, economic conditions and environment are inter linked and jointly affect participation of the children in education. Research evidence suggests that parental education exerts strong influence on education of offspring. Further mother's education is found to be a stronger determinant of her children's

education than the father's, especially with male children. Mother's schooling could reflect as an advantage more in early childhood and the probability of the child attending school increases. The present study affirms these findings. The educational attainment level of father and mother was analysed separately juxtaposed with attendance status of children and presented in Table 5 and 6.

Table 5
Education of Father and Educational status of Children

Father's Education	Educational Status of the Children							
	School Going	%	Drop out	%	Never Enrolled	%	Total	%
Hyderabad								
Illiterate	341	70.9	92	19	48	10	481	100
Primary	92	74.2	22	18	10	8.1	124	100
Upper Primary	109	90.1	8	6.6	4	3.3	121	100
Secondary & above	162	91.0	6	3.4	10	5.6	178	100
Total	704	77.9	128	14	72	8	904	100
Ludhiana								
Illiterate	447	42.8	167	16	431	41	1045	100
Primary	117	72.2	14	8.6	31	19	162	100
Upper Primary	56	72.7	6	7.8	15	20	77	100
Secondary & above	50	64.1	9	12	19	24	78	100
Total	670	49.2	196	14	496	36	1362	100

Table 6
Educational Level of Mothers and Educational Status of Children

Mothers' Education	Educational Status of Children							
	School Going	%	Drop out	%	Never Enrolled	%	Total	%
Hyderabad								
Illiterate	422	72	106	18.1	58	9.9	586	100
Primary	84	80	18	17.1	3	2.9	105	100
Upper Primary	84	85.7	5	5.1	9	9.2	98	100
Secondary & above	145	92.9	5	3.2	6	3.8	156	100
Total	735	77.8	134	14.2	76	8	945	100

Ludhiana								
Illiterate	576	46.6	186	15	474	38.3	1236	100
Primary	81	74.3	7	6.4	21	19.3	109	100
Upper Primary	21	75	3	10.7	4	14.3	28	100
Secondary & above	6	66.7	1	11.1	2	22.2	9	100
Total	684	49.5	197	14.3	501	36.3	1382	100

Data in Table 5 reveal that both in Hyderabad and Ludhiana, the percentage of children attending school was low when the father is illiterate. There is progressive increase in the proportion of children attending school as educational level of father increases to primary and upper primary education level. However patterns in Ludhiana in respect of parental education of secondary and above are counter intuitive. As per the data presented in Table 5 and 6, it appears that participation of children in education reduced if parental education increased to secondary and above from primary and upper primary education. This means the impact of parental education confounds with context specific factors which need to be taken into account to make parental education to have positive impact. Notwithstanding this anomaly, overall picture clearly demonstrates that the parental education indeed has a positive impact on participation of children of slums in schooling. This analysis has implications for educational planners and administrators as they need to focus on the adult literacy programmes as well as awareness programme on the significance of education if the participation of children is to increase. Figures in Table 6 further re-emphasise the role of mother's education in increasing the participation of children in schooling.

Income of the Household and Education of Sample Children

Income and wealth can affect children's education in several ways. In fact, increase in the household income can have a positive effect on the educational outcomes of children. Income of the household determines the access and ability to afford educational services for the children. The study confirms these general perceptions. Table 7 presents the income of the households as related to the educational status of children.

Table 7
Income of the Household and Education of Sample Children

Income year wise (in Rs.)	Educational Status of the Children							
	School Going	%	Drop out	%	Never Enrolled	%	Total	%
Hyderabad								
36000 & below	294	71.8	86	20.8	34	8.2	414	100
36001-60000	333	81.0	44	10.7	34	8.3	411	100
60001& above	244	81.6	27	9.0	28	9.4	299	100
Total	871	77.5	157	14.0	96	8.5	1124	100
Ludhiana								
36000 & below	296	42.6	70	10.1	329	47.3	695	100
36001-60000	197	51.2	75	19.5	113	29.4	385	100
60001& above	204	62.4	57	17.4	66	20.2	327	100
Total	697	49.5	202	14.4	508	36.1	1407	100

Figures in Table 7 indicate that the household income of the sample households is lower in Ludhiana in comparison to Hyderabad and it is also observed that the percentage of non-enrolled and dropout children are much higher in Ludhiana. With the increase in income, the probability of children attending school increases. In Ludhiana 62.4 per cent children of families having income more than Rs.5000 per month (Rs.60,000 per annum) are attending school compared to about 43 per cent of children with household incomes below Rs. 3000. The corresponding figures in Hyderabad are 81.6 per cent and 72 per cent respectively. This affirms unambiguously the impact of economic status of the household on the educational status of the children.

Duration of Stay in the Area

It is often said that the educational status of the children more often than not, especially in case of migrant children, is determined by the duration of stay of these families in a particular location. It is generally presumed that the families who have been staying for a longer duration have more stability in terms of employment, job and income therefore the chances of their children in school are more in comparison to those who have settled recently. An attempt has been made in this study to map this relationship by collecting relevant data. Table 8 presents data on this aspect.

Table 8
Duration of Stay and Status of Education of Children

Duration of Stay	Status of Education of the Children							
	School Going	%	Drop out	%	Never Enrolled	%	Total	%
Hyderabad								
Less than 5 years	120	73.2	25	15.2	19	11.6	164	100
5-10 years	122	70.1	35	20.1	17	9.8	174	100
10-15 years	158	74.9	33	15.6	20	9.5	211	100
More than 15 years	412	81.9	53	10.5	38	7.6	503	100
Total	812	77.2	146	13.9	94	8.9	1052	100
Ludhiana								
Less than 5 years	6	75.0	1	12.5	1	12.5	8	100
5-10 years	6	21.4	5	17.9	17	60.7	28	100
10-15 years	15	23.1	3	4.6	47	72.3	65	100
More than 15 years	670	51.4	193	14.8	441	33.8	1304	100
Total	697	49.6	202	14.2	506	36	1405	100

Some interesting patterns emerge from the data from Table 8. In both Ludhiana and Hyderabad majority of households and children have been staying in the same place for the last more than 15 years. In Hyderabad however people appear to be continually flocking in. But in Ludhiana the proportion of people staying in the slum for duration of 5 to 10 years is very less. In Hyderabad, with the increase in the duration of stay the propensity of children to attend school is also increasing. Around 82 per cent children are attending schools whose families are staying in the select slums for more than 15 years. In contrast to this, in Ludhiana, no particular patterns could be observed. Though majority of the residents are staying in the select slums for more than 15 years, but only around 51 per cent children are attending school. Slums in Ludhiana depict the complete neglect of these areas by the urban local authority as the slums are devoid of basic physical facility like water, electricity. No government school is available within the radius of 1 km in Ludhiana from the selected slums. The state has not recognised these slums though they have been existing for more

than 15 years. The residents do not get the benefit of social welfare schemes. Moreover the residents are migrants from different states and though they are staying in the slum but they visit their native place once in a year and many a times the children accompany them which results into either non enrolment or long absence from school leading to dropping out.

Private Expenditure on education of children

The educational consciousness, concerns among the parents and the desire to somehow educate their children is expressed in the expenditure incurred on education against several odds. It might sound a bit odd that education is largely free and compulsory up to elementary level of schooling in India. Yet, the fact remains that households including families from disadvantaged socio-economic background feel compelled to spend some amount on the education of their children. Important items of expenditure include stationery items, bag, shoes etc. But here substantial difference exists in household expenditure on education due to the type of schools the children are admitted to viz. government schools, government aided schools and private schools. The private expenditure incurred by sample households by nature of school attending is given in Table 9.

Table 9
Annual Household Expenditure on Education

Expenditure on Education	Hyderabad						Ludhiana					
	Govt.	%	Private	%	Total	%	Govt.	%	Private	%	Total	%
Below 500	66	11.1	3	1.4	69	8.5	53	16.4	0	0.0	53	14.4
501 - 1000	87	14.7	10	4.6	97	12.0	114	35.3	18	40.9	132	36.0
1001 - 2000	112	18.9	20	9.2	132	16.3	77	23.8	14	31.8	91	24.8
2001 - 5000	177	29.8	78	35.8	255	31.4	64	19.8	9	20.5	73	19.9
5001 - 10000	127	21.4	92	42.2	219	27.0	14	4.3	3	6.8	17	4.6
Above 10000	24	4.0	15	6.9	39	4.8	1	0.3	0	0.0	1	0.3
Total	593	100	218	100	811	100	323	100	44	100	367	100

Figures in Table 9 reveal that around 35 per cent families reported to be spending on education of their children in the range of 501 to 1000 Rupees in Government school whereas in Hyderabad around 16 per cent children’s families are spending in this range. In Hyderabad around 35 per cent parents are spending annually in the range of Rs 5000-10,000 and around 7 per cent are spending

more than 10,000 rupees. As more and more children are attending private schools in Hyderabad, the educational expenditure is higher than that of Ludhiana. As far as average expenditure on education per child per year is concerned, it was estimated to be Rs 1686 in Ludhiana and Rs 4004 in Hyderabad which indicates that as income level of household increases there is a corresponding rise in the expenditure on education of the child.

Time taken to reach school

Distance and time taken to reach the school has impact on children's education. As the parents in the selected households could not tell the distance, time taken to reach school was taken as a proxy indicator to measure the distance. Information on this aspect is presented in Table 10. The percentage distribution calculated for students according to time of travel from home to school indicates that around 44 per cent children in Hyderabad could reach school within 10 minutes whereas in Ludhiana around 59 per cent children were taking as much as half an hour or little more to reach school. In one of the slums, children were taking around 45 minutes to reach the school. Among those who were living farther away from school, around 15 per cent children in Hyderabad were taking around 25 to 30 minutes to reach to school. Around 8 per cent children in Hyderabad were spending 45 minutes to an hour travelling to and from school because some children were attending private school and for others the government secondary school of their choice was available at a greater distance. In Ludhiana, to reach the school, children were travelling a long distance out of compulsion as school was not available in the immediate neighbourhood.

Table 10
Time taken to reach school

Particulars Time taken	Hyderabad		Ludhiana	
	Number	%	Number	%
Up to 10 minutes	381	43.7	-	-
10-20 minutes	294	33.8	-	-
20-30 minutes	128	14.7	409	58.6
More than 30 minutes	68	7.8	188	31.4

Medium of Instruction

Various research studies advocate that the children especially at the elementary stage should be taught in their mother tongue. Fluency

and literacy in the mother tongue lay a cognitive and linguistic foundation for learning additional languages. In Punjab, the government schools are having Punjabi as a medium of instruction and in Hyderabad, most of the schools are having Telugu as a medium of instruction but few schools have one section in each grade where the medium of instruction is English.

Table 11
Children participation in schools with medium of instruction

Medium of Instruction	Hyderabad		Ludhiana	
	Number	%	Number	%
English	249	28.6	13	1.9
Hindi	18	2.0	155	22.2
Regional	592	68	524	75.2
No response	12	1.4	5	0.7
Total	871	100	697	100

Figures in Table 10 show that in Ludhiana, majority (75.2%) of the children are studying in the Punjabi medium schools because the official language of Ludhiana is Punjabi. However the most serious problem the children studying in these schools face is that they do not understand Punjabi as majority of the children are migrants from UP and Bihar whose home language is different and this was found to be one of the major constraints for these children to comprehend what is taught in the school. Parents and children reported that Hindi should be the medium of instruction for them. In Hyderabad around 68 per cent children were having Telugu as their medium of instruction, therefore, they did not face much of cultural and language difference. Further in Hyderabad nearly 30 per cent of children are actually studying in English medium schools. This clearly hints at their income levels and also aspiration levels.

Dropout and Non Enrolment

It has been noted that dropout is a universal phenomenon of education system in India, spread over all levels of education, in all parts of the country. However the dropout varies across different states and it also differs for different social groups. Dropout rate is lower for the general category of children in comparison to children belonging to scheduled caste and scheduled tribe children. The dropout rate is not only related to the social and caste factor but

also is influenced by the economic factors. Children from the poor households tends to dropout more easily and children living in slum areas belong to the families having low income and irregular jobs, therefore the dropout tends to be higher for these children. Failure to complete school education not only produces negative outcome for the individuals, but also widens the existing social and economic inequalities. In order to reduce wastage and improve the efficiency of education system, the educational planners need to understand and identify the social groups that are more susceptible to dropout and the reasons for their dropping out (Chugh, 2011).

Table 12
Dropout reasons of the sample children

Reasons	Ludhiana		Hyderabad	
	Number	%	Number	%
To look after the younger siblings	19	9.4	13	8.3
Financial constraints	123	60.9	68	43.3
Security of the child	13	6.4	3	1.9
Fear of rape of girl child	-	-	-	-
No help in studies at home	-	-	34	21.7
Lack of interest in studies	47	23.3	39	24.8
Total	202	100	157	100

The major reason behind the drop out is cited as financial constraint. For 43 per cent of the children from Hyderabad and 61 per cent of children from Ludhiana, inability to afford the education expenses emerged as the main reason. In Hyderabad it was specifically mentioned that the children needed private tuition and it was not possible for them to bear that expenditure. Around 9 per cent children in Ludhiana and around 8 per cent children dropped out as they were to look after the younger siblings. Another reason cited by the children and the family is lack of academic support at home. Since most of the parents are either illiterate or less educated, they could not help their children in studies. In school they could not understand as to what was taught and at home neither support nor any interest shown by the parents led to the disinterest in attending school which finally led to dropping out. Around 23 per cent children in Ludhiana and around 25 per cent children in Hyderabad reported that they could not understand what was being taught in the classroom. The children generally found mathematics as a difficult subject.

Concluding remarks

The study examined participation of children living in slums in Hyderabad and Ludhiana. The contrast between Hyderabad and Ludhiana is revealing. The slums in Hyderabad populated mostly local population and migrants from nearby districts within the state. This has not created any problems with regard to culture, language, etc. Further, slums in Hyderabad were provided some basic public services like drinking water, electricity connection, sewerage systems, etc. including education. The households in slums in Hyderabad also enjoyed higher incomes and parental educational levels are usually higher than those children living in slums in Ludhiana. On the other hand slums in Ludhiana are mostly populated by migrants principally from Bihar and Uttar Pradesh. This creates problems relating to culture, language, etc. affecting their day-to-day relations with the local community. Slums in Ludhiana are deprived of basic public amenities like drinking water, electricity, sewerage system, making their day-to-day life difficult. Most of the migrants work in small manufacturing units at very low salaries with no social protection. These manufacturing units, principally hosiery units, are functioning at cutting edge competition forcing them to cut costs wherever possible usually leading to low and stagnant wages for labour. As people from outside migrants have very weak voice to demand basic public amenities. The slums also do not have schools in their close vicinity. Consequently they do not have access to school as per norms. Children living in Ludhiana slums have to walk long distances to access school. This contrast can be seen in the difference in participation levels in education between slums of these two cities as mentioned above. Not only participation level in education in slums of Hyderabad is much higher but also the share accounted by private sector is higher. Around half of the children living in sample slums in Ludhiana are out-of-school compared to less than a quarter of children in Hyderabad. Nearly a third of children in Hyderabad slums are studying in English medium compared to negligible figures in Ludhiana. Majority of households in Ludhiana have been living there for more than 15 years but remain as outsiders. Even among those who have been living for more than 15 years the participation rates in education continue to be very low. Though children living in Ludhiana slums are principally from Bihar and Uttar Pradesh only a fifth of them are able to study in Hindi Medium. Nearly 70 per cent of them are pursuing their

studies in Punjabi Medium with which they are unlikely to have familiarity in their neighbourhood. Therefore children attending schools in slums of Ludhiana could not cope in the school owing to cultural and language differences. As a result many children in Ludhiana are dropping out from school and their learning levels tend to be low.

The contrast between Hyderabad and Ludhiana should not overshadow the overall low participation and high dropout rate. Even in Hyderabad nearly a quarter of children are out of school. Many children are attending private schools ostensibly because of poor quality of public schooling. Further achievement levels are low across both the cities as demonstrated by other studies (Baseline Survey, NCERT, Aggarwal 2000).

From the findings of the field survey the following suggestions can be made for priority action. Access to public schooling is critical to improve participation in schooling. Both establishment of government schools and improving the quality of government schools needs priority. Secondly, addressing the diversity of slum population through appropriate measures like sensitising local teachers about cultural diversity, making provisions for teachers in various languages, etc. goes a long way in improving the education of children living in slums.

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Do Schools Equalise Academic Achievements to Overcome Socio-economic Differences: A Study of Determinants of School Leaving Examination Marks in Tamil Nadu

R. SRINIVASAN* , G. G. SAJITH** AND M. KARPAGAM***

ABSTRACT

School education should provide an environment for inclusiveness. Understanding the backwardness of certain communities is as important as appreciating and nurturing intelligence and excellence. This is the surest route to render social justice and to establish an egalitarian society. When education is conceived as a form of human capital, then distribution of this human capital should be equal across society. Rather distribution of human capital should help to overcome the other social and economic backwardness of children in the depressed communities.

When society is stratified by communities, so are the schools to cater to different needs of the each stratum of the society. Hence, community, type of schools, location, gender, choice of subjects are inter-related and together determine the creation of human capital as measured by marks. Hence, we attempt at analysing the determinants of marks using data of nearly 3.9 lakh students who successfully completed 10th standard in 2008 and proceeded to complete 12th standard in 2010. With this large data set, we could find a clear trend of students from relatively forward communities, study in self-financing schools and choose subjects that take them to professional courses in higher education, ultimately scoring higher grades than others. On the contrary, the students from the backward and depressed communities, study in government schools, choosing subjects that do not take them to professional education and they also score very low marks. Thus, the existing school system creates further inequality through unequal distribution of human capital.

* Associate Professor, Dept of Econometrics, University of Madras, Tholkappiar Campus, Chepauk, Chennai-600080

** Manager, Citibank, NA, Chennai.

*** Associate Professor, in Economics (Retired), Meenatchi College, Chennai

Introduction

Literature on learning outcomes of students emphasises that there are identifiable factors that influence the test scores as a measure of learning outcomes. Family background, captured in terms of communities, parental education and employment, family income, etc., could influence choice of school and subjects of study. Irrespective of family background, school has a definite role to improve learning outcomes of students. In Indian context the language of learning also has a greater influence on learning outcomes.

Of late, the school education is being seen as an important human capital investment by both parents and the government. When marks at the school leaving exams determine the entry to 'job-oriented' courses and institutions of excellence, marks evolve in today's context as the ultimate measure of learning outcomes, acceptable to all. In spite of its intermediate character and that the actual purpose of school education is not to enable entry into higher education, but to instil values of culture, citizenship, literacy, numeracy and laying foundations for life long, marks and pass percentage are deemed as the indicators of quality of school as much as it is supposed to reveal the scholastic abilities of students. Notwithstanding the fact that the grades/marks scored in the government conducted school leaving examinations are standardised, marks do influence the schools and teachers to teach only those that are tested in such examinations and leave the rest for the students to discover themselves. Moreover, such examinations are only partial measurements of learning outcomes.

Yet, it is interesting to examine the role of social, school and other factors that determine the level of learning outcomes of students as reflected in marks. When human capital investment decisions are made by parents, family background does influence choice of school and learning outcomes. As parents strive to provide opportunities for their children to gain social and economic upward mobility through choice of school and subjects of study, ironically, it is also the basis for further socio-economic divergence in the next generation, as families forge intergenerational links in education and wealth. In this context, the growth of private schools, which are perceived to be more efficient than government schools in training the students to score more in the terminal examinations, reflect the preference of parents in this regard. The private schools have less number of students per class and more resources per

student, hence expected to provide better learning experience for the students. But the choice of private schools also reflect the economic and educational background of the parents, hence the home environment also should be conducive for such educational experience.

Though school is expected to be a social equaliser or at least to narrow the educational gap between students of different socio-economic strata, when we have different types of schools that roughly reflect the stratified society, then schools are surely institutions for exacerbating the social and economic divisions in the society. Tamil Nadu is an ideal state to explore how differences in schools could sharpen the divisions in the society through widening the learning outcomes of students of different communities. Till recent times, the State Government had different types of School Boards, which when combined with the differences in the management of schools we had several types of schools that cater to different sections of the highly stratified Tamil society. Though for the sake of analytical convenience we have aggregated schools in terms of two main boards and four main types of management, we could find the sharp differences in the segregation of students by communities overlap on the types of schools. Thus community through selection of schools and subjects of specialisation could influence the learning outcome of students. Given these factors, the variation in the learning outcomes of students should be explained by variation in a host of factors such as family background, school characteristics, location, gender and choice of subjects.

Review of Literature

Robert (1980) in a path breaking paper highlighted the dynamics of social background and schooling process. The main thesis that Mare had put forth was that the social background has a definitive role in continuation of education and through this it affects the ultimate educational outcomes. This study showed that there was a positive association between parental income, job and education with that of movement of students to higher levels of school education and then to the college, there after this effect was less or insignificant. Therefore, the study strongly concludes, 'parental encouragement may mostly strongly affect continuation decisions at the higher levels of schooling' and 'the socio-psychological benefits of higher socio-economic origins are most important at the highest schooling levels, while economic

benefits afford greater advantages for grade progression in the pre-college years'. Of course, Mare's analysis camouflages the role of students' innate ability and self determination to score more and move up in the education ladder. Cameron and Heckman (1998) using a sophisticated econometric modelling, proved that without accounting for the human ability, we would be over-estimating the effects of family background on educational transition and hence would misallocate resources among the students without innate ability to attain higher educational levels. Therefore, the innate ability of a student is a unobserved character in such studies.

Nevertheless, there have been attempts to show the causal effects of social and family characteristics on the educational attainments of students. Ermisch and Macro (2001), have studied the causal effect of family structure and parental education on students' educational attainment. They could show this causal effect being stronger in poor families. Valbuena (2011) investigated the impact of parental education on children's education. This study was based on the British Household Panel Survey, which was started in 1991. The 13th Wave (round of data) was collected in 2003-04. This survey gave longitudinal data over 13 years. Though the sample had 5500 households, excluding some of the respondents for inconsistency in data, the researcher has taken 3046 sample respondents. The analysis has shown the positive impact of parental education on children's education, and particularly the mother's post compulsory education had significant positive impact on children's college education. Family income and parental higher education had higher relevance for the greater educational attainment of children. Thus this study comes out with a significant finding of the growing educational gap in the society.

Bhaumik and Charkaborty (2010) have taken an interesting question in Indian context, that is, how the probability of transition from lower to higher levels of education is affected by social and family characteristics, based on the sample data collected by the National Sample Survey Organisation in 2005. Probabilities of three transitions over four educational levels – primary, middle, higher secondary and tertiary education are estimated. Personal and household characteristics are captured in terms of gender, household per capital consumption (a proxy for economic status) and education of the head of household. The economic and educational characteristics of the regions are captured in terms

of per capita GDP, share of agriculture to state GDP, literacy rate of the state, percentage of public expenditure on education and rural-urban character of household. Generally women have lesser probability to get into higher education, so too Muslims and people from rural areas. The students in states with higher level of literacy, higher percentage of public expenditure on education, have positive impact of successive transitions to higher levels of education.

Though time and again, studies have highlighted that social and family background of students does influence their educational attainment, there are a few shortcomings in such studies. The primary among them is the failure to include the innate ability of students. There have been psychological studies in this respect, but all the other studies have failed to distinguish between nurtured talents from the natural talents of students.

One another important aspect of these sociological and economic analyses is the influence of school characteristics and peer group pressure. Smaller class size, a proxy for higher resources per students and better concentration of teachers on individual student's needs is expected to increase the educational attainments. Researchers continue to study this aspect of educational attainment. Similarly, girls score more marks than boys, *ceteris paribus*. So presence of girls in the classroom is expected to increase the peer group pressure on boys and thus increases their educational attainments. A randomised experiment was conducted by Whitmore (2005) to find the impact of class size and presence of girls on the educational attainments of both boys and girls. While smaller class size at the lower levels of education has little impact on boys and girls, but it is quite likely to improve their educational attainment at the higher standards. Greater the presence of girls in the kindergarten, greater was the effect on both boys and girls in the higher classes. This study concludes that on the whole, smaller class size and greater presence of girls have positive impact on both boys and girls in higher classes.

We have conflicting evidence about the impact of all the school input factors on the educational attainment of students. This trend sustains the continued research interest in exploring the determinants of students' educational attainments; particularly, it is essential to design school system and justify state intervention for rendering social justice.

Research Issue

Whether the social background as reflected in the community and type of schools do explain the differences in learning outcomes as measured by marks in the school leaving examinations is the main question this paper tries to address. Capturing the intended learning outcomes through a single examination system is difficult. Nevertheless, the examination systems that are common to all types of schools and students provide marks as the measure of learning outcomes, to compare the relative academic achievements of students. The community – a broad indicator of socio-economic background of students, determines, on one hand, the choice of schools and the subjects they opt for in the higher secondary course, and on the other hand, the learning outcomes, in terms of marks in the terminal examinations. We test the determinants of learning outcomes of a set of 10th standard students and their learning outcomes in 12th standard, two year later. The gender and the location, along with the type of schools, are also important determinants of learning outcomes, which are included in this study.

The Database

We have taken two sets of data from the Dept of Government Examinations, Govt of Tamil Nadu, namely, the database of students who appeared for the 10th standard examination in April, 2008 and the database of students who appeared for the 12th standard examination in March, 2010. One of the authors analysed the results of the 12th standard in an earlier work (Srinivasan, and Karpagam, 2012), and the present work is to analyse the academic performances of the set of students who successfully completed 10th standard in 2008 and appeared for 12th standard examinations in 2010. We have matched the database of 12th standard with that of the 10th standard and identified students with reference to name, date of birth, sex and community. If all the four characteristics are similar in the two data sets for a student, then we conclude that the same student appeared for 10th standard in 2008 and for 12th standard in 2010. Thereafter, the marks, school and subjects are amalgamated to get a unified database of 10th and 12th marks for each student. Accordingly, we could get 3,88,889 students records containing marks, school characteristics, subjects in both 10th and 12th standard and community and other social indicators. This is the database for our study.

The Broad Picture

We are not analysing all the students who appeared for these two examinations, hence the broad picture is only a description of the subset of students who are in our database. The Table 1 given below shows that the girl-boy ratio in our database is 52:48. All the students who successfully completed the 10th standard in 2008 have appeared through recognised schools and have passed this examination in the first attempt. Out of these 3,88,889 students, only 86.6 per cent passed the 12th standard examination in 2010 and this is a little higher than the overall pass percentage of 85.3 per cent in that year for the 12th standard. In line with the trend set over the years, the pass percentage was higher for girls than for boys.

It is worthy of noting the sharp change in the rural-urban composition of students between 10th and 12th standard. The 59 per cent of the students who passed 10th standard was from rural areas and only 41 per cent was from urban areas. On the contrary a majority of the rural students have chosen to go to urban schools for higher secondary, hence we find only 49 per cent of the 12th standard students appeared from the rural schools and the rest 51 per cent appeared from the urban schools. We do find the location of schools does influence the probability of securing higher marks in the terminal examinations. Generally, students from urban areas perform better than their rural counterparts. In 2010, if we consider the total population of 12th standard students, the pass percentage in urban areas was 85.6 compared to 80.7 in rural areas. But in our sample, the pass percentage in urban areas was only slightly higher at 84.15 compared to 84.97 in rural areas. Hence, it is obvious, more students prefer urban schools to rural schools.

The distribution of students in terms of communities was more or less same as in the distribution of the students in the total population. What is important is the distribution of the students in the subject groups in 12th standard. We find nearly 65 per cent and 23 per cent of the students have chosen to study Science and Commerce subjects and the rest 12 per cent of the students are distributed between Arts and Vocational courses. The science groups give the students the base to pursue technical higher education, hence the larger proportion of students in these groups. Next the students prefer the commerce groups because they offer the base to choose commerce and related courses in colleges. We

find a higher proportion of the students in vocational courses, because such courses are provided mainly in government schools and a very insignificant number of government-aided and private schools offer these courses. The government technical schools that offer the vocational courses try to fill the intake capacity so as to engage the specialised teachers who are appointed to teach such courses. The vocational stream also offers the largest variety of courses and hence could accommodate larger number of students.

Finally, we take a look at the distribution of students by types of schools. We have combined all types of government schools, those run by the state departments of Education, SC&ST Welfare, Social Welfare, Minorities Welfare and Forest, and those of the Municipalities and Cantonment Boards. There is extreme variation in terms of social background of students, infrastructure and learning outcomes in each of the different type of government schools, but because of inadequacy of data in each of these institutions, we have combined them under the head 'Government Schools'. Next, we have the government-aided schools. The state government during various years have extended financial help to schools that have been established by philanthropists, social groups and linguistic and religious groups. These schools are perceived to serve the society at large; hence the state government has been providing recurring grants to meet the salary expenses on teaching and non-teaching staff in these schools. These government-aided schools are privately managed but partially government funded, hence, they do not fix higher tuition fees, consequently, we find students from lower middle class also study in these schools. Generally, the tuition fees in the self-financing SSLC schools are lower than in the Matriculation schools, hence we have divided the private schools into self-financing SSLC schools and Matriculation schools.

Table 1: Summary Statistics of 10th standard and 12th standard Students

S.No	Particulars	10 th standard	12 th standard
1	Total No of Observations	3,88,889	3,88,889
1A	Girls	2,02,715 (52.13)	
1B	Boys	1,86,174 (47.87)	
2A	Pass	3,88,889	3,36,570 (86.55)

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2B	Fail	-	52,319 (13.45)
2B1	Fail Girls		21,796 (10.75)
2B2	Fail Boys		30,523 (16.39)
3A	Rural	2,30,131 (59.18)	1,89,873 (48.82)
3B	Urban	1,58,758 (40.82)	1,99,016 (51.18)
4A	OC	19,839 (5.10)	
4B	BC	1,75,396 (45.10)	
4C	MBC	1,01,332 (26.06)	
4D	SC&ST	92,322 (23.74)	
5A	Group in 12 Std - Sciences		2,50,958 (64.53)
5B	Group in 12 Std - Commerce		88,402 (22.73)
5C	Group in 12 Std – Other Arts and Humanities		6,939 (1.78)
5D	Group in 12 Std - Vocational		42,590 (10.95)
6A	Government Schools	1,83,937 (47.30)	1,76,586 (45.41)
6B	Govt aided Schools	1,30,196 (33.48)	1,18,063 (30.36)
6C	Self financing SSLC Schools	10,115 (2.60)	32,528 (8.36)
6D	Matriculation School	64,641 (16.62)	61,712 (15.87)

When we compare the distribution of students among these four groups of schools, we find a concrete shift of students from all the groups towards self-financing SSLC schools, because, the intake capacity in higher secondary classes was less than the intake in 10th standard in all the schools except self-financing SSLC schools. In Table 2, we give a cross tabulation of students in these four groups of schools in both 10th and 12th standards. On the whole nearly 78 per cent of students studied both 10th and

12th standards in the same type of school and only 22 per cent shifted schools for the higher secondary. A higher percentage of students shifted from government to government-aided schools, and as a reverse process, we find 13.28 per cent of students from government-aided schools shifted to government schools for higher secondary, followed by self-financing SSLC and Matriculation schools. Nearly 24 per cent of students from self-financing SSLC schools shifted to government-aided schools followed by government and Matriculation schools for higher secondary. Next to government schools, the Matriculation schools retained the largest proportion of their Matriculation students in the higher secondary classes, and 13 per cent of them shifted to self-financing SSLC schools followed by government-aided and government schools. By and large, the students have moved to urban schools and self-financing and partially government funded schools.

Table 2: Cross Tabulations of students by Type of Schools in 10th and 12th Standards

Class	12 Standard				
	Type of School	Govt	Aided	Self Financing SSLC	Matriculation
10 standard	Govt	1,55,685 (84.64)	16,416 (8.29)	7,030 (3.82)	4,806 (2.61)
	Aided	17,289 (13.28)	93,929 (72.14)	12,876 (9.89)	6,102 (4.69)
	Self Financing SSLC	1,499 (14.82)	2,390 (23.63)	4,747 (46.93)	1,479 (14.62)
	Matriculation	2,113 (3.27)	5,328 (8.24)	7,875 (12.81)	49,325 (76.31)

Note: Figures in Parentheses are percentage to 10th standard total in each type of school.

Association between Marks and Social and School Characteristics

The data set has, apart from marks obtained in each of the subjects by 3,88,889 students in both 10th and 12th standards, each student's community, sex, date of birth, type of school, location and subjects studied in higher secondary. We have already seen the distribution of students by these parameters. In this section, we analyse the determinants of marks obtained in the 10th and 12th standard examinations. Initially, we described the distribution

of aggregate marks obtained in 10th standard over the social and school parameters that we have listed above.

Table 3 given below, shows the distribution of students by marks and sex in 10th and 12th standards. As percentage of marks increases in both the classes, the proportion of girls increases. The proportion of girls scoring more than 60 per cent in the 10th and 12th standard examinations are 54 per cent and 55 per cent respectively. Thus, girls not only show higher pass percentage than boys, they score over the boys in higher grades as well.

Table 3: Distribution of Students by Marks and Sex

Class	10 th Standard			12 th Standard		
	Marks	Girls	Boys	Total	Girls	Boys
≤34.9%	0	0	0	21,796 (42)	30,523 (58)	52,319
35%-49.9%	24,469 (46)	28,940 (54)	53,409	12,551 (46)	14,617 (54)	27,168
50%-59.9%	37,398 (49)	38,897 (51)	76,295	40,866 (52)	37,811 (48)	78,677
60%-74.9%	62,518 (51)	59,041 (49)	1,21,559	72,982 (54)	61,201 (46)	1,34,183
≥75%	78,330 (57)	59,296 (43)	1,37,626	54,520 (56)	42,022 (44)	96,542

Note: Figures in parentheses are percentage to respective class total in each row.

We have already seen that there was a sharp shift of students from rural schools to urban schools for the higher secondary. The rural-urban ratio was 59:41 in 10th standard and it has become almost on par in 12th standard, that is, 51:49. This is reflected in each of the grades in the 10th and 12th standards. Though, the overall proportion of urban students was 41% in 10th standard, their share increases as we move from the lower marks to higher marks, that is the percentage of urban students was only 29 in the grade 35 per cent to 49.9 per cent, and the proportion increased to 49 in the grade 'greater than 75 per cent' as shown in Table 4 given below. In the case of 12th standard, the students are almost equally divided between rural and urban schools, so is the distribution in the higher grades. But we find relatively larger proportions of urban students in the lower grades. Therefore, location does not make any difference in terms of grades, at the aggregate level, but it could make some difference for the science and commerce groups, because the urban centres have more private coaching centres in these subjects compared to rural areas.

Table 4: Distribution of Students by Marks and Location

Class	10 th Standard			12 th Standard		
	Marks	Urban	Rural	Total	Urban	Rural
≤34.9%	0	0	0	27,571(53)	24,748(47)	52,319
35%-49.9%	15,491(29)	37,918(71)	53,409	14,844(55)	12,324(45)	27,168
50%-59.9%	26,514(35)	49,781(65)	76,295	41,751(53)	36,926(47)	78,677
60%-74.9%	49,620(41)	71,939(59)	1,21,559	67,581(50)	66,602(50)	1,34,183
≥75%	67,133(49)	70,493(51)	1,37,626	47,269(49)	49,273(51)	96,542

Note: Figures in parentheses are percentage to respective class total in each row.

Table 5 shows the association between type of schools and grades in 10th and 12th examinations. In both the classes, we find the private schools have higher proportions of students in higher grades and the government and government-aided schools have higher proportions of students in the lower grades. This could mean that the students from economically and educationally backward communities study in government and government-aided schools and score lower marks compared to the students in the private schools.

Table 5: Distribution of Students by Marks and Types of Schools

Class	10 th Standard			
	Marks	Govt	Aided	Self fin SSLC
≤34.9%	0	0	0	0
35%-49.9%	40100(22)	12219(9)	506(5)	584(1)
50%-59.9%	46584(25)	22980(18)	1322(13)	5409(8)
60%-74.9%	55444(30)	41852(32)	3161(31)	21102(33)
≥75%	41809(23)	53145(41)	5126(51)	37546(58)
Total	183937	130196	10115	64641
Class	12 th Standard			
	Marks	Govt	Aided	Self fin SSLC
≤34.9%	38748(22)	9870(8)	1559(5)	2102(3)
35%-49.9%	20669(12)	5129(4)	756(2)	604(1)
50%-59.9%	46530(26)	22372(19)	4421(14)	5292(9)
60%-74.9%	54353(31)	49066(42)	11373(35)	19219(31)
≥75%	16286(9)	31068(26)	14419(44)	34495(56)
Total	176586	118063	32528	61712

Note: Figures in parentheses are percentage to respective class total in each column.

If the communities reflect the relative positions of educational and economic backwardness of people, then, we could expect higher proportions of students from forward communities should be in higher grades compared to the students from backward and oppressed communities. In Table 6, look at the grade '≥75 per cent' in both 10th and 12th standard examinations, the proportion of students decline as we move from the forward community OC to the most oppressed communities SC & ST, whereas it is the reverse in all other lower grades.

From Table 6, we could infer that the distribution of students by marks and community has a certain pattern. Compare the rows 35 per cent to 49.9 per cent with ≥75 per cent, as we move from OC to SC & ST, we find the proportion of students increases in the former row and declines in the latter row. Academic achievement distance between the OC and SC & ST can be highlighted using the following facts. One, the proportion of OC students scored more than 75 per cent was 57 in 10th standard and 53 in 12th standard, whereas for the SC & ST students they are 21 and 12 respectively. Similarly, we compare the proportion of students scoring less than 49.9 per cent, and find that the ratios for two classes in OC are 4 and 8, for SC & ST they are 22 and 32. Thus, higher proportion of OC students score more than 75 per cent and higher proportion of SC and ST students score less than 49.9 per cent in both the classes, widening the academic distance between the two communities in successive levels of education.

Table 6: Distribution of Students by Marks and Community

Class	10th Standard			
Marks	OC	BC	MBC	SC&ST
≤34.9%	0	0	0	0
35%-49.9%	817(4)	15834(9)	16021(16)	20737(22)
50%-59.9%	2113(11)	28423(16)	21792(22)	23967(26)
60%-74.9%	5682(29)	55333(32)	32375(32)	28169(31)
≥75%	11227(57)	75806(43)	31144(31)	19449(21)
Total	19839	175396	101332	92322
Class	12th Standard			
Marks	OC	BC	MBC	SC&ST
≤34.9%	1102(6)	16946(10)	14597(14)	19674(21)
35%-49.9%	430(2)	8263(5)	8401(8)	10074(11)

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50%-59.9%	2053(10)	31233(18)	22617(22)	22774(25)
60%-74.9%	5838(29)	63853(36)	35535(35)	28957(31)
≥75%	10416(53)	55101(31)	20182(20)	10843(12)
Total	19839	175396	101332	92322

Note: Figures in parentheses are percentage to respective class total in each column.

Of all the determinants of marks, community, type of school and subject groups in higher secondary are important in determining the students' marks in the 12th standard examination. We attempt at a multivariate distribution of 12th standard students across the three characteristics mentioned above.

Table 7: Distribution of Students by Community, Type of Schools and Groups in 12th Standard

Com	Schools	Science	Commerce	Arts & Humanities	Vocational	Total
OC	Govt	2088(10.5)	947(4.8)	62(0.3)	410(2.1)	3507(17.7)
	Govt-aided	2998(15.1)	1564(7.9)	51(0.3)	359(1.8)	4972(25.1)
	Self-financing SSLC	1171(5.9)	271(1.4)	2(0.0)	52(0.3)	1496(7.5)
	Matriculation	7106(35.8)	2733(13.8)	3(0.0)	22(0.1)	9864(49.7)
	Total	13363(67.4)	5515(27.8)	118(0.6)	843(4.2)	19839(100)
BC	Govt	37765(21.5)	14755(8.4)	1414(0.0)	8574(4.9)	62508(35.6)
	Govt-aided	37759(21.5)	14266(8.1)	952(0.5)	7294(4.2)	60271(34.4)
	Self-financing SSLC	13976(8.0)	2755(1.6)	6(0.0)	688(0.4)	17425(9.9)
	Matriculation	29937(17.1)	4973(2.8)	8(0.0)	274(0.2)	35192(20.1)
	Total	119437(68.1)	36749(21.0)	2380(1.4)	16830(9.6)	175396(100)
MBC	Govt	33530(33.1)	13325(13.1)	1163(1.1)	7711(7.6)	55729(55)
	Govt-aided	15442(15.2)	6845(6.8)	606(0.6)	3672(3.6)	26565(26.2)
	Self-financing SSLC	6478(6.4)	1342(1.3)	14(0.0)	379(0.4)	8213(8.1)
	Matriculation	9583(9.5)	1080(1.1)	0(0.0)	162(0.2)	10825(10.7)
	Total	65033(64.2)	22592(22.3)	1783(1.8)	11924(11.8)	101332(100)
SC & ST	Govt	30587(33.1)	14225(15.4)	1781(1.9)	8249(8.9)	54842(59.4)
	Govt-aided	13982(15.1)	7084(7.7)	859(0.9)	4330(4.7)	26255(28.4)
	Self-financing SSLC	3629(3.9)	1450(1.6)	17(0.0)	298(0.3)	5394(5.8)
	Matriculation	4927(5.3)	787(0.9)	1(0.0)	116(0.1)	5831(6.3)
	Total	53125(57.5)	23546(25.5)	2658(2.9)	12993(14.1)	92322(100)

Note: Figures in parentheses are percentages to the respective community total.

Table 7 shows that larger proportion of students across all the communities study in Science groups, followed by Commerce groups. Here too, the proportion of students is lower for MBC and SC & ST communities compared to OC and BC communities. What is interesting is the other end of the spectrum; we find relatively a larger percentage of students from the two depressed communities study in vocational groups compared to other two communities. So, there is a clear relationship between communities and groups chosen in the higher secondary course. Further, we find a larger proportion of students from OC and BC communities not only study Science and Commerce groups, but quite a larger proportion within these groups study in private schools, that is, self-financing SSLC and Matriculation schools and it is the reverse for the students from MBC and SC & ST communities. Thus, it is a combination of community, type of school and groups that determine the grades in the 12th standard examination.

Table 8 shows that the proportion of students who scored more than 75 per cent in 12th standard examinations has been larger than their share in the total enrolment for the examination. Thus, community correlates with grades that the students get in the examination. If we further classify this data in terms of schools and subject groups, we shall see some discernible pattern.

Table 8: Distribution of Students scored more than 75 per cent in 12th Standard

Community	Total Appeared	Scored greater than 75%
OC	19,839(5.10)	1041(10.8)
BC	1,75,396(45.10)	55104(57.1)
MBC	1,01,332(26.06)	20185(20.9)
SC&ST	92,322(23.74)	10846(11.2)
Total	3,88,889	96551

What we find in Table 9 is in line with the trend discussed so far. In the OC category, nearly 97 per cent of the students who scored more than 75 per cent have scored in the science and commerce groups, and nearly three-fourth of them studied in private schools. Compare this with the students in the SC & ST category, where only 78 per cent have scored more than 75 per cent in the science and commerce groups and nearly one-third of them studied in government schools. Thus a combination of community, school and subjects determine the marks in the 12th standard examinations.

Table 9: Distribution of Students with greater than 75% marks by school and groups

Community	School	Science and Commerce	Arts and Vocational
OC	Govt & Govt-aided	2484(23.8)	245(2.4)
	Self-fin SSLC&Matric	7634(73.3)	53(0.5)
	Total	10118(97.1)	298(2.9)
BC	Govt & Govt-aided	21905(39.8)	4589(8.3)
	Self-fin SSLC & Matric	28076(51.0)	534(1.0)
	Total	49981(90.7)	5123(9.3)
MBC	Govt & Govt-aided	8680(43.0)	2640(13.1)
	Self-fin SSLC & Matric	8630(42.6)	235(1.2)
	Total	17310(85.6)	2875(14.2)
SC&ST	Govt & Govt-aided	4871(44.9)	2221(20.5)
	Self-fin SSLC & Matric	3621(33.3)	142(1.3)
	Total	8483(78.2)	2363(21.7)

Note: Figures in parentheses are percentages to the community total for 'greater than 75%'

Determinants of Marks in Terminal Examinations

Having analysed the close relationship between marks obtained in 10th and 12th standard examinations and the various social and school characteristics, we hypothesise that a set of variables shall determine the marks obtained in 10th standard examination and those marks would, along with other factors could determine the marks obtained in 12th standard examinations.

In the first step, we conceive a linear function, in which the percentage of marks obtained in 10th standard examination is a function of gender, location, community, type of school and age of the students. Of these factors, gender, location, community and type of school are dummy variables. Age is measured by years upto 2 decimals. In addition to these variables, we include two more aggregate variables, which indicate the economic and educational environment of the students in each district. Hence, we take 31 district level per capita income in 2009-10 and literacy rate in 2011 for this analysis.

The regression specification is as follows:

$$y_i = a_1 + a_2 x_1 + a_3 x_2 + a_4 x_3 + a_5 x_4 + a_6 x_5 + a_7 x_6 + a_8 x_7 + a_9 x_8 + a_{10} x_9 + a_{11} x_{10} + a_{12} x_{11} + \mu_i$$

Here, y_i is 10th standard marks expressed as percentage to total,
 x_1 is gender dummy, boy=0, girl=1,
 x_2 is location dummy, urban=1, rural=0,
 x_3, x_4 and x_5 are three community-dummies, (OC, BC, MBC),
 keeping SC & ST as reference variable,
 x_6, x_7 , and x_8 are three types of school dummies (Government-
 aided, Self-financing SSLC and Matriculation schools), keeping
 government school as reference variable,
 x_9 is the age of students measured in years up to two decimals,
 x_{10} is the average district level per capita income for the years
 2007-10, measured at current prices, there are 30 district per
 capita income values in the study,
 x_{11} is the district level literacy rate for the year 2011, and
 μ_i is the residual item.

We expect all the independent variables to have positive coefficients, that is, all the variables positively influence the dependent variable, namely, the 10th standard marks. The regression equation given below has adjusted $R^2=0.209$ and all the coefficients are significant at 95% level of confidence.

$$y_i = 124.688 + 2.548x_1 + .900x_2 + 7.245x_3 + 5.748x_4 + 3.177x_5 + 6.497x_6 + 9.612x_7 + 11.259x_8 - 3.875x_9 + .000074x_{10} - .147x_{11} + \mu_i$$

Except age and literacy rate, all other variables have positive coefficients. Age should positively influence the marks, as older students have more maturity to learn; strangely this is not the case in our sample. Similarly, higher district literacy rate should positively influence the academic achievements of students, but once again, this coefficient has negative sign. Possibly, some of the otherwise educationally backward districts have more number of good schools. The students from MBC, BC and OC communities get increasingly higher marks when compared to students from SC and ST communities. Likewise, students from Matriculation, Self-financing SSLC and government-aided schools get higher marks than students from government schools. The urban students on an average score 0.9 per cent more than the rural schools. As expected, the girls get 2.548 per cent more marks than the boys. District per capita income positively influences the marks. On the whole, we have good fit of the linear regression equation that we have conceived.

Using this regression equation we have calculated the unstandardized predicted values of the 10th marks for all the students. We now construct an equation for the 12th standard

marks. This equation has a similar specification as the previous one, but run with a different data set. The general specification of the regression equation is given hereunder.

$$y_i = a_1 + a_2 x_1 + a_3 x_2 + a_4 x_3 + a_5 x_4 + a_6 x_5 + a_7 x_6 + a_8 x_7 + a_9 x_8 + \mu_i$$

Here, y_i is 12th standard marks of students in the sample,

x_1 is location dummy, urban=1, rural=0 for 12th standard students,

x_2 , x_3 , and x_4 three types of school dummies (Government-aided, Self-financing SSLC and Matriculation schools), keeping government school as reference variable,

x_5 , x_6 , and x_7 are the three types of 12th standard subject dummies (Science, Commerce, and Arts), keeping vocational courses as reference variable,

x_8 is the unstandardised predicted 10th standard marks for each student, and

μ_i is the residual item.

First, we obtained the unstandardised predicted values of the 10th standard marks for all the 3,88,889 students from the equation discussed above and used that variable as an independent variable in the second regression equation to estimate the determinants of the 12th standard marks. Here we consider only the 12th standard marks in percentage, as we do not consider the pass and fail status of the students. Some of the students who, at the aggregate level scored more than 35%, but could be declared fail, because they have not obtained the required 35% in any one or more of the papers.

The regression equation has an adjusted $R^2=.322$ and all the coefficients are significant at 95% level of confidence.

$$y_i = 18.258 + .385x_1 + 4.383x_2 + 9.923x_3 + 11,157x_4 - 8.475x_5 - 7.495x_6 - 10.129x_7 + .729x_8 + \mu_i$$

Urban students score more than the rural students, students from government schools score less than the students from the three other types of schools. Similarly students of vocational groups score more than the students of other subject groups. The positive sign of the coefficient attached to unstandardised predicted variable, show that the cumulative effect of schooling up to 10th standard has a positive influence on 12th standard marks. The regression analyses given so far prove that community, location and type of school up to high school do significantly influence the choice of courses and schools in the higher secondary and also the academic performance of students at both the levels.

Conclusion

The entire school system is designed to further the educational gaps between students of different communities divided by social and economic factors. Students from the Most Backward Communities and SC and ST communities do suffer from social, economic and educational backwardness at home. When most of them study in government schools and quite a substantial number of them in vocational and arts courses, school, the only institution of hope to compensate for their backwardness, does not provide the academic training and impart learning skills that put them on par with the students of other communities, at least in the academic performance measured in terms of marks obtained in the common examinations. If schools, particularly, the government schools have to perform the duty of a social and educational equaliser, then, they have to be at least twice as efficient as the self-financing educational institutions.

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Risk Taking Behaviour of Parentally Accepted and Rejected Children

SYED ISHFAQ AHMAD SHAH*

MAHMOOD AHMAD KHAN**

ABSTRACT

The main objective was to study the risk taking behaviour of parentally accepted and rejected children. Rohner's Parental Acceptance-Rejection Questionnaire (PARQ) Child Form- (1978) was used to identify the parentally accepted and rejected children and after administering this questionnaire the sample was selected which comprised of parentally accepted children (N=204) and parentally rejected children (N=204). Self-constructed risk taking behaviour scale was used to collect the data. The data was analysed by using Mean, S.D and t-test. The results reveal that parentally accepted children are low on unhealthy risk taking behaviour as compared to parentally rejected children. Parentally accepted children exhibit low or no unhealthy academic risk; exhibit less or no unhealthy social risk; are low on unhealthy future/goals risk. They are less interested in the adventurous risks which are dangerous for their health in particular and life in general in comparison to parentally rejected children who exhibit unhealthy adventurous risk. Both parentally accepted and rejected children exhibit average level of unhealthy security/peace risk like protesting against human rights violation without caring about their own life which may be due to the fact, that state is facing armed conflict since 1989.

Introduction

Parent child relationship is one of the most overwhelming, meaningful and powerful relationship out of all interpersonal relations. So far as Parental Acceptance-Rejection (PAR) theory is concerned parent's love-related (i.e., accepting-rejecting) parenting styles affect the development of offspring's mental representations about themselves and about how sensitively and reliably they

* Doctoral Scholar, Faculty of Education, University of Kashmir

** Dean and Head, Faculty of Education, University of Kashmir

can expect their caregivers to respond to their emotional needs (Ainsworth, 1989; Rohner et al., 2010). The theory speculates that these representations are likely to generalise to other close relationships, influencing offspring's appraisal and behaviour in intimate relationship throughout life (Rohner/et al. 2010).

A variety of personality-related studies have investigated relationships between acceptance-rejection and self-esteem (Salama, 1991), self-assertiveness (Elyan, 1992), personality traits/dispositions (El-Sayed, 2000), locus of control (Al-Nafie, 1997), loneliness (Mekhemer, 2003), dependency and self-criticism (Faied, 2000), overall psychological adjustment (Abdel-Wahab, 1999), and ego-strength and single-mindedness (Al-Otaibi, 2005). Results of these studies have shown significant correlations between perceived parental acceptance and positive personality traits. Further, children's perceptions of parental rejection correlate significantly with high levels of depression, anxiety, and neuroticism. Solangi (2012) revealed that status offenders have perceived more parental neglect than home children.

Salama (1987) reveals that respondents who perceived their parents as more rejecting tended to show higher rates of phobias, especially social phobias, than did respondents who felt accepted. In addition, El-Sayed (2000) showed that children who perceived their parents as more accepting also tended to exhibit higher levels of (self-reported) emotional stability and social adjustment, together with lower levels of anxiety. Almousa (2007) investigated the relationship between perfectionism (normality/neuroticism) and university students' perceptions of parental socialisation styles by using Rohner's PARQ. Results revealed that normal students perceived their parents as more accepting and warm, while neurotic students perceived their parents as more aggressive (hostile), more neglecting, more controlling, and more rejecting.

Trivedi (1987) found that parental attitude (acceptance-rejection) was significantly related to security-insecurity of children. Campo & Rohner (1992) reveal that perceived parental rejection in childhood was higher among substance abusers than non-abusers. The study by Zaeter (1998) found that juvenile delinquents tended to perceive their parents to be less accepting than did non-delinquents.

Risk has been a concern of human beings from the earlier days of recorded history and most likely even before that. The safety of

children as they learn and develop is of prime concern for parents, teachers and legislators alike. John et al. (2005) examined the relationship between adolescents' perceptions of life satisfaction, behavioural risky acts, and self-reported acts of violence. Analyses indicated that higher levels of life satisfaction are associated with lower violence. Participation in work and involvement in health-related risk-taking behaviours pertaining to sex, drugs, and alcohol are also associated with increased violence. Learning how to respond appropriately in risk situations comes not only from the child's direct experiences but also through the guidance of those around them. The role of parent practices in guiding children's decision-making in risky situations has mainly been investigated in experimental contexts. Parents mainly supervise their child's activities and provide encouragement/discouragement. Parent's intervention to prevent children's risky play and advice on how to complete the activity safely may possibly depend upon the acceptance/rejection of the child by them (Helen, 2010). Risk taking behaviour has been studied in connection with variables like social factors, affective factors, peer relations, societal conditions etc. but need to be studied in relation with parental acceptance/rejection. Therefore, the present investigator made a humble attempt in this direction.

The present study aims to provide the directions to parents, teachers, and educational administrators to organise the belongingness of the children and is expected to influence child rearing practices, counselling process in schools and adult education centres.

Objectives

1. To identify the parentally accepted and rejected children.
2. To study risk taking behaviour of parentally accepted and rejected children.

Hypotheses

1. There is significant difference between parentally accepted and rejected children on risk taking behaviour (Composite Score).
2. There is significant difference between parentally accepted and rejected children on risk taking behaviour (Factor Wise).

Operational definitions of the terms used

Parentally Accepted and Rejected Children

In the present study parentally accepted children refer to those children who scored equal to 25th percentile and below on Rohner's Parental Acceptance Rejection Questionnaire (PARQ). Parentally rejected children refer to those who scored above 75th percentile on the Rohner's Parental Acceptance Rejection Questionnaire.

Risk Taking Behaviour

In the present study Risk Taking Behaviour refers to the scores obtained by the sample subjects on the self-constructed Risk Taking Behaviour Scale of the researcher which measures unhealthy risk taking behaviour.

Methodology

Initial Sample

There are ten (10) districts in Kashmir valley of Jammu & Kashmir. Out of these, three (03) districts namely Srinagar, Baramulla and Kupwara were randomly selected for selection of initial sample. There are 08, 18 and 13 educational zones in district Srinagar, Baramulla and Kupwara, respectively. Out of these educational zones one from each district namely Gulab Bagh zone of Srinagar, Pattan zone of Baramulla and Sogam zone of Kupwara were selected randomly for collection of data. The initial sample of the present study comprised of 828, 8th class children of age range: 13-14 years.

Final Sample

Rohner's Parental Acceptance Rejection Questionnaire (PARQ) Child Form (1978) was administered to all the 828 sample subjects in different sittings after building a rapport with the subjects and the concerned teachers and headmasters of respective schools. The subjects who scored equal to 25th percentile and below on Parental Acceptance Rejection Questionnaire (PARQ) were termed as parentally accepted children and the subjects who scored above 75th percentile on Parental Acceptance Rejection Questionnaire (PARQ) were termed as parentally rejected children. The same technique of extreme scores has been adopted in many studies (Kithara, 1987; Lila et al., 2007; Rohner, 1978). Six (06) students were screened out from the final sample of the study as they were

continuously absent from the school. Therefore, the final sample comprised of 204 parentally accepted children and 204 parentally rejected children.

Tools used

1. Parental Acceptance-Rejection Questionnaire (PARQ) Child Form by Rohner (1978) for the identification of parentally accepted and rejected children was used.
2. For measurement of risk taking behaviour of parentally accepted and rejected children self constructed Risk Taking Behaviour Scale was used which measures unhealthy risk taking behaviour.

Analysis of data

Tests were administered as per the instructions provided in the test manuals. The collected data were analysed through statistical techniques viz: Mean, S.D and t-test.

Results and Discussion

The results of the present study conducted on the risk taking behaviour of parentally accepted and rejected children are discussed below:

Table 1
Significance of the mean difference between Parentally Accepted and Rejected Children (N=204 on each) on composite score of Risk Taking Behaviour

Factor	Groups	Mean	Std. Deviation	't'-value
Total Risk Taking Behaviour	Parentally Accepted Children	223.59	21.09	24.28**
	Parentally Rejected Children	285.25	29.56	

**Significant at 0.01 level

When parentally accepted and rejected children were compared on composite score of risk taking behaviour, the mean difference was found to be significant. On composite score of risk taking behaviour, Table 1 makes it clear that parentally accepted and rejected children differ significantly. The parentally accepted children have the mean score of 223.59 and parentally rejected children 285.25. The 't'-value computed is 24.28 which is greater than table value and is significant at 0.01 level. The mean score favours the rejected

group; therefore it can be asserted that parentally rejected children are taking high unhealthy risks as compared to parentally accepted children. Parentally rejected children perform unwanted acts. They take unhealthy risks like learning only selected questions to pass examination, habitual of using unfair means in examination, keeping parents in dark regarding their academic achievements, etc. They are accepting the responsibilities to get praise which are far beyond their capacities. They don't accept elder's suggestions, use pain killers without medical prescription. They decide things for future without assessing their pros and cons. They are often involved in conflict with police and public. They don't care for the reputation of their parents. On the other hand parentally accepted children take less unhealthy risks. They are always serious about their academics and study the whole content or syllabi. They are taking assignments as per their capacity. They keep themselves away from conflicts and problems. They care about the reputation of their parents in their society. They are deciding the things after looking properly into its pros and cons. From the above discussion it is clear that parentally rejected children exhibit unhealthy risk taking behaviour as compared to parentally accepted children who exhibit healthy risk or low unhealthy risk taking behaviour. These results are further shown in Fig. 1 given below:

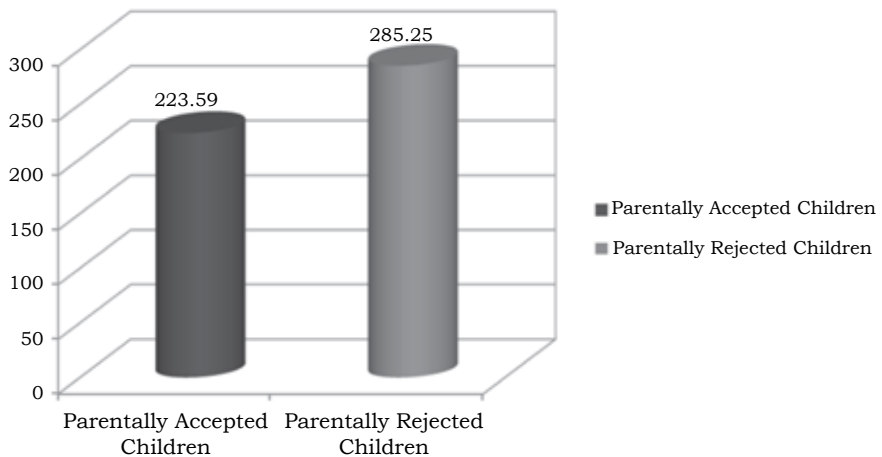


Fig. 1: Comparison between Parentally Accepted and Rejected Children (N=204 on each) on composite score of Risk Taking Behaviour

Table 2
Significance of the mean difference between Parentally Accepted Children (PAC) N=204 and Parentally Rejected Children (PRC) N=204 on Risk Taking Behaviour (Factor wise)

Factors	Groups	Mean	Std. Deviation	't'-value
Academic Risk (A)	PAC	40.25	8.1	17.68**
	PRC	56.16	10.01	
Social Risk (B)	PAC	40.84	7.85	17.66**
	PRC	56.38	9.89	
Future/Goals Risk (C)	PAC	41.1	8.1	18.95**
	PRC	57.4	9.16	
Adventurous Risk (D)	PAC	42.19	8.1	16.71**
	PRC	57.23	10.78	
Security/Peace Risk (E)	PAC	59.21	9.01	1.26*
	PRC	58.09	9.005	

**Significant at 0.01 level

*Not significant

The perusal of the Table 2 makes it obvious that parentally accepted and rejected children differ significantly on factor 'A' (Academic Risk) of risk taking behaviour. The mean score of parentally accepted children is 40.25 and that of parentally rejected children is 56.16. The obtained 't'-value is 17.68 which is significant at 0.01 level. The results support the argument that parentally rejected children take high unhealthy academic risks, because they experience aggression and hostile attitude from their parents. They conceal their academic weaknesses before their parents; they are habitual of making use of unfair means in examination. They don't care about the difficulty level of course or subjects while selection and selecting courses beyond their capacity. They don't consult teacher and parents while facing any difficulties in academics. While as parentally accepted children do take less or no unhealthy risks related to their academics. They consult parents and teachers freely while facing any difficulty. They don't get indulged in any sort of unfair means in examination. They select courses and take assignments according to their capacity. The results envisage that parentally accepted children are taking less academic risks as compared to parentally rejected children.

On the factor 'B' (Social Risk) of risk taking behaviour the mean score of parentally accepted children is 40.84 and that of parentally rejected children is 56.38. The 't'-value computed 17.66 is significant at 0.01 level. The Table 2 makes it clear that parentally accepted and rejected children differ significantly on factor 'B' (Social Risk) of risk taking behaviour. Parentally accepted children are low on social risk as compared to parentally rejected children who take more unhealthy social risks. This may be due to the fact that parentally accepted children are enjoying the love, affection, warmth from their parents which possibly results into less or no unhealthy social risks. They don't disagree with the authority usually figuring a major issue. They try to convince others about their decisions. While helping others in the society they take care of themselves first. They are very much reserved in the gathering or crowd, while as parentally rejected children due to aggression or hostile attitude from parents don't care about themselves. They don't care about the norms of the society or cultural restrictions.

On the factor 'C' (Future/Goals Risk) of risk taking behaviour the mean score of parentally accepted children is 41.1 and that of parentally rejected children is 57.4. The 't'-value is 18.95 which is significant at 0.01 level. The results imply that two groups differ significantly from each other on factor 'C' (Future/Goals Risk) of risk taking behaviour. Parentally rejected children are high on this dimension as compared to parentally accepted children. Parentally accepted children are taking less unhealthy future/goals risks as they are following the predetermined goals. They don't wait for the suggestions of other people regarding their future. They consult teachers, parents and other experts as early as possible for sake of their future. They are eager to safeguard their present as well as future. In contrary to them parentally rejected children are taking high unhealthy future/goals risk. They follow the path without caring about the type of destinations. They are not caring about their future. They believe that present should be charming and joyful. They prefer the jobs of economic privilege even if being completely opposite to their physique or capacity. They are not caring about the success of their coming life. Parentally accepted children are getting healthy environment at home, therefore, it is just possible that they take less unhealthy future/goals risk. They accept the guidance of parents and teachers. While as parentally

rejected children get unhealthy home environment and possibly due to parental rejection they take revenge against maltreatment of parents. They do not accept the guidance of parents and teachers and take unhealthy future/goals risk.

The perusal of Table 2 makes it evident that parentally accepted and rejected children differ significantly on factor 'D' (Adventurous Risk) of risk taking behaviour. The t^2 -value computed is 16.71 which is significant at 0.01 level. The mean difference favours the parentally rejected children indicating thereby that parentally accepted children are taking less or no unhealthy adventurous risks. They love their lives and care about themselves. They don't visit the dangerous places and are less interested in the adventurous risks which are dangerous for their health in particular and life in general. On the other hand parentally rejected children take unhealthy adventurous risks without caring about their life and parents. They are fond of taking risks by visiting dangerous places and wild forests, swimming in deepest waters etc. They are habitual of climbing large trees. This can be explained on the grounds that when parents reject their children they hardly bother about their lives and want to be away from home at any cost. Therefore, they take refuge while taking unhealthy adventurous risk while as parentally accepted children feel home like a heaven, therefore, are hardly bothered to move away from home and take unhealthy adventurous risks.

It is evident from Table 2 that parentally accepted and rejected children do not differ significantly on factor 'E' (Security/Peace Risk) of risk taking behaviour. The mean score of parentally accepted children is 59.21 and that of parentally rejected children is 58.09. The t^2 -value computed is 1.26 which is not significant even at 0.05 level. These results reveal that parentally accepted and rejected children don't differ from each other on factor 'E' (Security/Peace Risk) of risk taking behaviour. However, the mean scores depict that both parentally accepted and rejected children have an average level of security/peace risk, this can be due to the fact that the state is facing armed conflict since 1989. Therefore, both the groups take a social responsibility to go against the human rights violations and hardly bother about their lives. As both the groups have high mean score on this factor and the difference is not significant, no conclusive decisions can be taken.

These results are further shown in Fig. 2 given below.

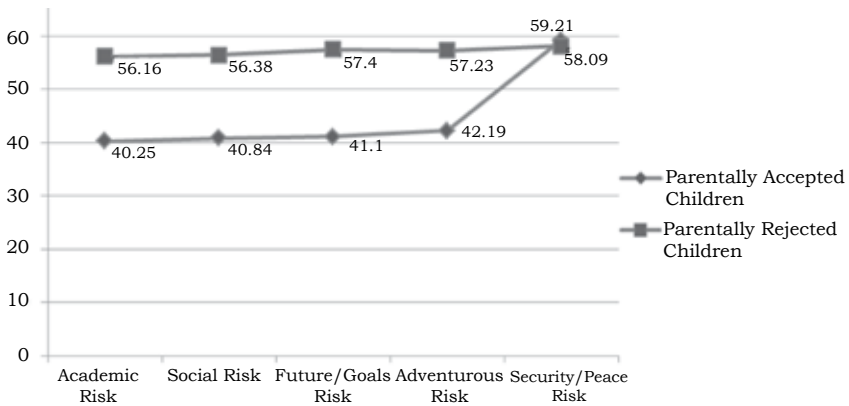


Fig 2: Comparison between Parentally Accepted and Rejected Children (N=204 on each) on Risk Taking Behaviour (factor wise)

The results presented in the Table 1 and 2 and Fig. 1 and 2, interpreted and discussed above imply that parentally accepted and rejected children differ significantly on the composite score of risk taking behaviour and also differ significantly on the factor ‘A’ (Academic Risk), factor ‘B’ (Social Risk), factor ‘C’ (Future/Goals Risk) and factor ‘D’ (Adventurous Risk) of risk taking behaviour, but don’t differ significantly on factor ‘E’ (Security /Peace Risk) of risk taking behaviour from each other. The results are in line with many studies as discussed below. (Bhan, 1984; Bierman et al., 1993; Elyan, 1992; Hernandez, 2007; Medinnus, 1965; Rasmi, 2008; Salama, 1991; Steward et al.,1999.

Medinnus (1965) found that rejected children had more delinquent problems as compared to accepted children and they had strong feeling that their parents rejected and neglected them. Bhan (1984) reveals that the aggressive children had poor family relationships. Parental acceptance–Rejection happens to be an important factor responsible for aggressive behaviour in children (Sinha, et al. 1990). Bader (2008) and Salama (1991) found significant positive correlations between children’s perceptions of parental rejection and children’s and adolescents’ high levels of aggression, hostility, and violent behaviour.

Early research on peer rejection has focused precisely on the high rates of aggressive behaviour that rejected students show (Bierman et al., 1993). Steward et al. (1999) reveal that individuals

who reported a tendency to misbehave during precollege years and whose mothers expressed less warmth and more aggression, and whose fathers expressed more aggression and more neglect were found to engage in at-risk behaviours more often. Hernandez (2007) found that children suffering from reactive attachment disorder-a condition related to poor or nonexistent caregiver bonding in early childhood may exhibit risky behaviours such as violence to themselves and others, setting fires, and a lack of inhibition in behavior toward strangers. Rasmi (2008) found that individuals who were rejected in childhood were consistently less likely to enjoy a higher level adjustment and psychological well-being, more likely to engage in risky behaviour, less likely to be satisfied with their lives, and more likely to encounter socio-cultural difficulties in young adulthood. Therefore, the hypotheses no. 01 and 02 which read as:

1. "there is significant difference between parentally accepted and rejected children on risk taking behaviour (composite score)" stands accepted and
2. "there is significant difference between parentally accepted and rejected children on risk taking behaviour" (factor wise)" is partially accepted.

Conclusions

1. Parentally accepted children are low on total unhealthy risk taking behaviour as compared to parentally rejected children.
2. Parentally accepted children are exhibiting low or no unhealthy academic risk; they learn whole content to pass the examination; they don't get indulged into any sort of unfair means in examination; they consult parents and teachers freely while facing any difficulty regarding their academics. On the other hand parentally rejected children are exhibiting unhealthy academic risk; they learn only selected questions to pass the examination; they use unfair means in examination; keeping parents in dark regarding their academic weaknesses.
3. Parentally accepted children exhibit less or no unhealthy social risk and they care about themselves while helping others in the society. They try to convince others about their decisions and they also care about the norms of society and cultural restrictions. While as parentally rejected children exhibit the opposite behaviour. They are usual of speaking about an unpopular issue in a meeting and don't care about the norms of society and cultural restrictions.

4. Parentally accepted children are low on unhealthy future/goals risk and they follow the path with predetermined goals. They are eager to safeguard their present as well as their future. On the other hand parentally rejected children are high on unhealthy future/goals risk.
5. Parentally accepted children exhibit less or no unhealthy adventurous risk. They are less interested in the adventurous risks which are dangerous for their health in particular and life in general. Parentally rejected children exhibit high unhealthy adventurous risk. They are fond of visiting dangerous places and wild forests, swimming in deepest waters and are habitual of climbing large trees.
5. Both parentally accepted and rejected children exhibit average level of unhealthy security/peace risk like protesting against human rights violation without caring about their own life. Helping people during the time when encounter like situation is on. This may be due to the fact, that state is facing armed conflict since 1989.

Suggestions for parents, teachers/counsellors

1. Parents should be sensitised by counselors about the ill effects of parental rejection so that they may change their attitudes towards their children which in turn is expected to result in healthy risk taking behaviour.
2. Parentally rejected children are exhibiting highly unhealthy risk taking behaviour as compared to parentally accepted children, so they need special care.
3. Parentally rejected children should be motivated to realise that the unhealthy risk taking behaviour exhibited by them destructs their life as well as the life of those associated with them. For this teachers need to give insight to these children so that they will exhibit healthy risk taking behaviour.
4. Parents should avoid rebuking their children and should encourage them for taking positive initiatives.
5. Administrators and planners should be sensitised for helping institutions by providing the counsellors so that the children with parental rejection can be cared properly.
6. Teachers should engage parentally rejected children in some school work and should seriously check the assigned work, so that they may not remain free to go for unhealthy risks.

7. The co-ordination of parents, teachers, children and other staff members of the school should be sought by the guidance and counselling worker in order to plan intervention programmes for parentally rejected children. This co-ordination can go a long way in helping these children in developing healthy risk taking behaviour.

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Skills Information Base for Technical and Vocational Education and Training Policy*

VINEETA SIROHI**

ABSTRACT

The information and evidence based decision making is imperative, particularly with regard to Technical and Vocational Education and Training (TVET) policy, considering its unique mandate to equip people with knowledge and skills required by the world of work. It is critical that TVET policy be drawn from a comprehensive information base which is established from the outset in order to inform the framework of TVET system. In India, the skill information base suffers from glaring deficiencies such as inadequacy of data, absence of fixed periodicity of collecting information, absence of effective legislation, incomplete information and non-availability of micro level/disaggregated information. Besides, the trend of increasing population in the younger age group and falling dependency ratio would need a paradigm shift in the skill development policy and it would be possible to harness the demographic dividend only if the country delivers more informed decision support system and effective policy intervention.

Introduction

More emphasis on general education by the policy makers and educational planners has placed Technical Vocational Education and Training (TVET) at the back stage in the educational landscape of many developing countries including India. This is further endorsed by the negative perceptions of the stakeholders which portray it as a low status and inferior education. However, during the last few years the increasing conviction in the value of skill development in enhancing employability and competitiveness

* The paper is based on the research conducted by the author for UNESCO, Bangkok on School to Work Transition Information bases in Asia and Pacific.

** Associate Professor, Department of Educational Administration, National University of Educational Planning and Administration, New Delhi

along with the rhetoric of knowledge economy has augmented the prominence of this area on national and global agendas. The World Development Report (2007) makes reference to school to work transition as one of the five major transitions of life and the Global Monitoring Report (2012) is devoted exclusively to youth and skills. At the national level too, for decades confronted with several hurdles such as little relevance of the curriculum, lack of alignment between labour market and vocational courses, low education levels of the workforce and limited access to formal vocational education and training, policy makers have been grappling with how to revamp the skill development system. Recently, in India there has been a renewed focus on skills development, with a target to develop the skills of 500 million people by 2022. To this end, in 2009 the government espoused a National Policy on Skill Development with the aim to enhance the skills and knowledge of the people in order to increase their employability and competitiveness in the global world (NPSD, 2009).

It is estimated that the trend of falling dependency ratio and increasing population of 20-35 years which is relatively younger fraction would place India the youngest nation and will continue to give India a relative advantage over other countries for another 25-30 years. It is also estimated that in 2020, the average Indian would be only 29 years old which is quite less as compared to 37 years in its neighbour China and also other countries of the West like the United States, West Europe and Japan where it would be 37, 45 and 48 years, respectively (GOI, 2010). Moreover, this ageing phenomenon is anticipated to globally create a dearth of skilled human resource by about 47 million and India would have a surplus of skilled human resource numbering to 56 million by 2020 according to the Boston Consulting Group study (NPSD, 2009).

Strengthening education and skills is an important policy force for inclusive and sustainable growth. Education and training policies and systems, more and more face the challenge of continuously adapting to the demands of competitive markets along with the individual learning needs. However, governments are considering policy options to build up a skilled human resource base to increase the employability of the workforce and to serve the growth sectors of the economy. Within the realm of TVET there is an overarching concern of the “skills mismatch” which tends to pose certain questions as, what are the skill gaps? At what level

do they occur? Which skills are required by the employers? Which skills are imparted by the institutions? How do the training systems support the acquisition of skills and its upgrading? How does the education system interface with the world of work to synchronise skills development with the changing demands?

Against this backdrop, securing relevance of skill development assumes the top policy priority and the efforts to this end should be kept persistent reflecting the dynamicity of the world of work. Hence, a sound information infrastructure to collect skills requirement on the demand side and to examine the performance of TVET graduates on the supply side should be considered as the initial rung for the incessant adaptation and development of TVET system. Particularly, from the policy perspective, more emphasis should be given to the development of information infrastructure focused on the education-to-work transition for preparing youth more efficiently for the world of work. Education-to-Work transition includes developing readiness for the world of work, facilitating the actual transition process and improving labour market outcomes. An Education-to-Work information base is a minimum requirement to initiate a proper Education-to-Work transition policy. In developing countries like India, the issue of Education-to-Work transition has not received much attention till recently despite the fact that transition to work appears at quite an early age. Initiatives towards this end may be promising in addressing this issue and would call for a paradigm shift in government priorities and policies. In order to ensure that TVET imparts relevant knowledge and skills to enhance the employability of the takers of TVET, there is need for a comprehensive base of information on education to work transition. Education-to-Work information base is a set of policies and practices for garnering information relating to skills and knowledge required by the employers and the labour market outcomes of those entering the world of work. It requires capturing accurate and timely information on the skills' demand as per the changing nature of the world of work, and also on how the skills' supply by TVET performs in the labour market. A sound information base provides deeper insight into the dynamics of education and work and help in informed policy decisions.

Utility of Education-to-Work Information Base

A sound Education-to-Work information base is beneficial for all the stakeholders, both at macro and micro level. At the macro

level, it provides information about the skills required by the employers in various sectors and levels of jobs. On the basis of this information, the government can look at the relevance of the skills imparted by the providers of education and training like the schools and the TVET institutions. Thus, the gaps in the skills demanded and the skills supplied would be identified so as to enable the governments to make interventions in terms of policy and programmes relevant to the labour market situation and enhance the employability of the TVET graduates. At the institutional level, by evaluating the performance of their graduates in the world of work, the information base may provide the direction in which the school or TVET institution may affect reforms. The institutions can also go in for a comparative analysis of other institutions and identify and target the hard spots in their institution in order to improve their courses in line with the requirements of the labour market. At the individual level, this information system would help the students to know about the available jobs, requirements of skills in various jobs, their monetary benefits, opportunities for career advancements and related issues. This information would help them in making the right decisions about the courses to be pursued and the kind of skills they need to develop to be successful in the job market. In a broader perspective, the mismatch between the supply and demand of skills can be rectified with the help of a strong information system which would help the policy-makers and planners make informed decisions and strategic interventions.

Trends in Education and Employment

In India, the education and employment trends during the last decade give a positive picture about education which shows that over the years, there has been a considerable progress in the educational achievement as a whole. This is evident from the rising proportion of 15 years and above aged population attaining secondary education and above to 30 per cent in 2009-10 from approximately 21 per cent in 1999-2000 (GOI, 2011). There is an escalation of almost 10 percentage points in educational achievement during the decade. Whereas the employment trend shows that specifically among the educated youth (15-29 years with level of education of secondary and above), irrespective of the rural or urban area, the unemployment rate was high with marked gender difference of about 10 percentage points and sharp decline of employment among females. The unemployment rates

for the usual status among educated youth are found to be quite high in urban areas as compared to the rural areas and it is more prominent amongst females which are 18 per cent in rural areas and 23 per cent in urban areas, whereas in the case of males it is 8 per cent in rural areas and 10 per cent in urban areas. On the other hand, there is no gender difference to be found with respect to the underemployed population aged 15 years and above in the urban areas. However, more proportions of males (11 per cent) are available for additional work than females (8 per cent) in the rural areas (NSS, 2009-10). Further, the status of employment in the urban areas by general education level, of the persons in the age group of 15 years and above indicates that highest proportions (18.5 per cent) of persons with secondary education were self-employed. In the case of regular employment, persons with level of education graduation and above marked the highest proportion (24.4 per cent) followed by those who were having education till secondary level (19 per cent). It was observed that incidence of casual employment decreased with increasing level of education and was found to be more prominent among illiterates and persons with education below secondary level (NSS, 2009-10). This undoubtedly signifies the relevance of education for steady employment opportunities.

Education-to-Work Transition

The transformation in the Indian economy due to liberalisation calls for educated human resource adequately equipped with skills not only to compete with the global standards but also to keep pace with the growing blend of latest and sophisticated technology at the domestic level. While potential for education may be realised by expanding education, nevertheless, it becomes imperative to tackle the problems related to skills mismatch in terms of supply and demand for enhancing employability and effective management of human resources. This clearly underlines the importance of understanding relationship between education and labour market. Such understanding requires a careful analysis of information related to transition from education to work, indicators of which draw both from education and labour market and the integration of the two is very demanding in terms of data requirements for policy predictions. There are three salient features which underline an effective education-to-work transition information base. First of all, in order to anticipate the demand and supply of future skills, an information base must draw upon comprehensive labour

market information including data on the current employment market, job vacancies and recruitment needs along with information about training and career progression. Secondly, from the supply side, an information base must draw upon a reliable system for tracing youth from completion of education to entry into the labour market. Thirdly, since statistical surveys may not capture complete information on skills required, it is crucial that close cooperation between industry and the education sector be established. This would make it possible to gather comprehensive information through formal and informal communication between local employers and TVET providers.

Policies and Practices

In India, the collection and utilisation of data is governed by certain legislations and regulations like Collection of Statistics Act (1953), Collection of Statistics (Central) Rules (1959), National Policy on Dissemination of Statistical data (1999), Collection of Statistics Act (2008), Collection of Statistics Act (2011) and the recent regulation covering, specifically, skill gap surveys and labour market information systems in the National Policy on Skill Development (2009).

The surveys conducted by National Sample Survey Organisation (NSSO) cover all employment sectors across the nation, barring a few inaccessible areas of Nagaland and the Ladakh and Kargil districts of Jammu and Kashmir. The NSSO survey included questions relating to possession of skills in 1993-94, 1999-2000 and 2004-05. Though the scope of each survey is different, but taken together, these provide some idea on the skill profile of the sample under study. Incidentally, the 2004 round of NSS had a module on vocational training which could be used for undertaking more in-depth analysis on vocational training. The National Skills Development Corporation has conducted national sector-wise skill gap studies and also state-wide studies. While the state surveys cover all sectors of the economy, the national surveys cover 20 high growth sectors as well as the informal sector. There are some other sector-specific and state-specific studies, conducted by a few organisations, which identify employment potential and skill identification.

At the federal level, the Central Statistical Organisation (CSO), functioning within the Ministry of Statistics and Programme Implementation (MOSPI), is the apex statistical body in the

country. While the CSO works for planned improvement of the overall statistical system in the country, each of the Ministries, at the federal level, have a statistical unit, independently collecting, collating and disseminating statistical data. Nationwide sample surveys on socio-economic indicators are carried out by the federal government on a regular basis whereas at the sub-national level, a Directorate of Economics and Statistics (DES) exists in all States and Union Territories, heading their respective statistical systems and collecting data as and when required. There are other agencies also which carry out skill gap analysis at the national and state level. Way back in 1988, as a result of the National Policy on Education (1986), the centrally sponsored scheme on vocationalisation of secondary education envisaged the conduct of district vocational surveys for realistic estimates of Human Resource needs on a long-term and continuing basis, but not much has been done towards this end.

Though the employment and unemployment surveys are conducted by NSSO quinquennially, the time gap of five years do not allow capturing the rapid changes in the labour market. Moreover, the results are published 18-24 months after the end of each survey round. Now, NSDC plans to carry out surveys at three year intervals. Most of the other surveys are conducted on ad hoc basis. There are other alternative sources that provide quantitative data like the publications and the Employment Market Information Programme of the Directorate General of Employment and Training. There is legislation mandating the registration of vacancies with the Employment Exchange under the Employment Exchanges (Compulsory Notification of Vacancies) Act 1959. The data for Employment Market Information Programme is collected once in two years but is restricted to the organised sector. The funding of the skills' need surveys is done by the national government and private stakeholders. However, it varies according to the sector and type of survey. Over the last five years, the funds allocated for skill gap surveys have been increasing.

With regard to the occupational disaggregation, India has adopted the National Classification of Occupations (NCO-2004) which is in line with the approach adopted by ILO in its International Standard Classification of Occupations (ISCO). Similarly, for industrial disaggregation, the National Industrial Classification (NIC-2008), which is identical to the structure of International Standard Classification of Industries (ISCI), has been adopted to provide a basis for the standardised collection, analysis

and dissemination of industry-wise economic data. Though they may give a broad idea of the skills demanded, they do not map the rapidly changing specific skill demands by occupation or industry.

While the National-level data could be used for policy development, there is need for more disaggregated data at the provincial level in a uniform manner that could greatly aid policy formulation. Though the five-year plan exercise was a continuous process, these were, in the aggregate, sufficient for broad policy directions but perhaps not appropriate for focused area level interventions. The federal nature of the country also poses challenges of coordination across different state governments.

Challenges: Assessing Skills Demand

To be able to make the authentic use of the information about demand for skills for the purpose of policy and planning, it requires adequate skill and effort in gathering data from diverse sources, analysing and interpreting it to give it a meaningful and comprehensive shape. There is no single indicator that can capture the transition from education to work entirely. In India, although the major source of data for tracking of skills is the National Sample Survey; however, there are some other agencies/organisations who conduct research on specialised labour market data. The major challenge faced relates to using the existing data in an integrated manner to predict Education-to-Work transition. The use of broadly defined classification of industries, occupations and province provide a wider perspective of the labour demand dynamics but does not give scope for detecting the explicit changes that take place in the requirement of skills as per the specific industry, occupation and province. The employment and unemployment survey is conducted every five years, but due to this huge time gap between surveys, the fast changing scenario of the labour market is overlooked by the stakeholders. The main results are published in about a period of two years after completion of each survey. It can only provide a trend at a broad level rather than specific and updated information that can give the required feedback to policy-making or policy implementation. One major limitation of the surveys under National Sample Survey Organisation (NSSO) is that due to the constraint of sample size mainly dictated by limited Human Resource, it is not possible to arrive at reliable estimates at lower level of disaggregation. There is need for more disaggregated data at the provincial level in a uniform manner that could aid

policy formulation. Moreover, the NSS rounds do not permit for an obvious division between vocational and general education. Due to this limitation, it is not easy to conduct in-depth study of vocational education and training solely on the NSS source. Moreover, a surfeit of organisations is involved in data generation which is largely decentralised. The lack of uniformity in the use of definitions and concepts is a serious problem, which often makes it difficult to compare results of different surveys. In addition to this, in case of ad-hoc surveys, the definition of the term skills and the methods used to identify it, differ with each survey creating difficulty in comparison. Besides, there is no particular legislation and regulation effective to support the compilation and generation of data on skills requirement and its use by the public.

In case of executing employer surveys, small size of employers and informal functioning without any proper registration poses a significant challenge, as it is difficult to identify the exact population of employers. Moreover, the exercise of carrying out surveys for the unorganised sector faces issues of methodology and logistics. It is very difficult to survey the highly fragmented clusters which do not have any industry association. Nevertheless, the significance of Labour Market Information System (LMIS) has been extensively acknowledged at various forums. There is need for collection of such data through employer surveys which could provide more comprehensive information. Thus, limited coverage of the employment market information, inability to use the existing data in an integrated manner, periodicity, delay, lack of reliable estimates at lower level of disaggregation, are some of the issues that need to be addressed. Nonetheless, the National Policy on Skill Development (NPSD, 2009), places lot of emphasis on developing labour market information system and planning of human resource for the consistent and genuine measurement of the trends in the economy and the dynamic forces of the labour market. Hence, for developing an effective LMIS and Human Resource Planning (HRP) needs to take into cognizance the challenges highlighted above.

Assessing Labour Market Phenomenon

Incidentally, in order to track labour market performance, surveys/ studies are undertaken on ad-hoc basis with only a few sectors being covered. There is no nationalised system of keeping records of employment of vocational pass outs, though, some schools and institutes maintain such records. However, the recent policy

on skill development identifies labour market performance as a key thrust area proposing programmes to develop and upgrade the skills of the workers and make them competent to tune with the shifting requirements of the labour market and the altering technologies. It also emphasises on modular courses/short term relevant courses to facilitate the placement of individuals into the workplace. It has given importance to enhancing the employability of the workforce. Moreover, to reduce the mismatch of skills, it focuses on skill development system that would be based on the demand for skills and channelled by the pointers of labour market (NPSD, 2009).

Lack of commitment and motivation to conduct studies and collect such data along with no legislation for collecting such information results in scarcity of data investigating the earnings and employment outcomes of those who have undergone the TVET programmes. This hinders making effective policy decisions about the programmes of vocational education and training.

Seeking Employer Involvement

In India, involvement of employers has been quite weak during the past. The involvement of the employers in the process of decision making in TVET is quite challenging due to ineffective legislation and inadequate knowledge among the stakeholders who participate in the council or board meetings. In addition to this, another drawback is perceived on the part of the private sector for its reluctance and lack of fervor to engage more intensely in policy dialogue concerning TVET. Many firms do not see direct benefit hence they lose interest in participating for the improvement of TVET. But now the Apprentices Act 1961 is proposed to be amended to facilitate mutual cooperation and understanding between employer and employee on the one hand and between education and employer on the other hand. Since the last decade, when manufacturing sector faced the crisis of skills deficit, due to the mismatch between the supply and demand of skills, Ministry of Labour and Employment took the initiative of holding discussions with the affected parties. Consequent encouraging outcomes provide evidence of the advantages it gives to all the stakeholders, by adopting a more participatory approach involving industry while making decisions for TVET. Establishment of National Skill Development Corporation and Sector Skills Council is also a positive step towards employer involvement. Further, if

we wish to encourage the active participation of the employers at par with other countries, we need to motivate the employers for continuous participation and engagement by means of introducing some incentives may be in the form of monetary benefits, as is the case with other countries; otherwise their participation may not be sustained for long.

Current Challenges in Skill Gap Studies

The National Skills Development Corporation (NSDC) is building a research base in the skills domain and has commissioned District-level and Sector-level Skill Gap studies. District-level skill gap studies for all states except Bihar have been completed. Updates to studies for the 24 high growth sectors have been commissioned and are expected to be completed by 2014. Some challenges related to skill gap studies were highlighted on discussions with NSDC. There are a few challenges related to data, with data on unorganised sector employment and productivity not available. Further, district-level employment data for industry, being used by the states, is outdated and only covers organised sector. NSSO has state-level break-up by economic sectors which, again, may not be adequate for district-level estimations. On the supply side, there are hardly any studies or estimates on the pass-out/ completion and drop-out rates from both vocational (ITI, VTP, Diploma etc.). This makes it difficult to estimate the number of people who are dropping out and who may directly benefit from the skill trainings. The industry classification, being used by NSDC and the Planning Commission and the industry classification available with General Manager-District Industries Centre (GM-DICs) in the districts are different. Since, even if we go by Industry association database, which might have sectors listed that can be re-classified into NSDC classification, its data is mostly not exhaustive with many non-member Small and Medium Enterprises (SME) industries missed out. Further, re-classifying GM-DIC data, which, as such, is exhaustive, into NSDC sector classification is extremely difficult. Thus, in a bottom up industrial skill requirement estimation model, it becomes a constraint. District-wise training capacity data of unorganised training providers is difficult to estimate and is, therefore, not currently factored in while estimating the skill gaps. The scope of the skill gap studies needs to be discussed and agreed upon with key state-level stakeholders, such as the skill development missions, prior to finalising it. In Chhattisgarh, the

requirement of the state skill development mission varied from the scope of the regular studies and was accommodated by NSDC as an additional scope. Such kind of variations at state-level (for example, in Kerala also, there was a need to have additional chapter on skill requirements for emigrants) can then be accommodated in the study design itself. Moreover, the definition of semi-skilled and skilled varies between states. The key issues are of college drop-outs and those who completed 10th or 12th being classified as semi-skilled (these represented large numbers who had practically no skills) with additionally, basic graduates with poor employability, being classified as skilled, which is challenged by many people.

There is need for estimating the skill requirement on scientific and realistic bases with specific definition of skills as also argued in a paper of Institute of Applied Manpower Research (IAMR) which mentions that the estimate 500 million people to be trained by 2022 is made without any specific definition of skills (Mehrotra et al., 2013).

Learning from International Experiences

The irregularity and periodicity of the labour force surveys poses a barrier in providing complete and updated information about Education-to-Work transition. On the other hand, several countries such as Philippines, Indonesia, Kazakhstan and Mongolia conduct quarterly labour force surveys which help in updating the labour market information. Incidentally, Philippines also has a unique procedure to ensure reliability and acceptability of survey results among the statistics agencies and relevant users through an Inter-Agency Committee (IAC) on Labour, Income and Productivity Statistics, created by the National Statistical Coordination Board (NSCB). This kind of an external, inter-agency committee on statistics could be a promising model for other countries. Most of the labour force surveys do not provide complete information on education and training. In order to have comprehensive information for analysis of Education- to-Work transition, youth cohort surveys are more desirable. There are instances of this kind of comprehensive and longitudinal information available from a number of youth cohort or follow-up surveys in Scotland, Ireland, Norway, England and Wales. Similarly, the Bureau of Labour and Employment Statistics in the Philippines conducts nationwide employer Integrated survey on specific skill needs once in two years.

In addition to this, the Technical Education and Skills Development Authority (TESDA) graduate tracer studies are a good example of representation of disaggregated data by region, mode of delivery, gender, occupation and educational attainment. Other well-known graduate tracer studies include those of Malaysia, Canada and Australia. Malaysia, on its part, conducts an online higher learning institution tracer study for assessing the rate of employability and the effectiveness of the academic courses. The participation in this survey is mandatory for graduates. On the other hand, Job Openings and Labour Turnover Survey (JOLTS) in USA compile information on vacancies and labour mobility.

The National Employer Skills Survey (NESS) in UK has a distinctive feature of targeting skills deficit and gaps and unravelling vacancies emerging from skills' and non-skills' issues. On the demand side, in-depth qualitative information about employers' needs can be adequately gathered through an institutionalised system of employer involvement like that of UK Sector Skills Council and the Industry Skills Council of Australia. Besides this, information on the recruitment of new graduates and the skill needs of the companies are also garnered on individual basis in countries like Japan through informal engagements between companies and educational institutions (UNESCO, 2012).

General Recommendations

With the development of National Policy on Skill Development and the assimilation of the National Vocational Education Qualifications Framework (NVEQF) and National Vocational Qualification Framework (NVQF) in the National Skills Qualification Framework (NSQF), which includes both technical and vocational education and training, there is a need for developing a comprehensive Policy on Technical and Vocational Education and Training. In this regard, a sound skills information base is imperative, and it should have an all-inclusive picture of education–labour market linkages in terms of analysis of both supply and demand of skills. The educational policies must consider both the quality and efficiency of the supply of education and labour and non-labour policies affecting the demand for education. Hence, such a comprehensive framework will not only strengthen the diagnostic capacity of education supply and demand analysis, it will also simultaneously restructure the policy approach to education issues. TVET policy does not exist in isolation and, therefore, the TVET information

base needs to be linked with other policies like the economic policy and the education policy.

There is need to secure the political will and commitment from all the stakeholders. Besides this, there are various organisations working for skill development, there is a need to have a common line of thought among them as also for a coordinated effort in order to avoid any duplication of efforts and wastage of resources.

Research and capacity building need to be strengthened. For this, suitable programmes may be organised to train the researchers at all levels—national, state and institution—on the methodology of collecting, analysing and interpreting the data.

Much more still needs to be done to improve the quality and coverage of Labour Market Information presently being collected by various agencies in India. More disaggregated data on specific target groups such as women, youth, migrant workers and disabled people is usually obtained by undertaking special studies to gather, analyse and interpret both the quantitative and qualitative data.

Information on occupations that are disappearing or emerging as a result of technological changes and structural changes in an economy can be gathered as part of broader based establishment surveys or special studies designed to obtain this specific type of information. Information on the demand for workers in specific occupations and the changing content of these occupations has to be developed using data from several sources.

Specific Recommendations

- So far information gathering and policy specifically for education to work transition are not in place in India. There is a need to specifically develop a set of policies and practices that collect and provide information related to the skills need of employers and the labour market situation of school leavers. There is need of a policy specifically for skill needs data collection, dissemination and research. The National Policy on Skill Development addresses larger issues and not specifically data collection issues.
- While developing information base for education to work transition, analogous to the development of statistical surveys, there is need to go beyond to establish close communication channels between education and employers to share information about skills supply and demand.

- Serious inclination towards quantitative parameters has made the existing labour market information system quite redundant in the present context. The widening gap between quantitative and qualitative information has led to serious problems. There is need to reconcile these diverse aspects. Both supply and demand dimensions of quantitative data are significant for development of outcome oriented TVET policy. However, quantitative data may not suffice for actual information for skills demand which may provide a reference point for developing TVET programmes, curriculum, delivery etc. In this regard, we need to devise means to capture the qualitative information also including employer's opinion about the relevance and validity of education in the context of future requirements.
- To capture the dynamicity of the labour market and monitor interim fluctuations the labour force surveys should be conducted more frequently. Along with the frequency, the regularity of these surveys needs to be ensured to collect comprehensive data about employer demands and labour turnover. Since India has a huge informal sector, the gap in the information would always be there if we do not cover this sector, therefore we have to undertake employer surveys for this sector also. The information could also be captured by means of household surveys.
- It is essential to carry out tracer studies at micro and macro level, to know the competence of the pass outs of TVET programme in the workplace. At the micro (institution) level, capacity building of the surveyors needs to be conducted and the methods and survey period /interval need to be monitored to ensure the reliability and validity of the data and its utilisation. On the other hand, the macro level (system level) survey should focus more on gathering information related to the process of transition to work, including pace of gaining employment, role of education in gaining employment and consistency in work. Household surveys focusing on youth and covering information related to educational background and labour market situation may also be helpful.
- A constant engagement between education and employer is imperative to capture the qualitative information. Careful intervention and mediation is required on the part of the government to strengthen the role of employers. The continued participation from the employers may be encouraged by adopting delivery oriented approach.

- Legislation need to be introduced to ensure uniformity and regularity of the surveys throughout the country at fixed intervals.
- Meticulous policy research is required for elaborating feasible and tangible methods of developing a robust information base and to link it with other policy issues. Such policy research would also help in identifying gaps and further improvement of the information base.

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Achievement Motivation of the High School Students: A Case Study among Different Communities of Goalpara District of Assam

C SARANGI*

ABSTRACT

The study examines the effect of achievement motivation on the academic achievement of high school students of tribal and non-tribal communities vis-à-vis their sex and locale. The data were collected through descriptive survey method by adopting stratified random sampling technique. Gopal Rao's Achievement Motivation Scale was used as a measure for the study and t' test and Pearson's co-efficient of correlation (r) were adopted to measure the significant difference and significant relationship between the variables. Consequently the study found no significant difference between tribal and non tribal and between male and female students. However, the urban students showed higher achievement motivation than the rural students of both the communities. In case of relationship, no significant relation was observed between achievement motivation and academic achievement of tribal, male and rural students. But a significant relationship was found between the achievement motivation and academic achievement of non tribal, female and urban students of both the communities.

Introduction

In today's world achievement is considered to be a key factor for personal and social progress. The whole system of education revolves round academic achievement of students at school. Do the children find such a system interesting? The school learning of a child depends on various psycho-physical, socio-cultural and economic factors. Individual differences result in diversity among students in their academic achievements and studies have shown

* Dr. C Sarangi, Associate Professor, Head, Department of Education, Goalpara College, Goalpara, Assam-786101

general mental ability, as a major factor in determining achievement (Khader, 1992). But apart from the general mental ability, other factors such as personality traits, attitude or interest towards the study, achievement motivations etc. are also the determinants of academic achievement. Motivation is always considered to be a central factor in academic achievement. Achievement is a task oriented behaviour that allows the individual's performance to be evaluated according to some internally or externally imposed criteria that involve the individual in competing with others or with some standard of excellence (Smith, 1969).

Achievement motivation is a primary condition to achieve something. It is a strong motive characterised by ambition, high level of energy, strong desire for independence. It is a stable learned characteristic feature in which satisfaction comes from striving for and achieving a certain level of excellence. Achievement Motivation is a drive to excel in learning tasks combined with capacity to experience tried in accomplishment (Eggen and Kauchak, 1994). The concept of Achievement Motivation was first popularised by Murray in 1938. Later David McClelland (1965) and Atkinson (1964) concentrated on the study of achievement motivation. People who strove for excellence in a field for the sake of achieving and not for some reward are considered to have a high need for achievement. This need has been labelled as n-achievement for convenience. So the need for achievement or n-ach was defined as the desire or tendency to do things as rapidly and to accomplish something difficult to master, to manipulate, to organise physical objects, human beings or ideas. This is to do things as rapidly and independently as possible to overcome obstacles and obtain a high standard to excel oneself so as to rival and surpass others and to increase self-regard by the help of successful exercise of talents (Murray, 1938).

The theory of achievement motivation is concerned with the interaction of personality and the immediate environment as a contemporary determinant of aspiration, efforts and persistence when an individual expects that performance will be evaluated as success or failure in relation to some standard of excellence.

McClelland (1965) has rightly said that if in a given country the students in the schools or universities have concern for excellence, that country will show a considerable amount of progress. So the progress of a country depends upon its youth /students and, to a great extent, depends upon their academic attainment.

Significance of the Study

It is important both for the parents and the educators to understand why promoting and encouraging achievement motivation from an early stage is imperative. It is a consistent striving force of an individual to achieve success to certain standard of excellence in the competing situation. The students form self concept, values and beliefs about their abilities at a young age at school. The development of an early academic achievement motivation has significant implications for later academic careers. A great deal of research has found that students with high achievement motivation are more likely to have increased levels of academic achievement and have lower dropout rates. So the investigator feels that the raising of achievement motivation of the high school students may go a long way in enhancing the academic achievement. That is why the present study endeavoured to examine the achievement motivation of tribal and non-tribal students of Goalpara District of Assam.

Objectives of the study

1. To find out the levels of achievement motivation of high school students in relation to their community, sex and locale.
2. To find out the difference in the achievement motivation among the high school students on the basis of communities (tribal/non-tribal), sex (male/female) and locale (urban/rural).
3. To find out the relationship between achievement motivation of high school students and their corresponding academic achievement.

Hypotheses

Ho1. There is no significant difference in the achievement motivation among high school students on the basis of their community, sex and locality.

Ho2. There is no significant relationship between the Academic Achievement and the Achievement Motivation of the high school students on the basis of community, locale and sex.

Methodology

The Sample

The study was conducted with a sample of 200 students of class X selected from 10 government high schools of Goalpara district

of Assam through Stratified Random Sampling Technique. Stratification was done on the basis of community, sex and locality. It consisted of two categories of students: the students belonging to the tribal community which includes Rabha, Hajong, Bodo, Kachari tribes and the other category of the students belong to non-tribal community which includes all the general castes of Hindu and Muslim, Scheduled Caste, OBC etc. Both males and females of the above communities of rural and urban schools were considered.

Tools Used

Gopal Rao's Achievement Motivation Scale (1974) was used as a measuring tool.

The marks obtained by various categories of students of class IX in their Final Examination were taken as an index of their Academic Achievement.

Analysis and Interpretations

Table 1
Percentage distribution of Achievement Motivation (AM) Scores of Various Categories of Students

Categories of students	Nos.	High A.M (%)	Moderate AM (%)	Low A.M. (%)
Entire	200	7	60	33
Non-tribal	140	10	60	30
Tribal	60	5	35	60
Male	100	15	68	17
Female	100	14	55	31
Urban	120	13	67	20
Rural	80	10	50	40

From Table 1 it is clear that only 7 per cent of high school students in total sample are at high level of achievement motivation, 60 per cent students at moderate and 33 per cent at low level. So it is concluded that high school students have moderate achievement motivation. But categorically it has been seen that maximum percentage of tribal students (60 per cent) are in low level of achievement motivation.

Table 2
Significance of the difference between Means of the Achievement Motivation Scores of the Various Samples

Sample Groups		N	M	SD	't' value	Significant at 0.05 Level
Community	Non-tribal	140	17.05	3.52	2.31	S
	Tribal	60	15.63	3.69		
Sex	Male	100	17.48	3.88	1.39	NS
	Female	100	16.73	3.73		
Locale	Urban	120	17.16	3.89	10.03	S
	Rural	80	11.87	3.49		

Table 2 depicts that the mean difference in AM Scores between tribal and non-tribal high school students are significant at 0.05 level. It indicates that there exists a significant difference in the Achievement Motivation of tribal and non-tribal students. From the mean scores provided in the Table 2, it is evident that the non-tribal high school students have higher mean score (17.05) than their tribal counterpart (M=15.63). This means the non-tribal students have a high need for achievement which was supported by Gokulnathan and Meheta (1972), Sha (2006) etc. The result of the present study is contradictory to the studies of Lalitha (1985), Lyngdho (1974), Mubayi (1976) etc. where they reported that tribal and non-tribal students did not differ significantly in their level of achievement motivation.

Further the t value 1.39 shows the mean difference in the AM scores of male and female high school students is not significant at 0.05 level. This indicates that there is no significant difference between male and female students of both the communities with respect to the achievement motivation. The mean scores of both groups (M=17.48 & M=16.73), as given in the Table 2 are only slightly different. It indicates that gender has no significant effect on achieving the standard of excellence in their academic field. The result of the present study is supported by Ahmed (1998), Chetri (2014), Grewal and Sinha (1987); Lalitha (1985), Pathak (1974), etc. but contradicts the studies by Kaur (2004), Parikh (1976), Veena and Shastri (2011) who found a significant difference in achievement motivation between male and female students.

The rural-urban sub-samples of high school students were compared with respect to their AM and the t value of 10.03 showed a significant difference between rural and urban high school students at 0.05 level. According to mean score as given in Table 2 it is evident that the urban sub samples have higher mean score ($M=17.16$) in achievement motivation than the rural sub samples ($M=11.87$). This indicates that the students from urban locales are striving more for achieving excellence than their rural counterparts. Thus the rural-urban locality has a significant effect on the achievement motivation of the students of the both communities. This result of the present investigation is supported by the studies of Kaur (2004), Mubayi (1976), Srivastav (1979), Rana and Nirmala Devi (2011), Vimal Kishor and Rana (2010), etc. but the studies of Ahluwalia (1985), Grewal and Sinha (1987), Lalitha (1985), Thanelakshmi and Mohaidaen (2011) etc. are contradictory to the present study as they found no significant difference between urban and rural high school students in respect of the achievement motivation.

Table 3
Relationship between Achievement Motivation (AM) and Academic Achievement (AA) of High School Students:

Sample	N	Obtained r'	Df	p- value of r	Significant at 0.05 level
Non-tribal	1400	0.70	138	0.208	S
Tribal	60	0.17	58	0.325	NS
Male	100	0.11	98	0.254	NS
Female	100	0.54	98	0.254	S
Urban	120	0.42	118	0.228	S
Rural	80	0.77	78	0.283	S

The calculated value of r is 0.70 and is higher than the table value of r at 0.05 level of significance as shown in Table 3 which reveals a positive correlation between achievement motivation and academic achievement of non-tribal student groups but in case of tribal student groups the co-efficient of correlation ($r= 0.17$) between AM and AA which is less than the table value, is not significant at 0.05 level. It means the academic achievement of non-tribal high school students are influenced by their achievement motivation

where as the academic achievement of tribal students group are not influenced by achievement motivation.

The 'r' value between AM and AA of male and female groups of students reveals a different result. The calculated 'r' value 0.11 is less than the table value at 0.05 level of significance which indicates that the relationship between the above two variables is not significant and hence the academic achievement of male students are not affected by their achievement motivation. On the other hand, in case of female students, the 'r' value 0.54 is more than the table value, which shows that there is a significant relationship between AA and AM at 0.05 level. It implies that the academic achievement of female students is closely related with their achievement motivation.

The correlation between AM and AA of urban and rural groups of students reveals that in both cases the calculated 'r' value 0.42 and 0.77 are more than the table value and hence significant at 0.05 level. That means the academic achievement of urban and rural students of both the community were closely related with their achievement motivation.

The above result of present study is supported by several investigations which indicate an inverse relationship as well as correlation between achievement motivation and school achievement of high school student i.e. the findings of Amrai et al. (2011), Christian (1979), Hota (1995), Krishnamurthy (2000), Lalitha (1985), Pathak (1974), Poddar (2013), Sandhu (2014) etc.

Findings

1. The percentage distribution of the scores reveals that most of the groups of students (60%) have average level of AM. It also reveals that the level of AM in the male and urban students were better in comparison to their other counterparts.
2. It was found that non-tribal students were slightly better than their tribal counterpart. In case of males and females of both the communities, it was found that males had marginally better AM than females. Further, in case of urban and rural students of both the communities, urban students had much higher Achievement Motivation than their rural counterparts. Thus, it is found that except rural students of both the communities all other categories of sample had average Achievement Motivation.
3. There was no significant difference between tribal and non-tribal high school students in relation to their AM.

4. There was a significant difference in AM between urban and rural students. The urban students have much higher AM than their rural counterparts.
5. There was a significant correlation between the Achievement Motivation and Academic Achievement of non-tribal students.
6. There was a significant correlation between the Achievement Motivation and Academic Achievement of female, urban and rural students of both the communities.
7. The academic achievement of tribal students was not significantly related with achievement motivation.
8. The academic achievement of tribal students was not significantly related with their achievement motivation.
9. The academic achievement and achievement motivation of male students of both communities was found to be not significant.

Conclusion

The analysis shows that non-tribal students have comparatively better Achievement Motivation than the tribal students. Besides other factors, due to low Achievement Motivation many tribal students may fail to achieve excellence in their studies. The tribal students and particularly the rural students being socially disadvantaged and deprived have significantly lower Academic Achievement compared to the non-tribal and urban students. This warrants attention of one and all to provide proper educational climate and supporting human assistance to enhance the level of achievement motivation which can subsequently improve their academic performance and they can march ahead with other students of advanced and sustainable society. They need proper help, motivation, encouragement, remedial instruction, guidance and counselling. The proper diagnosis of their educational backwardness and corrective treatment are also necessary ingredients of a sound educational programme for the deprived, tribal and rural student-population.

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Education and Ethnic Communities: Towards an Inclusive Framework

K.H. AMITHA BACHAN*, SWETHA G** AND MAYA MOHAN***

ABSTRACT

Inclusive framework to education aims to reorient curriculum to address the learning styles and needs of students coming from diverse backgrounds. The vulnerabilities for the children to take advantage of educational opportunities may be because of their race, social class, ethnicity, religion, gender or ability (Vittlo and Mithaug 1998). The issue becomes graver in the case of marginalised sections. This paper tries to look at the issue of inclusive education in the context of the educational experiences among an ethnic group Kadar in the state of Kerala, South India. The main arguments of this study are based on the experiences from the preparation and distribution of a locally contextualised education material prepared for 'Kadar' and other rural children by Western Ghats Hornbill Foundation (WGHF).

Introduction

Education as a basic right of children has been accepted as a principle globally. Yet, a large number of children who remain out of the schooling system compel us to think about issues of inclusion. An inclusive system framework of education addresses the learning needs of all pupils within an educational system. The basic tenets of inclusive education are grounded in the UN Convention on the Rights of the Child. There are mainly two perspectives on inclusive education. The first perspective revolves around pupils having Special Education Needs (SEN) and it aims to enrol all children in regular schools (UNESCO, 1994). On the other hand in the developing countries, the issue is slightly different. The 1994 UNESCO World Conference recognised the issues faced by disabled and gifted children, street and working children, children from remote or nomadic population, children from linguistic, ethnic,

* Research Director, Western Ghats Hornbill Foundation.

** Teacher, Poorna Learning Centre.

*** Assistant Prof. Dept. of Sociology, Christ University, Bangalore.

or cultural minorities and children from other disadvantaged or marginalised areas and groups in accessing education. The international perspective on inclusive education advocated by the UN aims at fostering strategies to increase the participation and learning of children who experience marginalisation or exclusion within the educational settings. The vulnerabilities for the children to take advantage of educational opportunities may be because of their race, social class, ethnicity, religion, gender or ability (Vitillo and Mithaug, 1998).

When we look at the issues of exclusion there are two levels of barriers. The external barrier can be the location of schools and the economic condition of students. The lack of schools in the locality is a key hindrance for students living in remote inaccessible areas to avail education. The social stigmatisation is another factor. A child from a poor family will find it too difficult to get enrolled and adjusted in a private school even if it is with the backup of the public policy interventions like the provisions in the Right to Education Act in India that rejects the possibility of a child being rejected from a private school. The internal barriers for a child from the marginalised section include the curriculum, pedagogy, medium of instruction as well as the examination pattern. The issues will be graver in the case of a first generation learner. Educational reforms have been mooted at international, national and regional levels to address these diverse barriers and to make education truly inclusive.

Scholars who looked at inclusive education from educational reform perspective (Ainscow, 1999; Ferguson, 1996; Mitler, 2000; Thomas et al., 1998) describe inclusion as a process through which the schools aims to reorient its curriculum and strategies to address the learning styles and needs of the students coming from diverse background. Sebba and Ainscow (1996) observe that this process would help the school to build capacity to accept all children from the locality and reduce instances for exclusion.

The idea of education is not merely to impart knowledge to the students in certain subjects but to develop in him/her those habits and attitudes with which they may successfully face the future and at the same time preserve the traditional values which will safeguard future further. But can we look at the current education system after all the educational reforms and innovations as capable enough to make sure that none of the children would feel 'orphaned out' or isolated from his/her self and society during the course of

education? This paper tries to look at these issues in the context of the educational experiences among an ethnic group Kadar in the state of Kerala, South India.

Kerala is a land of religious, ethnic, cultural and geographical diversities. There are 35 tribal communities among which five are primitive tribes, 51 Scheduled Caste communities and 81 backward communities. With such a heterogeneous geographic and demographic nature of the state, can the present educational curriculum addresses the need of all? Is it flexible enough to accommodate the differences?

All these heterogeneous communities and people from different geographical regions are following same syllabus and curriculum. A primitive 'Kadar' tribal child born in a temporary hut made of bamboo and reeds, near a streamside in the rainforest of Anamalais in the Western Ghats, a child from the fisher folk community born near the seashore in a small shelter thatched with coconut palm leaves and a child living in the slum of urban metropolitan city have to depend on a single syllabus and more over they have to use the same curriculum material. What is the result? Most often those who have cultural independence and courage to be true to our basic instincts will opt to go out of the system first, definitely the tribal child and sooner or later the other two go out of the so called 'education' system and in our terms we identify them as 'drop outs'. Otherwise, they will lose their inner spirit and become ready to end up as an employee in the government sector, or at the most they will learn some technical skills and opt to export their skills and life to earn more money.

A child between the ages of 10 to 14 is so conditioned and seems determined to become an engineer without even knowing the meaning of 'engineering' and the parents and the society are proud that the child has an aim in life. We think it as a result of the achievement of education. On the other hand, there are reports of alarming rates of drop outs among the marginalised sections including the tribals. What does it mean? Is it that all the children of the marginalised community in the state have serious problems with their intellectual, physical and mental condition? Or is there some serious problem with the education?

There were lot of efforts and reforms that took place in Kerala, starting from early 1990s following the national policies to ensure 'Right of Education'. National Education Policy of 1986, its Programme of Action (1992), the Minimum Learning Level

programme and the Operation Blackboard scheme etc. were the initial ones, followed by the District Primary Education Programme (DPEP) 1994, and Sarva Shiksha Abhiyan SSA (2001). Despite some achievements like increase in the enrolment of more students, change into grade based assessment system, decentralised administration, logistical supports for schools, child centered thoughts etc., we are far away from the real 'inclusion', in terms of a right based and locally contextualised education.

This lack of contextualisation has been recognized as one of the shortfalls in the current education system, where the individuals' different concepts, understanding of their surroundings (subjects and the objects or symbols they are dealing with in their daily lives) i.e. 'worldview' has not been considered. Here we'd like to reflect upon this shortfall of present educational programmes and its implication on education, learning, language diversity, culture, knowledge and environmental consciousness, especially of the marginalised communities. In this paper, for our arguments, we use experiences from a decade long conservation oriented education with various groups of people, interaction with 'Kadar' tribal communities and experiments based on a locally contextualised education material prepared for 'Kadar' and other rural children by Western Ghats Hornbill Foundation (WGHF).

The materials were prepared for the Anganwadis of the Athirapally panchayat in Thrissur district of Kerala. It seemed to address the need for a curriculum that is relevant to the culture of the tribal child in order to make the classroom experience relevant. The materials have incorporated Kadar, Malayalam and English languages as part of their books.

Contextualisation of Curriculum

Contextualising the curriculum for the learner is always considered as a good concept. But practically, that has never been the case. It is very important that one is cognisant about the environmental changes that occur in one's premises and is able to actively participate in the process of conserving what is left over. Contextualisation can be understood as 'the activity of making a concept meaningful in a given context' (Weelie & Wals, 2002). The concept of "world view" can help to have a basic understanding of the requirements of 'contextualisation'. It means the conceptions of the world that a student holds "prior to formal instruction may, in part, be a result of traditional practices and beliefs that exist in their

communities and to which the students are committed” (George, 1999). According to Cobern (1991), the term ‘World view’ refers to the “culturally-dependent, generally subconscious, fundamental organisation of the mind. This organisation manifests itself as a set of presuppositions or assumptions, which predispose one to feel, think, and act in predictable patterns”. World views help people ‘to conceptualise what reality should be like and to understand and interpret all that happen day by day in this framework’ (Kraft, 1974).

It was Kearney who introduced the notion of ‘world views’ in 1984 which proposes that there are different ‘world views’ by which people make sense of the world and act upon it. The content and structure of the ‘world views’ are the essential components that can be used to differentiate world views. Cobern (1991) brings it to the field of science education by defining world views as ‘foundational beliefs i.e. presupposition about the world that support both common sense and scientific theories’. He contends that it is important to understand such world views which will influence the learning of the child.

A school going child becomes a mere recipient of irrelevant facts if what is provided is not relevant to him/her. Relevance can be defined as the relation of the knowledge content provided inside the classroom to the immediate physical environment of the child and the child’s cognition levels. The matter of relevance, apart from learning what a school wants the child to learn should also let the child appreciate his/her natural environment, understand it and develops a relationship with it. In order to do this, contextualisation of curriculum is important. The aspect of relevance and contextualisation needs to be understood in terms of the content as well as the mode in which it is transacted—primarily the language aspect.

The main reason for high dropout rates in present education system or its ineffectiveness is the lack of ‘contextualised’ curriculum that suits one’s region or community. The present education system which is a product of the historical events of the colonial era has been insensitive to the local and marginalised groups in India. Studies on the education of tribal children (Nambissan, 2007) continuously draw us to this fact. Result of such an educational system is the marginalisation of the already marginalised communities. This is not far better in the case of Kerala, the most ‘literate’ state, where ethnic groups are a minority (1.10%; 3,21,000, Govt. of India, 2011),

and there is no such curriculum in the state to accommodate the linguistic, geographical and cultural diversities of any particular group of the population. For a primitive community, their culture, tradition and living is closely related to their environment/nature and they will have their own ways to practice real conservation. The extinction of such knowledge, culture and practice will be the adverse outcome of following a universal mode of education.

There have not been many curriculum materials that address the regional or local language, symbols or objects that we come across in daily life representing the tradition, practices and culture in Kerala. When we take the case of the marginalised communities, although our National Curriculum Framework (NCERT, 2005) emphasises on contextualisation of curriculum for those 'marginalised from the mainstream', it is far away from reality. It demands for contextualisation of curriculum, the need for specific syllabus and textbooks by incorporating the diversities in each region and for that NCF is a guiding document to set general standards of education. DPEP and SSA are also oriented towards developing contextualised education materials. Primary education materials in Irula, Mudhuga and Kurumba languages by KIRTADS (Mini, 2013) and pre primary education packages prepared by Western Ghats Hornbill Foundation under CEPF-ATREE Western Ghats Small Grants programme including Kadar and Muthuvan languages (Bachan et al., 2012; The Hindu, 2012) are the few experiments in this regard.

Role of Teachers

Role of teachers in education is very crucial as they have a chance to intervene and mould the curriculum, whatever it is, towards the real goal of education. Personal experiments of many teachers are the key for better performance of many 'Anganvadis' in Kerala, especially in tribal and rural areas. Most of them will have their own dictionary of the local dialect, objects and example, thus, a 'locally contextualised curriculum' may get developed through their own personal experiences. A non-tribal Anganvadi teacher in Vazhachal area speaks of the kind of acceptance, she has amongst the new children when she speaks to them in their language (Kadar) which she has picked up over the years. She differentiates the Kadars and Malayar children by saying that the Malayars understand the 'nātubhāsh' (Malayalam) better but the Kadars do not.

There is also the case where the teachers seem to be unprepared to use many of the teaching aids, e.g., the flashcards and workbook. In one of the Anganvadi, the teacher had stuck the flashcards onto a large sheet of paper and put it up on the wall. On being asked why she did that, she said that she did not know what else to do with it. On suggesting that she could use those to develop some kind of a game with which the children can play with as well as learn from it, she said, 'we want people like you to tell us how to do this. We did not have such things in school and we don't know how to use it'. One cannot really blame the teacher since he/she has been exposed to traditional ways of learning by rote the given content and not to other ways where the learner is actively involved in the process and learns through observation, analysis, experimentation, trial and error etc.

We have repeatedly asked a question to teachers of various grades from Anganwadi to higher secondary during various interactions and classes i.e., 'which letter would you prefer to start with while teaching letter to the children?' More than 90 per cent of the teachers reply that 'we should start with 'A' for English or 'Aa' for Malayalam. It was a great realisation for them to know that we can start from any letter familiar to the children and the ultimate aim is to understand the full set of letters. Since, the teachers are not provided with an insight into the culture of children through the curriculum material or otherwise, most of the pre-primary and primary teachers are doing or have to do more experiments to deal with the curious young chaps (is "learners" a better word?) in the classrooms.

Many of the recent interventions in the learning and teaching, such as DPEP and SSA, have resulted in redefining the role of a teacher as a guide and facilitator rather than a universal encyclopaedia. A teacher with a comprehensive knowledge of the symbols and objects of the local environment—to communicate—can make the students better understand what he/she speaks about. But, still, most of the teachers find it difficult to find suitable materials for local contextualisation. The universal nature of the curriculum, questions and fixed answers for them without much flexibility, lack of opportunity for a multi-lingual approach and tight schedules bind them to traditional way of teaching.

One of the teacher expressed that the incorporation of poems from the Kadar folk culture has resulted in a certain acceptance amongst the students where they could 'recognise the song as having

heard from their grandmothers'. There is also a tone of satisfaction when the teacher says, 'when it used to be the Malayalam poems they used to merely recite it for the sake of it, but now this is a language that they understand and so they are more excited to sing the songs from the new books'. The multi-lingual text has in a way sensitised the teacher to be indiscriminating towards languages (and cultures). At times, the multiplicity of roles played by an Anganvadi teacher (some other works assigned by government for community empowerment) leaves less than sufficient and quality time to be spent inside the classroom.

Content: Known to Unknown through Comprehension

The actual process of learning and education is a journey from known to unknown. The 'known' is to begin; it varies from individual to individual, place to place, community to community. The local objects are the key to unlock the curiosity and it plays an equal or much better role than local languages do which evoke the imagination inherent resulting in creative experimentation, aiming at infinite, far beyond the boundaries of the arithmetic and logic. One who wanders around limited boundaries designed by other can only become good manager of the known things. But a 'childish' attitude to experiment and go beyond boundaries is another key to the unknown. Here we have the real questions about our classroom teaching curriculum. Does it accommodate local objects, symbols and languages including various dialects? Do they have enough flexibility to adopt them? Do they provide freedom for students to choose what they requires for learning? Is it possible for a class room to provide diverse objects and interactive tools better than we have outside in the 'Nature' (Bachan, 2010)?

An evaluation of SSA in Haryana indicated, "Out of 100 students of Class-II, all were able to spell out orally A to Z alphabet, count 1 to 20 numbers completely whereas to narrate alphabet of local language, 44 (44.0%) were able to completely narrate. In case of ability test of English language of class-II students, only 7 students out of 100 students were able to read correctly 5 words of English language. 17 (17.0%) students were able to write 5 words out of 5 correctly whereas 83 (83.0%) students were not able to write these words correctly. In case of class-VI students, in an ability test for English paragraph, about 30% of the students were found to be able to read and write the paragraph of English completely while the rest 70% were not able to read and write the

English paragraph (GOH, 2009). One wonders, what the point is if they can write letters of the alphabet but can't use the same letters independently to read or write? It suggests that there is a lack of comprehension of phonics and the configurations of a language.

Comprehension instruction is often disregarded in primary education, where the focus is on learning how to decode (Pearson and Duke, 2002). Prior knowledge/discussion, reading related texts on the same topic, and most of all discussions are ways of developing focus and independence in reading. It is evident that, in spite of concerns about reading comprehension, classroom practices can inadvertently weaken the process of comprehending. It is important to attend it right from the early primary years and include prior knowledge activation, instruction of reading strategies, and theme based discussions in the reading classroom (Sinha, 2012).

It is obvious that we need to start from a 'known' thing to lead to the unknown and it is not possible to understand an 'unknown' from another 'unknown'. In most of the exercises without a locally contextualised curriculum or exercise, the children will be learning by rote retain it for some time, use it awkwardly without an understanding or comprehension just for writing an examination and soon it will be lost from the learner forever. Unfortunately this is the system most of the people follow in the classrooms.

Inclusion of Language

Individuals are marked by many identities. Language and ethnicity constitute important ones. It is desirous for any culture to survive, to keep its language alive for that is the only way to pass on the knowledge gained over centuries. So, acknowledging language as a medium of worldly engagement rather than a mere tool of communication would help us to be more sensitive to the demands of the linguistic minorities that are ever increasingly marginalised and furiously neglected by the policies and policy makers. This view of inclusion should then take note of the marginalised languages and work towards empowering them through meaningful education that not only respects their language but also give them the other languages—in this case Malayalam and English—so that they can speak for themselves in demanding their rights and the means to access them.

Not all languages in India enjoy the same status. English rules the place with Hindi coming in next and the regional languages with its Sanskritised version taking prominence over other slangs, the other less spoken languages are nearly forgotten. The children of the Kadar tribe were taken by surprise when during an interview were asked to name different plants and animals in their language, because someone outside their community happened to acknowledge their language. This apart from being an appeal to having a more inclusive system also demands to take note of the classroom practices that have been shaped by various forces into becoming a monolingual space. The survey conducted by NCERT shows that there has been a steady drop in the number of languages used in schools. In 1970, there were 81 different languages used at the primary level and it stood at 41 in 1995, and stands at 33 according to the survey in 1998.

For example in stories, the word which is usually used to refer to the grandmother is “Muthassy” but in the real life this word is only used very rarely. Instead of it, the common words used to call grandmother is “Ammamma”. It may vary in style according to the place but the common usage is basically the same. This shows that there is much difference in the print language compared to that of the vernacular use of language. The print language used, makes it difficult for the tribal student to understand the usage of words. This is because they use words entirely different from the everyday usages.

An experiment with an educational package composed of various thematic books, puzzles and flashcards in the ‘Kadar’ native language, regional language ‘Malayalam’ and English shows the need for an inclusive education through contextualisation. It was observed that since the spoken language of the child at home (Kadar) is not the same as the language of instruction (Malayalam) in the classroom, the child finds it hard to comprehend which in turn results in a high drop-out rate. So the incorporation of the tribal language is to help make them feel comfortable with the process of education. The emphasis on the spoken language at home is for them to acquire the knowledge with clarity and the inclusion of the official language (Malayalam) is just also important, “for their integration into mainstream schools and the society at large” (The Hindu, 2010).

Including songs and stories from the Kadar folk culture has seen better acceptance amongst children because of their familiarity with the content.

Language Endangerment

India is home to at least 400-700 distinct languages or tongues and most of them are at the risk of dying out. The effect could be devastating. Each language is a key that can unlock local knowledge about medicinal secrets, ecological wisdom, weather and climatic patterns, spiritual attributes, artistic and mythological histories etc. (Mallikarjun, 2012). So, the death of a language will also kill with it large treasuries of knowledge. It is important that each child is given the right to use his/her language. Having a flexible curriculum that is sensitive towards giving each language and culture its space is one way of ensuring equality for all linguistic groups.

There were only 114 languages in India according to the 1991 census, and these have become 234 during 2001 census (Kidwai, 2008). But raw data collected of languages names shows they are 10,400 in India (Mallikarjun, 2012). The role of language in education and other functional domains is decided by the privileged class or community. The dogmatic rigidity in claiming privileges and parity of their language selection is also responsible factor for language death (Khubchandani, 1984). Language being the basic means of reflection of whole aspects of the life, culture of a community, the inclusion of the language is an important component towards inclusiveness of education.

Unilingual to Multilingual

It is evident that students those already fluent in a non-English (native) language, when enter in English medium schools face an outright threat even in English speaking countries. "The twelve years of schooling functions to rob students of their language and replace it with academic English" (Yana, 2010). Recent researches show that Bilingual to Multilingual models have found effective at teaching English than English only. Also no research recognises the validity of teaching language by reducing the language to specific aspects of grammar (Ray, 2012; Yana, 2010).

Multilingualism can be considered as a key to creative and comprehensive learning, cognitive growth leading to creative and diverse thoughts and achievements and social inclusion. According to Noam Chomsky, "All humans have a language acquisition device which contains knowledge of the grammatical rules common to all languages" (Shaffer et al., 2009).

Anganwadi teachers, who used the curriculum materials, opined that it has multiple potentials. With the inclusion of Kadar

language, Malayalam and English, it has created a space for a learning experience without fear. The materials work magically well in attracting the kids. It does a great job of getting them to engage with it without inviting their wrath. More needs to be done for teacher education and to make such material available widely.

Considering the cultural diversity of the country, multilingualism is the key to 'inclusiveness' in India. There were some recent developments and demands for inclusion of local languages in education. The tribal activists and organisation demand "Mother tongue based multilingual early childhood education for tribal children" in Odisha. They developed Arunima, study materials, according to ten tribal languages of the state namely Munda, Santhali, Kissan, Oraon, Kuvi, Koya, Bonda, Juanga and Saura which were inaugurated on 14th November 2012 (The Orissa News, 2013). KIRTADS in Kerala has documented and developed book for primary schools using Irula, Kurumba and Muduga tribal languages (Mini 2013). An ethnic community based, multilingual—from Kadar and Muthuva tribal language, Malayalam (language of the state) and English workbook has been developed and distributed to the community by Western Ghats Hornbill Foundation WGHF (Bachan et al., 2012; The Hindu 2012).

Conservation Education and Practice

The need to protect the biodiversity carries along with itself the need to sensitise the masses regarding the environment that they are a part of. Although there is a lot of research on the issues of biodiversity, there is rarely any substantial action taken to sensitise people regarding those issues. Even if there were such programmes, deal with factual 'information', most often without contextualising. 'Information' in one sense is dead unless it is contextualized to day to day experience from the immediate environment. Most of the awareness programmes deal with information that seldom relates with tradition, culture, experience and emotions of a community and region.

The NCF position paper on science education demands for an environmental validity apart from cognitive, content, process, historical and ethical validity. Environmental validity asks for science to be "placed in the wider context of the learner's environment, local and global, enabling him/her to appreciate the issues at the interface of science, technology and society". It is evident that most of the public knowledge on science is actually

gathered outside school. Usually that depend on their personal interest or that is 'known' or 'matter' to them (Nature, 2010).

It is true that learning is real 'practice' of every person to acquire knowledge and achieve immense depth and satisfaction. Class room practices or schooling usually support to adapt to a system of learning designed by 'a group', who have monopoly over economy, society, and resources. Usually, education also becomes a big part of their 'earnings' and business, where the real science or scientists have no significant role. The knowledge acquired by a student, or person is actually a measure of how and to what extent they have de-schooled themselves to immerse into experimentation, practice and problem solving outside, in the real life.

Right Based and Inclusive Approach–implementation

Right Based Approach (RBA) has been evolved after World War II in the international arena as UN initiated various conventions and treaties address global human rights. So is the case of many policy reforms in India following the international declarations towards more 'right' based and 'inclusive' reforms in various sectors like rights of the children, women welfare, planning, and conservation and also in education. Most of these efforts popularly known as 'participatory' are being questioned for their gap between the vision and implementation policy. According to Weiner (2001), "Despite a range of commitments made in the Indian constitution to equally addressing the disadvantage faced by certain groups and universal education, policies on the ground have done little to fulfil the ambitious vision developed at the birth of modern Indian nation-state".

Terms like 'mainstreaming', 'integrated' and 'inclusive' are often used in discourses on education. 'Mainstreaming' is where the decision has been taken by a set of people or authority for a universal syllabus, curriculum, and language. It also includes 'disciplined' ways of schooling and learning without any facilities or support for including the diverse nature of pupils. 'Integrated' is where some facilities are provided for the 'marginalised' students, treating them similar to 'differentially abled' who need to be supported for 'mainstreaming'. 'Inclusive' is where all these communities with diverse dialects, language, experiences and culture as a whole are considered equally part of the system and in the process of teaching and learning. The traditional educational system adopted the early strategy of mainstreaming. However, as

with policy changes, we have adopted an 'integrated' approach to make a shift from exclusive to a more inclusive and 'right based' approach. The concept has been shifted from exclusive 'mainstreaming' to very inclusive and right based approach in the international and national arena. But the differences and gaps in the ideologies, policy and practice show that we are closer to an 'integrated' stage and far away from the real 'inclusive'.

Subrahmanian (2003) points out, "Social control, discipline and order are central framing tenets of education and its institutions, and centralisation of the management of the content of education has been a common feature of education worldwide. 'Education for all' has been interpreted in policy terms as a race of numbers, rather than as a shift towards the creation of the kind of education system that can embrace education to diverse groups and acknowledge and address economic constraints that limit education participation". Little has been done to alter in a meaningful way the relationship between state administrators, elite village leadership, teachers and the poorer, low caste groups within their communities (Subrahmanian, 2000).

Effectiveness of a Geographically, Culturally Contextualised Multilingual Curriculum Material

Education can, and should be meaningful for all, whether it is for the child of a wealthy aristocrat or for the child from a lesser privileged socio-economic background or for a child from a community of forest dwellers isolated from urban civilisation. The first step is to produce a more appropriate set of teaching-learning materials by contextualising it to the child's environment. It does a great job of getting them to engage with it without creating fear, misconceptions and disinterest in the subject matter.

The experience has been quite an enlightening one in the manner that it was possible to get a bird's eye view of the many factors and processes that are involved in the effective implementation of an education material, the nature of children and the ground level difficulties of Anganvadi teachers. It seems that this curriculum has multiple potentials. With the inclusion of Kadar language and Malayalam and English it has created a space for an experience that the children appreciate without fear.

The materials produced are centered on biodiversity, multiculturalism, multilingualism, and are child-centred. Books, beyond a certain point cannot do as much as a teacher can,

especially in a scenario where the age of the children is 3-6 years and are expected to be inside a classroom, learning certain set of things that will 'help' them to be more successful in schools. It is the teacher who is in control of the place for various reasons and hence it is also important to involve them in the process right from the time of conceptualising it. Instead of looking at them as waiters who serve cooked food, they must be involved right from the beginning. It is not fair to expect them to understand a child-centered pedagogy when they themselves have been through a traditional teaching-centred classroom.

Teacher empowerment would be crucial for the success of such an enterprise. In the absence of a program to help the teachers realise the importance of this kind of a curriculum, it makes it hard for them to understand its full potential. It would also be helpful for the teachers to have a forum for sharing their experiences where each one can work towards a beneficial professional and personal satisfaction.

The development of the new learning materials being an attempt to provide a more meaningful education for the tribal children, to take a step forward would be to abstract principles on which such a curriculum is based and what its objectives seem to achieve. DaanVanWeelie and ArjenWals (2002) propose to visualise a curriculum for environment education in terms of three perspectives (1) ecological literacy, (2) personal growth and development, and (3) an understanding of the socio-scientific dispute character of environmental issues.

Conclusion

Education reforms in India have undergone revolutionary changes in the policy level from exclusive to inclusive and right based. But the inadequacies in the planning and implementation have to be addressed to reach a really inclusive education system. Contextualisation of education in an inclusive manner is the need of the hour and inclusion of language and content of all the ethnic, marginalised and local communities is very important.

The recent experiments in the educational sector in Kerala did some advancement in 'mainstreaming' the culture of education into little more inclusive 'integrated' approach. Children studying in class four under the DPEP performed remarkably better than those in the non-DPEP sector. The former's standard of efficacy showed that they were equal to the eighth standard conventional

class (The Time of India, 2001). Change in the education system (through programmes like Sarba Shiksha Abhiyan (SSA)) to strengthen teachers to think, work collectively and develop innovative programmes in a decentralised manner did progress in the learning process. Former Education Minister of Kerala opined that, “Our experience shows that marginalised children are capable of learning and achieving results if the right conditions are created for their engagement in learning. Trusting the teachers and giving them decision-making freedom opens the way for professional development. It is interesting to note that the participation of the collectives strengthened and sustained quality education initiatives through decentralised decision-making” (Baby, 2008). Evaluation of SSA by Planning Commission (GOI, 2010) indicates that the quality of education imparted to children is a major concern under SSA. But many of the cited achievements are not related to quality and drawbacks point towards the real needs. According to the report, “there has been moderate improvement in Pupil-Teacher Ratio (PTR), availability of infrastructure facilities and awareness among parents regarding SSA, there are still some outstanding issues, which need to be addressed such as shortage of upper primary schools in both rural and urban areas, mainstreaming of ‘out of school children’ and ‘dropouts’, seasonal migration, weak monitoring and supervision linkages and quality of education imparted”.

Economic marginalisation, poverty and early entry in work for children are realities that impinge on their schooling. However there needs to be a sociological approach to education based on an understanding of the tribal context and how it mediates pedagogic, curricular and institutional processes (Nambesan, 2007). Issue of inclusion of language is one of the big challenges in education. Securing livelihood along with Right to Education is another challenge. Striking the right balance between formal and informal science education will never be easy, but the answer is not to focus exclusively on the small fraction of people’s lives spent in school. Policy-makers need to start looking at alternative models (Nature, 2010).

The gap between real inclusion and right based education appears to be perishing even after many experiments like DPEP, SSA and the RTE act. Even after changes into child centred education system and redefining the role of teachers to a particular extent, the present education system is far away from complete contextualisation and comprehension. It has resulted in the

marginalisation and drop out of ethnic and local communities from education and the cultural/traditional institutions and the state institutions run parallel resulting in social exclusion and endangerment of language and culture. Exclusive and mainstreaming nature of education and learning narrows down the scope for development and progress of regional languages and immense knowledge associated with great diversity of culture and traditions in our country.

Examination of multilingual pedagogy developed by incorporating 'Kadar' ethnic community language, Malayalam and English points out 59 odd words out of 148 not related to 'Malayalam' or Tamil; about 44 are related to Malayalam and very few are real Malayalam words. Many of the word names are really organic, e.g. "Kootupambu" meaning the "Snake which makes nest" for King Cobra, where as its Malayalam is 'Raja Vembala' meaning King Cobra. But it is the only nest making snake in our region (Bachan et al., 2012) and hence, it is more appropriate to call it Kootupambu. The basic instinct to conserve their own knowledge and language of ethnic communities are inherent in every aspect of their life and that is why such languages have not become extinct in this world of 'mainstreaming'. Naming 'Giraffe' an animal the Kadars see only in pictures as 'Gopura Kazhutha' (Gopuram = tower, Kazhutha = donkey) where there is no name in Malayalam is one of the example where the Kadar language shows progress and growth through developing new words. Looking into this, one can imagine what could be the results of inclusion of all the tongues and languages of the indigenous and local communities in education, planning and development.

So inclusion of diverse languages and dialects, materials and themes native to diverse indigenous and other marginalised communities, diverse pedagogy providing great freedom for the students and an inclusive diverse curriculum connecting to the universal syllabus is still a dream. Many of the innovations of the NGOs based on 'community participation' are accepted or neglected by the Government systems without clear analysis of what these models offer and what insight they provide into developing localised education strategies based on community ownership (Subrahmanian, 2003).

A study evaluating SSA in Haryana, points out the lack of an appropriate, qualitative and effective teaching learning material and teacher training as major drawbacks (GOH, 2009). An evaluation

of EVS teaching in Kerala also points out at lack of integration of different subjects even if that is envisaged in the syllabus (Dogra, 2013). This is due to lack of knowledge or material related to the 'world view' of the students and it could become very serious when it comes to indigenous communities. Vigilance against the imposition of narrowly refined conceptions of education can only be maintained and strengthened through the opening up of the spaces for the citizens, particularly those who are outside the education system, to express their views and perspectives on the nature and shape that education should take to realise their fullest aspirations and freedoms (Subrahmanian, 2003).

In the background of RTE Act, alternate and parallel education that contributed a lot for the education contextualisation finds a hard way ahead. Focus should be given to development of diverse, contextualised supplementary curriculum materials addressing 'worldview' of each and every indigenous and marginalised community, at least under district level SSA. This could be applied to different natural communities and geographical regions and developed as a support material helping the teachers and students for integration and comprehension. Any attempt to contextualise education to the needs of the marginalised communities must look into the failures in the major experiments to bridge the gap in the extent of contextualisation. Contextualisation of education should focus on—1. Content to start from known to unknown to accommodate everyone's 'world view'. 2. Language to be indigenous; flexible to accommodate multilingual ranging from indigenous, local, regional to universal 3. Should result in effective decentralised and inclusive pedagogy; flexible enough to provide high degree of freedom to choose. 4. Method of teaching and evaluation should be comprehensive rather than prescriptive and 5. The role of the teachers should be as facilitators to enable pupil to comprehend, travel from known to unknown through pursuits of creativity, problem solving using information, rather than act just as a knowledge centre or information provider.

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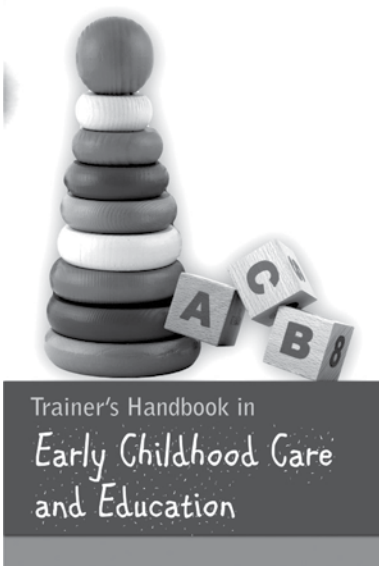
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