

Verbal Ability of School Children: An Exploratory Study in Dhaka City

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Declaration

Except where full references have been given, this research report contains the independent original work which performed by myself under the supervision of Professor Dr. Shamim F. Karim, Department of Educational and Counseling Psychology, University of Dhaka. This research report has not been submitted before, nor it is being submitted anywhere else at the same time for award of any degree, except for publications.

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Certification

This is to certify that the thesis entitled “**Verbal Ability of School Children: An Exploratory Study in Dhaka City**” submitted by Fatima Khan Basu has been carried out under my supervision. This is further to certify that it is an original work and suitable in partial fulfillment for the degree of Masters of Philosophy (M. Phil) in Educational Psychology, Department of Psychology, University of Dhaka. I recommend the thesis for examination.

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Abstract

This cross-sectional study explored association between verbal ability and contextual factors amongst school children ($N=116$; ages 9 to 12 years) of Dhaka City. Despite several initiatives by the Government of Bangladesh, NGOs and INGOs to achieve Millennium Development Goal 2, consistency in children's success is an alarming issue. Data were collected from 116 students of grade 4 (55.2%) and 5 (44.8%) by using Bangla version short form of child Parental Acceptance Rejection Questionnaire, PARQ (Fatema, 2008) and Bangla adapted version (Fatema & Afrose, 2011) of WISC-IV and from their 116 parents by using demographic questionnaire and adapted Bangla version of Family Adaptability and Cohesion Evaluation Scale II (FACES II) and. The empirical evidence confirms a strong positive association of children's age, family adaptability and cohesion, perceived parental acceptance-rejection and mothers' educational level with the verbal ability. These findings suggest that government needs to put attention on associated factors of verbal development to ensure a sturdy student life.

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Chapter 1. Introduction and Background

1.1. Human Development and MDG Achievement of Bangladesh

Over the last decade Bangladesh has started to walk towards its golden time. Development is evident in many areas. According to the United Nations Development Programme (UNDP), Bangladesh considered to have achieved medium human development and ranked 142 among 187 countries with an HDI score of 0.558 (Human Development Report 2014). Furthermore Bangladesh has already reached several targets of the MDGs like reducing poverty gap ratio, attaining gender parity at primary and secondary education, under-five mortality rate reduction, containing HIV infection with access to antiretroviral drugs, children under five sleeping under insecticide treated bed nets, detection and cure rate of tuberculosis under directly observed treatment short course and others. Focusing on MDG 2 Bangladesh has made remarkable progress in the area of primary education though it has challenged with several factors to attain the goal 2.

MDG 2: Achieve universal primary education

The government has taken various initiatives under a comprehensive National Education Policy (2010) to achieve its objectives. Significant progress has been made in increasing equitable access in education, reduction of dropouts, improvement in completion of the cycle, and implementation of a number of quality enhancement measures in primary education. The national enrolment rate (NER) is 98.7 percent; girls: 99.4 percent, boys: 97.2 percent (Millennium Development Goals: Bangladesh Progress Reports 2012). Initiatives have been taken to introduce pre-school education to prepare the children for formal schooling. But till now the quality of education is in a question at the primary and higher levels.

In March 1990 in Jomtein Thailand, the World Conference on Education for All (WCEFA), meeting adopted the World Declaration on Education for All, covering five areas of action or goals, to be achieved by the year 2000. Following the declaration, Bangladesh prepared its first EFA: National Plan of Action (NPA I) (Primary Education Development Program, PMED, 1995), covering the period 1991- 2000. With the guideline of EFA goals, National Plan of Action-I covered five major basic education program areas; one of these is Early Childhood Education and Development (ECED).

In 2001 the achievements of NPA I and basic education needs of the country provided the framework for NPA II. The basic goal of NPA II (2003-2015) is to establish a knowledge-based and technologically-oriented competent society to ensure that every school-age child has access to primary level institutions that provide all necessary facilities, continue in school to receive and achieve quality education, and provide opportunities to pre-school children, young persons and adults to meet their learning needs in a competitive world, both in the formal and non-formal sub-sectors of basic education without any discrimination (Ministry of Primary and Mass Education website).

While the country has done well in meeting its headline MDG obligations, there remain serious weaknesses on the quality and durability of some outcomes.

1.2. Education system of Bangladesh

The three main educational systems in Bangladesh ordered by decreasing students numbers, are:

1. General Educational System
2. Madrasah Education System
3. Technical – Vocational Education System

Other systems include a Professional Education System. Each of these three main systems is divided into four levels.

1. Primary Level (5-years cycle, age group 6-10 years)
2. Secondary Level (7-years cycle): It consists of three sub stages;
 - a) 3 year junior secondary (age group 11-13 years)
 - b) 2 years of secondary (age group 14-15 years)
 - c) 2 years of higher secondary (age group 16-17 years)
3. Tertiary Level (5-6 years cycle to obtain a Masters degree)

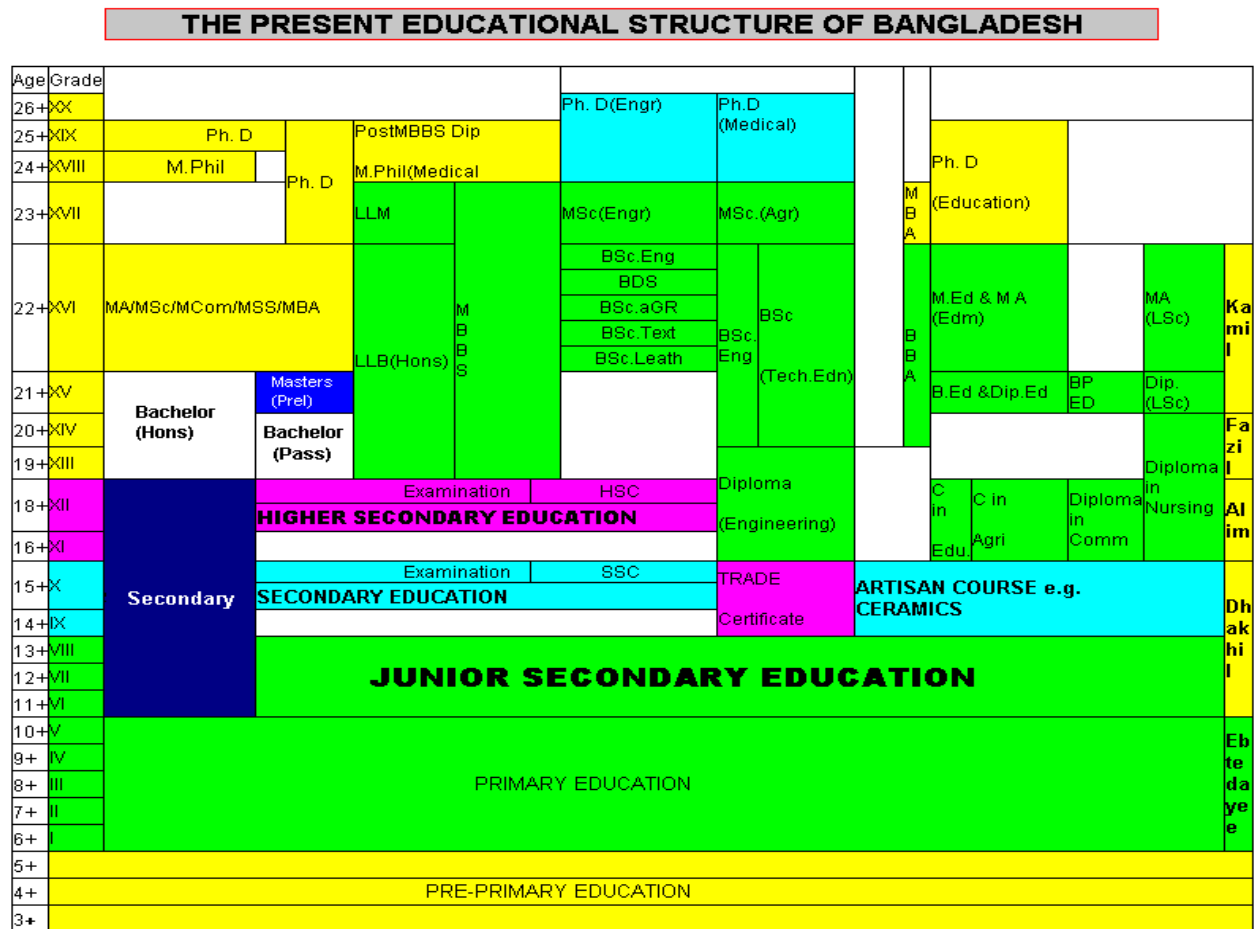


Figure 1. Educational Structure of Bangladesh

According to Bangladesh Bureau of Educational Information and Statistics (BANBEIS) data, in 2008 total number of grade 4 and 5 students in Bangladesh was 4825601.

Table 1: Grade wise Enrolment by sex in all types of Primary level institutions, 2008.

	Boys	Girls	Total
Grade 4	1376122	1455353	2831475
Grade 5	963986	1030140	1994126
Grand Total			4825601

Source: Bangladesh Bureau of Educational Information and Statistics, BANBEIS

1.3. Curriculum, Competency & Assessment

The curriculum for the primary level in Bangladesh is considered to be competency based and the aim is to ensure that students achieve a minimum set of competencies (CAMPE, 2000). Two decades ago the competency based primary education curriculum was introduced in our country. The curriculum for primary level introduced by the National Curriculum and Textbook Board (NCTB) has identified a set of general competencies and formulated subject-wise terminal competency-based Essential Learning Continuum (ELC) for a five year cycle. The curriculum for the primary level defines competency (NCTB, 2002-2003) as ‘the gained knowledge, ability and attitude which could be applied in real life at the right time’ (translated from the original Bangla). Ensuring achievement of the competencies requires that the assessment system is consistent with the curricular aims (Kabir & Monzoor, 2008). However, the assessment methods and practices to measure competencies achieved by students remain problematic. Written test is the sole measurement instrument and assessment of oral communication skills, cognition, and values and attitudes is ignored. The assessment tests/examinations appear merely to assess

content knowledge, rather than competency, and teaching in the classroom is shaped by the demands of the examinations (Banu, 2009).

In 2012 Dey and Siddiquee examined to what extent the assessment tests in the cycle completion examination (Primary School Certificate, PSC) correspond with the curricular aims. They have explored the nature of the Bangla test items - how they relate to curriculum-prescribed competencies and textbook contents and their potential for assessing cognitive abilities of students. For the curricular area of Bangla language, there are 16 terminal competencies learners are expected to achieve within five years of primary schooling (NCTB, 2002-2003). These terminal competencies are formulated on the basis of four language skills- Listening, Speaking, Reading and Writing. The table below shows all the terminal competencies.

Table 2. Skill Based Terminal Competencies

Skill Area	Terminal Competency
1. Listening	1.1 To acquire knowledge about the mode of Bangla language construction, organisation of sentences (syntax) and its rules and applications. 1.2 To be able to understand the main idea of rhymes, poems, stories, conversations, speeches, descriptions etc. in Bangla by listening to them attentively. 1.3 To be able to understand by listening to the numerical words (countable, ordinal and date).
2. Speaking	2.1 To be able to use the mode of Bangla language construction, organisation of sentences and its rules and applications. 2.2 To be able to recite Bangla rhymes, poems and tell stories and engage in conversations, speeches, descriptions etc. with understanding. 2.3 To be able to express and exchange own thoughts and feelings to the class – mates and others and speak in standard colloquial Bangla correctly. 2.4 To be able to say the numerical words (countable, ordinal and date).

Skill Area	Terminal Competency
3. Reading	3.1 To be able to apply the mode of construction of Bangla language, organisation of sentences and its rules and applications. 3.2 To be able to understand the main idea of Bangla rhymes, poems, stories, conversations, speeches, descriptions etc. by reading attentively. 3.3 To be able to read Bangla printed and hand-written materials with correct pronunciation, and continue acquiring knowledge about Bangla language. 3.4 To be able to read the numerical words (countable, ordinal and date).
4. Writing	4.1 To be able to apply in writing the mode of Bangla language construction, organisation of sentences and its rules and applications. 4.2 To be able to understand and write the main theme of the Bangla rhymes, poems, stories, conversations, speeches, descriptions etc. 4.3 To be able to write the numerical words (countable, ordinal and date). 4.4 To be able to express in writing about observations, experience and attitudes in correct and clear Bangla language. 4.5 To be able to write ordinary letters, applications and fill in different forms.

Source: National Curriculum for Primary Level, 2002-2003

Several areas of concern have been identified through the review of Bangla test question papers of the PSC examination. The most relevant finding to the present study is the absence of scope to assess some of the basic linguistic abilities of the students such as listening, speaking and reading. As PSC examination includes only written tests, the test questions focus on writing skills. Instead of testing students' linguistic abilities, the tests ask for specific memorized answers. They do not allow students to communicate their experience and demonstrate observation skills through linguistic expressions. The questions prompt them to reproduce language from the textbook contents. Hence the assessment aim doesn't quite match with the curricular aim. The characteristics of the assessment items strongly suggest a backwash effect on primary classroom instruction encouraging memorization and low level cognitive skills rather

than building the linguistic and communication skills of students. Such a restrictive approach does not enable students to achieve mastery of literacy and oral skills and build the foundation for further learning.

1.4. Statement of the problem

Despite all the efforts the Campaign for Popular Education estimates that 66 percent of children in Bangladesh do not even achieve basic literacy and numeracy (Campaign for Popular Education, 2003–2004). The Education Development Index (EDI) reflects this poor performance, ranking Bangladesh 105 out of 121 countries in terms of educational outcomes (Education for All Global Monitoring Report, UNESCO, 2006)

Getting children into the classroom is insufficient if they do not emerge with the knowledge or skills necessary to improve the quality of life for themselves and their households. However, even though Bangladesh has taken considerable steps towards education, it also faces considerable challenges in order to sustain and build on the achievements of the last decade and to remain on track to achieve the Millennium Development Goals (MDGs). This failure may be attributed to several factors worth exploring to recommend effective interventions. This study explores potential factors contributing to the achievement of verbal ability of school children. The development of verbal abilities form a crucial part of a child's maturation process. Verbal abilities are key components for acquiring language, and learning how to read and write. Moreover, verbal abilities are needed for good social communicative functioning. Literature reviews reveals few to no evidences regarding factors contributing to children's verbal ability development in Bangladesh. Foreign Literature suggest that parent's educational qualification, several family characteristics such as family income & expenditure for child's education, family structure, quality of parenting, has impact on verbal ability. Therefore, this study was deemed to

open doors to explore the factors for creating supportive environment for children which would facilitate development of their verbal ability.

1.5. Significance of the study

- This study will identify the range of verbal ability of the school children of Dhaka City and provide scientific evidence of the school children's ability. It is most important to curriculum developers and policy makers to know the ability of the children as they can get the opportunities to explore their potentiality at best when they get developmentally appropriate education.
- Background i.e. family factors are imposed as the determinants of verbal ability of school children in most of the foreign literatures but in the present study will explore all the potential factors responsible for verbal ability through in-depth qualitative data collection tool. The detailed factors explored will be useful for researchers and users of the scale in similar contexts.
- This measure of verbal ability will be very helpful for an educational psychologist to assess and provide appropriate educational interventions for the students.
- Educational Psychology is a new and applied branch of Psychology in Bangladesh. As a new field it is essential to prove the usability of the students' assessment tools to emerge as a professional field with scientific base. Scientific tools assist to produce precise and more appreciable professional works.
- Many researchers study individual and family development over the life cycle. From an individual standpoint, preadolescent school-age children have been the focus of less research than infants, toddlers, and adolescents. Families with preadolescent school-age children have also received less attention than those at other stages of the family life

cycle (e.g., birth of first child, launching). Thus, the current study focuses on this population.

- Research on Verbal Ability of preadolescent is scarce in Bangladesh.
- The results of this study will provide important insights for educators, teachers, practitioners, and families with pre adolescent children.

1.6. Objectives

1.6.1. General Objective

To explore the verbal ability of school children of Dhaka city

1.6.2. Specific Objectives

- To measure the range of verbal ability of grade 4 and 5 students
- To explore the association of verbal ability with family income
- To explore the association of verbal ability with parent's educational level
- To explore the association of verbal ability with educational expense
- To explore the association of verbal ability with family adaptability and cohesion
- To explore the association of verbal ability with number of adults at home
- To explore the association of verbal ability with perceived parental acceptance and rejection
- To explore the association of verbal ability with media exposure

1.7. Operational Definition of Terms

In this section four key terms examined in the study are defined: verbal ability, quality of parenting, family adaptability and family cohesion.

Verbal ability: Verbal ability is defined in this study as developed mental skill. This definition reflects the view that verbal abilities are developed rather than innate although it is recognized that developed abilities may depend on both the environment and genes. This definition seeks to avoid the labeling bias that has previously been associated with defining cognitive and intelligence tests as measuring innate potential (Jencks, 1998).

Verbal ability is the ability to analyze information and solve problems using language-based reasoning. Verbal ability is a component of intelligence. It is also termed as verbal intelligence. The Verbal IQ measures general ability to reason, solve problems and recall important information presented in a verbal format (printed or spoken). The verbal IQ also reflects children's ability to explain verbal concepts clearly, provide rationale for their choices, and explain conceptual information. Verbal reasoning is important in most aspects of school work. Reading and language arts tasks required verbal reasoning skills. Even the more abstract courses such as math and physics require verbal reasoning skills, as most concepts are either introduced orally by the teacher or introduced in written form in a textbook. Verbal ability is one of the most accurate predictors of academic success because of the strong reliance on reading and writing in formal school programs.

Parental Acceptance: Parental acceptance refers to the warmth, affection and love parents can give their children, has two expressions; physical and verbal (Rohner, R.P. 2005).

Parental Rejection: parental rejection is as the absence or significant withdrawal of warmth dimension (Rohner, R.P. 2005)

Family Adaptability: Family adaptability refers to the ability of the family system to change. Families that are more adaptable demonstrate greater capacity to change; whereas, families that are less adaptable tend to maintain homeostasis. Family adaptability is defined as “the ability of a marital or family system to change its power structure, role relationships, and relationship rules to situational and developmental stress” (Olson & McCubbin, 1982).

Family Cohesion: Family cohesion refers to the level of closeness among family members. Members of families high in cohesion tend to be less differentiated; whereas, members of families low in cohesion tend to be relatively disengaged. Family cohesion is defined as “the bonding that family members have toward one another and the degree of individual autonomy they experience” (Olson & McCubbin, 1982).

Chapter 2: Literature Review

To survive successfully in the competitive market of the world, requires competent man power.

Preparation to be a proficient person starts from childhood. Hence careful parents wish to encourage in their children skills of reading, oral communication that requires substantial vocabulary and the basic mathematical skills among other attributes.

Investigations of the determinants of these skills are found in many literatures. Developmental psychology researches look at processes and the practices in which parents engage that are associated with successful “outcome” measures. Studies in social psychology identify associations between family characteristics or structures and children’s test scores. Researches in economics emphasize the family resources and relative prices that create incentives for families to make investments in their children’s cognitive and social-emotional skills. Some emphasize the critical role of genetic endowments; others focus on the importance of the community and racial/ethnic or religious cultures to which the child is exposed.

2.1. Contextual factors

This research contributes to the literature that emphasizes the role of contextual factors as a central factor influencing the verbal ability of children. Efforts to explain the contextual factors influencing children’s verbal ability have produced three perspectives; family characteristics, quality of parenting and media exposure.

The first perspective family characteristics include family income, educational expense, parents’ education, family adaptability and cohesion, family structure (number of adults at home). The centrality of the family as a primary context for individual development has been documented for children (Bronfenbrenner, 1990) and adults (Walters & Stinnett, 1991). The second perspective

emphasizes parenting practices which considers parenting practices important to children's cognitive development (including verbal ability), and children's habits, personality traits, and non-cognitive skills critical for their later achievement both in school and in the labor market (Mayer 1997). The third perspective is media exposure which has consequences in many areas of child development (Levine, L.E & Munsche, J., 2014).

2.1.1. Family characteristics

Evidence of the relationship between *parent's education* and their children's measured ability or cognitive achievement is quite strong and is found in many research reports. Smith, Brooks-Gunn, Kohen & McCarton (2001) showed strong associations between parent's educational level and several measures of children's ability including verbal ability.

Parents' literacy levels are usually related to children's literacy development and parent-child engagement in literacy activities in the home has been found to help children develop oral language. Children's IQ scores were found strongly correlated with fathers' and mothers' educational level individually. Mothers' education contributed to 18.6% of variation in Verbal IQ, 15.6% of performance IQ and 23.5% of full scale IQ. The impact of mothers' education on IQ scores is more prominent. Fathers' education has also linear relationship with IQ scores (Sarkar, R. K., 2010)

A second family characteristic that influences the child in many ways is its *level of income*. Family income, affect children's development and achievement in the U.S. because critical educational resources can be purchased with money (Gamoran 2001; Mayer & Susan 1997; Hanushek 1997). This is observed in Bangladeshi context. For example, higher-SES families can "purchase" better schools for their children, by either sending children to private schools or

spending money to reside in high-quality school. Better schools have more challenging curriculum, better-performing schoolmates, better physical resources, higher teacher-to-student ratios, and better-qualified teachers, all of which benefit children's development notably (Greenwald, Hedges and Laine 1996; Rivkin, Hanushek and Cain 2005; Chiu 2010). More affluent families can also provide their children with more stimulating living environments, including better physical living arrangements as well as other materials.

There are many research which claim extreme income deprivation or poverty have severe effect on the nutrition and health of the child, and this in turn adversely affects the child's capacity and eagerness to learn. Children raised in low-income families score lower than children from more affluent families do on assessments of health, cognitive development, school achievement and emotional wellbeing (Brooks-Gunn, Duncan, Maritato 1997). Income differences well above poverty also impact children's cognitive test scores. Studies use various cognitive tests and report strong relationships with family income, some showing a linear effect across wide ranges of incomes, others finding stronger effects at lower levels of income.

However, the evidence of influence of income level is more complex and deserves a longer description. Mayer (2002) provides a comprehensive review of the impact of income on children's outcomes in the domains of cognition, health, and later labor market behaviors.

Regarding cognitive test scores she notes that many studies that show sizable effects of family income when not controlled for other parental characteristics, do not show that effect when the parent's education or own test scores or family structure are controlled. Mirroring that point, McCulloch & Joshi (2002) looked at the effects of family income on the child's vocabulary test score, the Peabody Picture Vocabulary Test (PPVT), using the same dataset. They measure income by quintile dummy variables and show strong income effects on PPVT scores controlling

for only the child's age and gender. But they show that these income effects decline in significance as mother's education and aspects of the home environment are included in the statistical models. Clearly family income is important for children's cognitive development. It is also clear, however, that when the things income can provide or the personal parental attributes that typically generate income are statistically controlled, money itself is not found to be the critical ingredient. This distinction is important in social policy, since handing a family the money without those parental attributes will not have the same impact as it has in comparisons across families with both the money and the accompanying characteristics.

There is far less consistency in the evidence on the influence of *family structure* on children's verbal ability scores. Families with only one adult have less parenting capacity and face greater stress in childrearing, so one might expect to find a negative effect of single-parenthood.

Similarly, families that have experienced turmoil through marital disruption may also exhibit the effects of stress on the children's measured skills. Yet empirically, the findings in McLanahan (1997) reflect the literature that shows that family structure does not have a strong, persistent effect on children's verbal ability scores, although it does have a stronger association with other aspects of their wellbeing. Similarly, Joshi et al (1999) report inconsistent effects of lone parenting on different cognitive tests and these decline in significance when family attributes like parent's education are included in their analysis.

It is assumable that a child's environment that has more point of interaction will be able to facilitate development of verbal ability through increase number of human communication.

Therefore a child who lives in a house that have more number of adults should have more opportunity for developing verbal ability. There are three types of family in Bangladesh: nuclear

family, joint family and extended family. Nuclear family is defined as a group of persons united by ties of marriage and parenthood or adoption. It consists of a man, a woman and their socially recognized offspring. It is widely held and believed that nuclear family is the most oldest and basic universal form of social organization.

The joint family is an extension of the nuclear family in which members of unilineal descent group (a group in which descent through either the male or the female line is emphasized) live together with their spouses and children in one homestead and under the authority of one of the members. For example, a patrilineal joint family consists of an older man and his wife, his sons and unmarried daughters, sons' wives and children and so on. It typically grows when children of one sex do not leave their parents' home at marriage, but bring their wives to live with them. The members of a joint family share all function of the family.

An extended family is similar to the joint family except that it does not necessarily live in the same dwelling, but normally the members live close together and work in teams. Moreover, it may include other kin in addition to the members of the nuclear family.

The father is normally the head of the family and all authority rests upon him; he is the owner and administrator of family property. All family members have the duty to obey and respect him. In the father's absence, the eldest son takes his position. Due to the patriarchal family system, importance is given father, paternal grand father and paternal uncle rather than to the mother, maternal grandfather and maternal uncle. Stereotyping male and female roles within the family is still prevalent.

Regarding child outcomes several scholars have found *family cohesion and adaptability* to be important resources. Dreman and Ronen-Eliav (1997) found a negative relationship between

both adaptability and cohesion and mothers' reports of adolescent behavior problems. In a study of inner-city youth, Kliewer and Kung (1998) found that cohesion moderated the relationship between children's self-reported hassles and both internalizing and externalizing behavior problems, whereas adaptability moderated the effects of hassles on externalizing behavior problems only. Smith, Prinz, Dumas, and Laughlin (2001) found a relationship between cohesion and children's behaviors in a sample of African-American kindergarten children. Weist, Freedman, Paskewitz, and Proescher (1995) found cohesion to buffer the effects of stress on adolescent boys' discipline problems at school. Weiss and Sneed (2002) found a relationship between adaptability and cohesion and toddler's behavior problems. However, Weiss, Goebel, Page, Wilson, and Warda (1998) did not find a relationship between adaptability and cohesion and the behavioral problems of preschool Latino children. On an individual level, Amerikaner and Genevieve (1994) found cohesion to be a key interaction variable related to individual psychological health among a sample of college students.

A few studies have examined the relationship between family adaptability and cohesion and academic achievement. Smith et al. (2001) did not find a relationship between family cohesion and kindergarten students' reading achievement. Masselam and Marcus (1990) found a more balanced family type (adaptability and cohesion) present in families of youth who were successfully progressing in public schools as compared with youth who were in alternative schools because of their lack of success in public schools. When examined separately, cohesion, not adaptability, distinguished the two groups. Unger, McLeod, Brown, and Tressell (2000) found that cohesion mediated the relationship between parental conflict and grade point average for adolescent girls. While not examining cognitive ability directly, the studies by Masselam and

Marcus (1990) and Unger et al. (2000) suggest that a cohesive family environment might be an important resource in the development of cognitive abilities.

2.1.2. Quality of Parenting

Parenting is not something that happens in a vacuum. It happens in a context – whether a cultural, socioeconomic, or familial context- and it reflects the values and beliefs of that context. It has been said broadly that authoritative parenting is associate with the most positive outcomes. There is some research that supports this idea. In one study of over 10,000 American adolescents from a variety of ethnic and socioeconomic backgrounds who were living in a variety of family structures, the authors concluded that, “analyses indicate that the positive correlates of authoritative parenting transcend ethnicity, socioeconomic status, and family structure. Virtually regardless of their ethnicity, class, or parents’ marital status, adolescents whose parents are firm, accepting and democratic earn higher grades in school, are more self-reliant, report less anxiety and depression, and are less likely to engage in delinquent behavior” (Radziszewska, Richardson, Dent, & Flay, 1996).

However, although an authoritarian parenting style has been associated with poorer school performance among Euro American children and adolescents, this is not the case for Chinese children. Although Chinese parents are more controlling, their children typically do well in school. Chao (2001) explains this paradox by describing the Chinese concept of *chiao shun* or the expectation that parents will train their children “to adhere to socially desirable and culturally approved behavior”. When children reach school age, mothers provide the drive for their efforts to succeed in school, but this is done in a context of warm, supportive, and physically close relationship that was established when the child was much younger. Another important concept in this culture is *guan*, which literally means “to govern” but can also mean “to care for” or even

“to love”. From this perspective, even close monitoring and correcting of a child’s behavior by adults is seen by both parent and child as a fulfillment of their responsibilities to the child and in the child’s best interest.

Instead of direct investment, families’ parenting practices should be of great importance to children’s development in Bangladesh. Theoretically, parenting is important to children’s development, as bioecological and transactional models of children’s development maintain that reciprocal interactions between children and the multiple environments in which they are embedded largely account for differences in children’s development (Bronfenbrenner and Ceci 1994). High quality parenting is crucial to children’s later achievement in education and the labor market, and it can remedy the developmental disadvantages resulting from low family income (Gertler et al. 2013). If a child excels academically, this brings pride to the family. Conversely, if a child fails academically, it brings embarrassment. Meanwhile, family and parents are expected to provide a healthy emotional environment at home and to support the school’s role in improving children’s academic achievement. Family is thus highly involved in children’s growth and parenting influences children greatly.

Parental attitudes and behaviour, or parenting style, have been found to be more important than socio economic status (SES) in predicting and fostering academic achievement (Christenson, Hurley, Sheridan and Fenstermacher 1997; Eamon 2005; Steinberg, Blatt-Eisengart, and Cauffman 2006). Studies over several decades have shown that of the four parenting styles described by Maccoby and Martin (1983) authoritative parenting, characterised by high levels of parental warmth/involvement and monitoring/supervision, is predictive of positive psychological and academic competence for offspring. Authoritarian parenting or neglectful parenting, typified by high monitoring/supervision and low warmth/involvement, or low monitoring/supervision and

warmth/involvement respectively, are associated with negative outcomes in these areas (Maccoby and Martin 1983; Steinberg, Mounts, Lamborn and Dornbusch 1991).

Studies that examined how parenting styles influenced the cognitive development of young elementary-aged children are rare (e.g., Chen, Dong, & Zhou, 1997). In a study of adolescents, Dornbusch et al. (1987) found that authoritarian and permissive parenting styles were negatively associated with higher grades, whereas the authoritative parenting style was positively associated with higher grades. Radziszewska, Richardson, Dent, and Flay (1996) found similar results in their study of 15-year-olds. In another study of adolescents, Leung, Lau, and Lam (1998) found that that academic achievement was negatively related to authoritarianism. In a study of adolescent minority students (Hispanic American, African American, and Asian American), Boveja (1998) found that adolescents who perceived their parents to be authoritative engaged in more effective learning and studying strategies.

Ronald P. Rohner (Rohner, 1975, 1986, 2002) formulated a lucid parental acceptance-rejection theory (PAR Theory). According to PAR theory, humans everywhere regardless of differences in culture, race, gender, geographic context or other such defining conditions – are likely to respond to perceived PAR in a specific manner. This theory has been proved by many experiments around the world (Rohner, 2011). In general, the more acceptance (warmth, affection, care, comfort, concern, nurturance, support, or simply love that children can experience from their parents or caregivers) children receive, the more positive influence will be on children's development and the more rejection (parental rejection, which refers to the absence or significant withdrawal of these feelings and behaviors, and by the presence of variety of physically and psychologically hurtful behaviors and affects), the more negative influence will be on children's

development. Parental acceptance-rejection are the two warmth dimensions of parenting.

According to PAR Theory, parental acceptance refers to the warmth, affection, care, comfort, concern, nurturance, support or simply love that children can experience from their parents and other care-givers. And parental rejection refers to the absence or significant withdrawal of these feelings and behaviors and by the presence of a variety of physically and psychologically hurtful behaviors and affects. Comprehensive cross-cultural research over 45 years found that parental rejection may be experienced by combination of four principle behavior features;

1. cold and unaffectionate, the opposite of being warm and affectionate
2. hostile and aggressive
3. indifferent and neglecting
4. undifferentiated-rejection

But there is a key question whether the parents really rejecting or they are perceived to be such. Kagon (1978) explained it “parental rejection is not a specific set of actions by parents but a belief held by the child”. Rohner, khaleque, and Cournoyer (2005) have given detailed description of different forms of parental rejections. According to them, cold and unaffectionate parental behaviors are opposite of warmth and affectionate dimension of parenting. Hostile and aggressive parents abuse their children physically and/or emotionally. Indifferent or neglecting parents are physically and psychologically unavailable and pay no attention to needs of their children. Undifferentiated rejecting parents are perceived as unloving, disparaging, or uncaring toward their children.

Parenting practices are often associated with family’s income. However, how strongly parenting practices are more associated with family’s income may vary greatly by social contexts and by

social groups. Asian parents tend to expend resources to enhance children's education as much as possible. For instance, they supervise children's extracurricular activities, assign homework tasks, help children with their school work, and purchase private lessons for their children (Kao and Tienda 1995; Louie 2001).

2.1.3. Media exposure

In spite of the explosion of new forms of media, TV still takes more time in children's lives than any other form. Based on an American national sample of 8 – to 18-year-olds in 2009, the Kaiser family Foundation (KFF) found that children are watching an average of almost 4.5 hours of TV and videos or DVDs per day, some of it on handheld devices such as a cell phone (Rideout, Foehr, & Roberts, 2010). In almost half of homes the television is always on and rules set by parents for media use tend to monitor content, not amount of time. In those families that do have rules about media use, children use media an average of almost 3 hours less per day (Rideout et. al., 2010).

In 2007 and 2008 MEXT (Ministry of Education, Culture, Sports, Science and Technology of Japan) conducted nationwide studies on “academic ability and learning conditions” and got the same findings. MEXT has conclusively demonstrated that the longer a child's exposure to electronic visual media, the poorer their academic records.

Not all television viewing has the same effect on children's development. There is evidence that educational TV improves cognitive functioning and academic performance for some children, while entertainment TV makes academic performance worse. However, with infants there is no evidence that TV of any kind is helpful (Kirkorian, Wartella, & Anderson, 2008). The American academy of Pediatrics Committee on Public Education (2001) recommends that pediatricians “discourage television-viewing for children younger than 2 years and encourage more interactive

activities that will promote proper brain development, such as talking, playing, singing, and reading together”. While 32% of children under 2 do not watch any screen-based programming, 68% do watch TV sometimes (Vandewater et. al., 2007), and 43% watch TV, including recorded programming, every day (Rideout & Hamel, 2006). The research evidence shows that infants and toddlers learn much more effectively from real-life interaction than from on-screen programs (Anderson & Pempek, 2005; DeLoache et. al., 2010; Krcmar, Grela, & Lin, 2007). Both the amount and the quality of interactions between parents and child decrease when the videos are playing (Pempek, Demers, Hanson, Kirkorian, & Anderson, 2011).

Research on *Sesame Street* has found even greater positive effect on preacademic skills when children watched beginning at age 2 and 3 rather than age 4 (Wright, Huston, Scantlin, & Kotler, 2001). Educational (but not entertainment) TV seems to affect learning in a positive way from age 2. Although there are many educational programs on television, *Sesame Street* has included a research component since the very beginning of its programming and, as a result, has more research on its effectiveness than any other program.

A longitudinal study of German children found that watching educational program was positively associated with reading achievement, while watching entertainment television was negatively associated (Ennemoser and Schneider, 2007).

Considering the above background it can be hypothesized that family characteristics, quality of parenting and media exposure have an important influence on children’s verbal ability. This research has investigated the relationship between family characteristics, quality of parenting and media exposure and verbal ability.

Chapter 3. Theoretical Framework

Many theories have been proposed over the years to explain the developmental changes that people undergo over the course of their lives. Theorists have also attempted to explore the underlying factors of the diversity on people's ability. Some focus on innate ability and some focus on contextual factors. This article focuses on contextual factors. This work is anchored in the writings of scholars such as Vygotsky and Bronfenbrenner.

Vygotsky's theory combines the social environment and cognition. According to him the role of culture and social interactions are imperative to cognitive development. The four core principles of Vygotsky's Sociocultural theory of development are;

- Children Construct their knowledge
- Development cannot be separated from its social context
- Learning can lead development
- Language plays a central role in mental development

Children will acquire the ways of thinking and behaving that make up a culture by interacting with a more knowledgeable person. Vygotsky believed that social interaction will lead to ongoing changes in a child's thought and behavior. These thoughts and behaviors would vary between cultures (Berk, 1994).

The second element in the sociocultural theory is the zone of proximal development (ZPD). Vygotsky believed that any pedagogy creates learning processes that lead to development and this sequence results in zones of proximal development. It's the concept that a child accomplishes a task that he/she cannot do alone, with the help from a more skilled person. Vygotsky also described the ZPD as the difference between the actual development level as determined by

individual problem solving and the level of potential development as determined through problem solving under adult guidance or collaboration with more knowledgeable peers. The result of this process is children become more socialized in the dominant culture and it induces cognitive development (Moll, 1994).

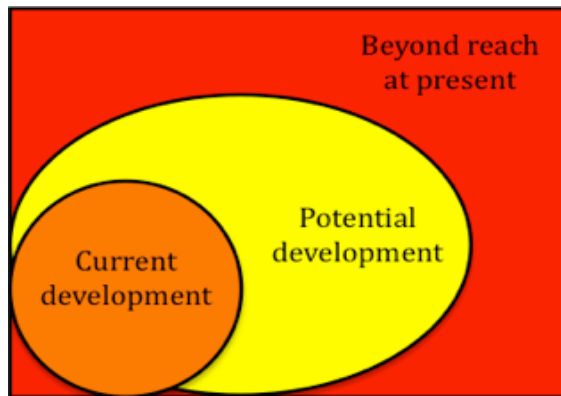


Figure 2: Diagram to demonstrate the ZPD

In order for the ZPD to be such a success, it must contain two features. The first is called subjectivity. This term describes the process of two individuals begin a task with different understanding and eventually arrive at a shared understanding. The second feature is scaffolding, which refers to a change in the social support over the course of a teaching session. If scaffolding is successful, a child's mastery level of performance can change, which means that it can increase a child's performance on a particular task. Vygotsky believed that adults in a society foster children's cognitive development in an intentional and systematic manner by engaging them in challenging and meaningful activities.

He also suggested that language is the most important tool for gaining this social knowledge; the child can be taught this from other people via language. According to Vygotsky, the acquisition of language (and in particular, speech) is fundamental to children's cognitive growth because language provides purpose and intention so that behaviors can be better understood. Through the use of speech, children are able to communicate and learn from others through dialogue, which is

an important tool in the Zone of proximal development. In a dialogue, a child's unsystematic, disorganized, and spontaneous concepts are met with the more systematic, logical and rational concepts of the skilled helper.

The underpinning framework of present study is *Bronfenbrenner's bioecological theory* which posits that individual human development and academic socialization in particular, occur as a result of interactions within and between multiple embedded ecological systems impacting upon the developing person (Bronfenbrenner 1979, 1989).

Urie Bronfenbrenner (1917-2005) developed the ecological systems theory to explain how everything in a child and the child's environment affects how a child grows and develops. His theory focuses on the quality and context of the child's environment. He states that as a child develops, the interaction within these environments becomes more complex. He labeled different aspects or levels of the environment that influence children's development, including the microsystem, the mesosystem, the exosystem, and the macrosystem.

The microsystem is the small, immediate environment the child lives in. Children's microsystems will include any immediate relationships or organizations they interact with, such as their immediate family or caregivers and their school or daycare. How these groups or organizations interact with the child will have an effect on how the child grows; the more encouraging and nurturing these relationships and places are, the better the child will be able to grow.

Furthermore, how a child acts or reacts to these people in the microsystem will affect how they treat her in return. Each child's special genetic and biologically influenced personality traits, what is known as temperament, end up affecting how others treat them.

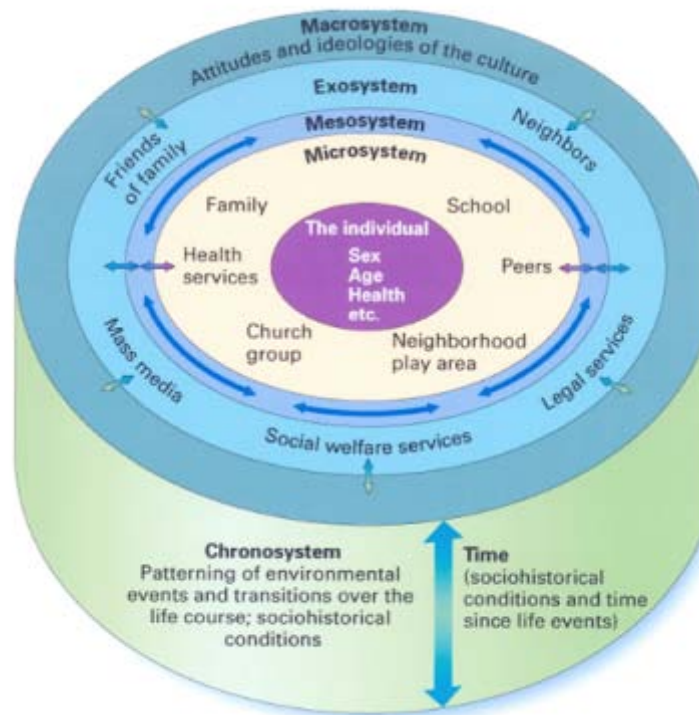


Figure 3: Levels of Bronfenbrenner's Ecological Systems Theory

Bronfenbrenner's next level, the mesosystem, describes how the different parts of a child's microsystem work together for the sake of the child. For example, if a child's caregivers take an active role in a child's school, such as going to parent-teacher conferences and watching their child's soccer games, this will help ensure the child's overall growth.

The exosystem level includes the other people and places that the child herself may not interact with them but that still have a large affect on her, such as parents' workplaces, extended family members, the neighborhood, etc. For example, if a child's parent gets laid off from work, that may have negative effects on the child if her parents are unable to pay rent or to buy groceries.

Bronfenbrenner's final level is the macrosystem, which is the largest and most remote set of people and things to a child but which still has a great influence over the child. The macrosystem

includes things such as the relative freedoms permitted by the national government, cultural values, the economy, wars, etc. These things can also affect a child either positively or negatively.

Bronfenbrenner sees the instability and unpredictability of family life which creates the most destructive force to a child's development (Addison, 1992). Children do not have the constant mutual interaction with important adults that is necessary for development. According to the ecological theory, if the relationships in the immediate microsystem break down, the child will not have the tools to explore other parts of his environment. Knowing about the breakdown occurring within children's homes, it is necessary for schools and teachers to provide stable, long-term relationships. Yet, Bronfenbrenner believes that the primary relationship needs to be with someone who can provide a sense of caring that is meant to last a lifetime. This relationship must be fostered by a person or people within the immediate sphere of the child's influence. Schools and teachers fulfill an important secondary role, but cannot provide the complexity of interaction that can be provided by primary adults.

A key feature of this theory is that sociological factors impacting upon an individual, such as parental income and neighbourhood, are translated to psychological influences through processes such as parenting behaviours, teacher behaviours and involvement in cultural activities. Thus the emergence of academic resilience is possible even in disadvantaged socioeconomic (SES) contexts traditionally linked with academic risk (e.g. Casanova, Cruz Garcia-Linares, de la Torre and de la Villa Caprio 2005; Friedman and Chase-Landsdale 2002; Jimerson, Egeland, Sroufe and Carlson 2000). Conversely, academic success is not guaranteed even for children from affluent backgrounds.

Chapter 4. Conceptual Framework

According to Vygotsky development cannot be separated from its social context. So to understand the verbal ability of children, contextual factors need to be explored. This research includes the elements of microsystem and exosystem of Bronfenbrenner as contextual factors. Family characteristics, parenting practice are elements of microsystem and media exposure is element of exosystem which have association with development of children's verbal ability. In the following flow charts represents the contextual factors associated with the development of verbal ability of children.

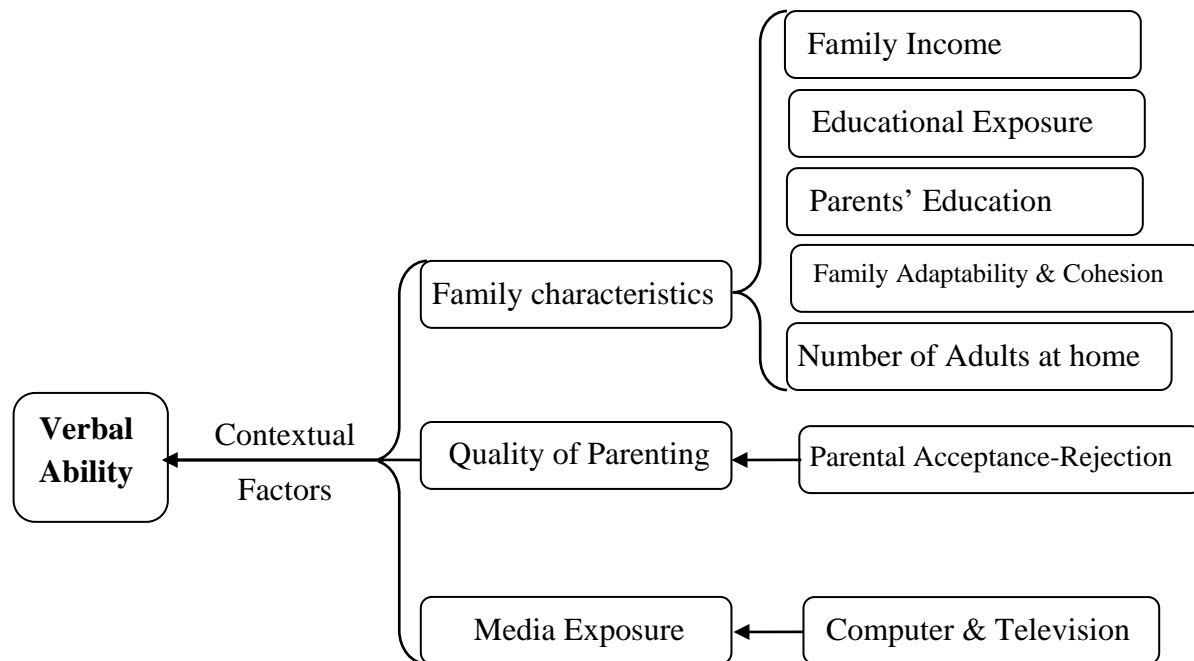


Figure 4: Flow Chart of contextual factors associated with verbal ability of children

Chapter 5: Methodology

2.1. Study Design

This was a cross sectional quantitative survey design. The quantitative survey (Ary, Jacobs, Razavieh, & Sorensen, 2009) has collected information to meet the objectives.

2.2. Population & Geographical Location

The study population included parents and children of grade 4 and 5 of Bangla medium Schools. It was conducted in Mohammadpur region in urban Dhaka.

Mohammadpur Thana is located 23.7550° N, 90.3633° E in Dhaka division with an area of 11.65 square kilometer with a population density of 37,555/km². Majority of the male (about 77%) and female (about 74%) children of the study population age group attend school (Bangladesh Bureau of Statistics BBS, 2014).

2.3. Sample

Geographical location and the schools have been selected considering the feasibility of data collection time and resources (convenience sampling). Grades 4 & 5 have been selected purposively and then one section from each grade was selected randomly to collect data from the children of those sections. Age of children was 9-12 years. However, note that data were collected from children and their parents.

Parents: All parents of selected sections of grade 4 & 5 students were included as sample. Data were collected from 116 parents about their children.

Children: One hundred and sixteen ($n = 116$) parents permitted their children to participate in the study. Therefore the sample size for children was also 116.

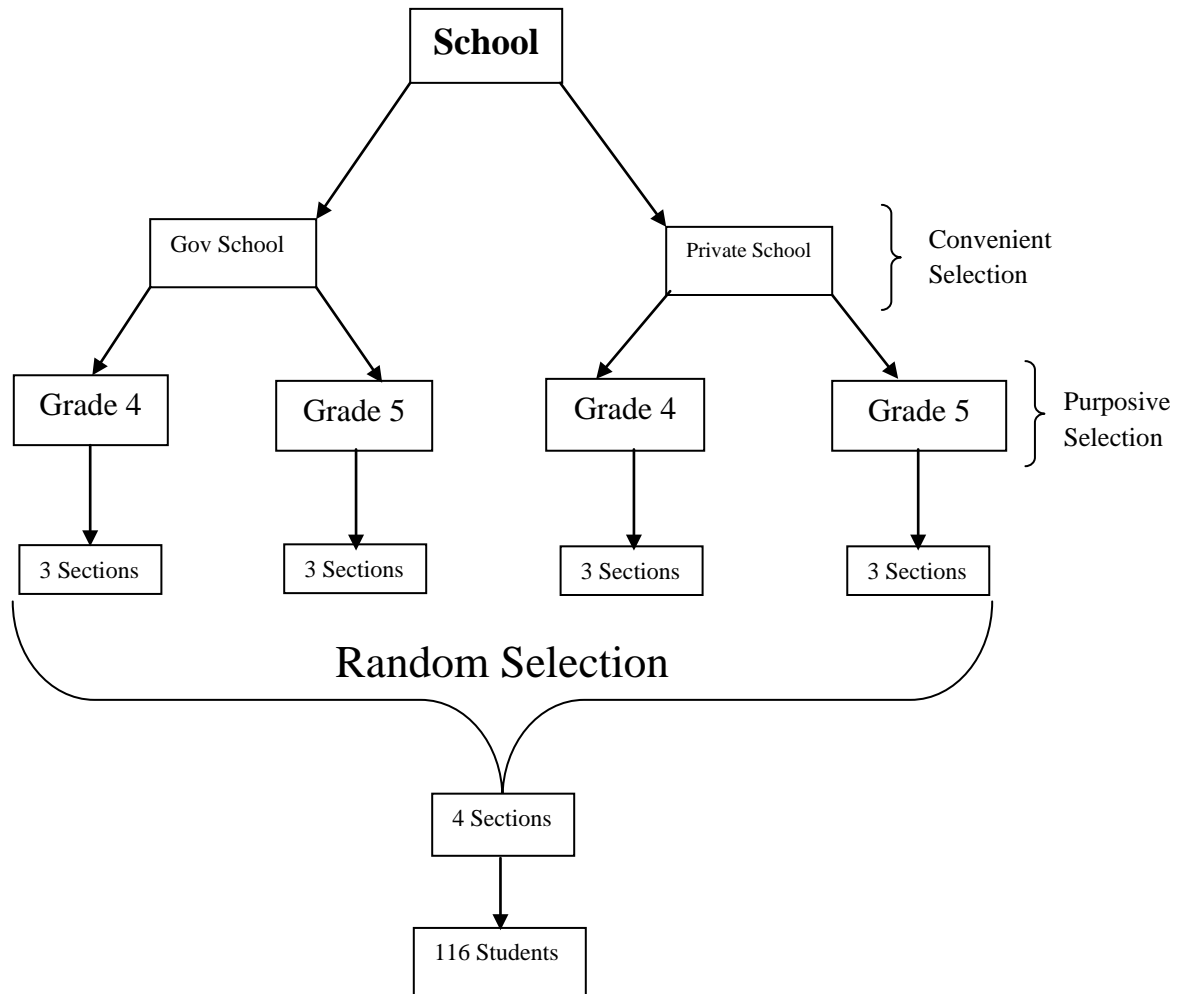


Figure 5: Sampling Procedure

2.4. Instruments

2.4.1. Socio-demographic questionnaire

Self administered pre-coded structured questionnaire (Gillham, 2000) was used to collect socio-demographic information. Parents have completed this questionnaire. However, this was not completely anonymous but requested for class roll number of child. It did not ask for names of the parent or the child or the school. The reason for collecting class roll number was to identify children whose parents gave consent for further data collection from their children. The consent form explained and ensured the strict process of confidentiality. The self administered structured questionnaire touched on:

- 1) Demographic information (children's age, gender, class, educational level of parents, family monthly income, family structure),
- 2) Educational expense for last year and
- 3) Media exposure time of children.

Information on *parents' educational level* was obtained as their highest educational degree achieved. If one of the parents' information on education was missing, other parent's educational information used to measure this variable.

Family's monthly income included average monthly income of family members. Missing values were imputed by prediction.

Education expense was measured to capture amount of money families spent on their children's education during the last year.

In this study information on one of the features of *family structure* was used; i.e. number of adults at home. Parents, Siblings, relatives and any other adults whose age was above 18 years were included here.

Media exposure time included the total time (on average) children spent with computer and TV daily.

2.4.2. Adapted Bangla Version (Fatema & Afrose, 2011) of Wechsler Intelligence Scale for Children- Fourth Edition (WISC-IV)

WISC IV developed by David Wechsler (2003), adapted by Fatema & Afrose (2011). WISC IV composed of 15 sub tests such as Block Design, Similarities, Digit Span, Picture Concept, Coding, Vocabulary, Letter-Number Sequencing, Matrix Reasoning, Comprehension, Symbol Search, Picture Completion, Cancellation, Information, Arithmetic and Word Reasoning. Out of 15 sub-tests 10 tests are core sub-tests. These are summed to four indexes (the Verbal Comprehension Index, the Perceptual Reasoning Index, the Working Memory Index and the Processing Speed Index) and one Full Scale IQ (FSIQ). The score in each area (indexes) will indicate ability in these four areas and FSIQ indicate the cognitive ability. It is an individually administered clinical instrument for assessing abilities of children aged 6 years through 16 years 11 months.

The introduction of the index scores gave practitioners the ability to use WISC IV partially for research purpose. When necessary to aid in interpretation, the practitioner could describe verbal abilities using the VCI in place of the VIQ. (Raiford, S. E., Weiss, L. G., Rolfhus, E., Coalson, D. 2006). In the present research three core subtests (similarities, vocabulary and comprehension) of verbal ability index were administered and the obtained scores (Verbal Comprehension Index or VCI score) were used as the indicator of verbal ability of children and would interpreted with the corresponding percentile rank.

Verbal Comprehension Index (VCI) measures Verbal concept formation. It assesses children's ability to listen to a question, draw upon learned information from both formal and informal education, reason through an answer, and express their thoughts aloud. It can tap preferences for verbal information, a difficulty with novel and unexpected situations, or a desire for more time to process information rather than decide "on the spot." This index is a good predictor of readiness for school and achievement orientation, but can be influenced by background, education, and cultural opportunities.

Verbal Subscales

Verbal Comprehension index (VCI) is based on Similarities, Vocabulary, Comprehension, (Information, Word Reasoning). This study was only used three core subtests (Similarities, Vocabulary and Comprehension,).

Similarities measures logical thinking, verbal concept formation and verbal abstract reasoning. Two similar but different objects or concepts are presented, and the student is asked to tell how they are alike or different. Similarities is an untimed core Verbal Comprehension subtest.

Examples: How are whales and lions similar?

How are anger and delight similar?

Vocabulary measures the students' verbal fluency and concept formation, word knowledge, and word usage. Vocabulary is an untimed core Verbal subtest

Example: Children are shown pictures or a word is said aloud. They are asked to provide the name of the object or to define the word.

What is this?



What is a "bicycle"?

Comprehension measures common-sense social knowledge, practical judgment in social situations, and level of social maturation, along with the extent of development of their moral conscience. Children are asked to explain situations, actions, or activities that they'd be expected to be familiar with. Comprehension is a core Verbal Comprehension subtest.

Example: Why do we turn out lights when we leave a room?

English WISC IV Reliability & Validity

Original WISC IV is highly valid and reliable test. Different types of ways were followed to determine its validity and reliability.

Test-retest reliability was computed based on 60 children across the 11 age groups, tested twice in 32 days on average (13 to 63). Results were at minimum .76, but most were in the .80s.

Interscorer reliability by experts was generally .98, with Comprehension dipping to .95.

For Convergent Validity, correlations between the WISC IV and WISC III seem most appropriate and which has stronger correlations. Results of this are below:

Table 3: Correlations between the WISC IV and WISC III

WISC III	WISC IV	Correlation
VCI	VCI	.88
POI	PRI	.72
FDI	WMI	.72
PSI	PSI	.81
FSIQ	FSIQ	.89

Source: Wechsler Intelligence Scale for Children–Fourth Edition Manual

Bangla WISC IV Reliability & Validity

The internal consistency reliability of WISC-IV split-half method was used. The correlation coefficients for all 12 subtests were very high which indicates strong internal consistency among within the subtests. The correlation coefficient for 12 subtests (Block Design, Similarities, Digit Span, Picture Concept, Vocabulary, Letter-Number Sequencing, Matrix Reasoning, Comprehension, Picture Completion, Information, Arithmetic and Word Reasoning) were found to be .77, .92, .86, .83, .96, .93, .88, .90, .91, .93, .93, .80. The correlation coefficients were significant at .01 level. Split-half method cannot be used for three subtests (Coding, Symbol Search, and Cancellation) because those subtests are speed tests which have only one total score. In case of test-retest method, Pearson's Product Moment Correlation Technique was used. The reliability coefficient was found to be .97, .98, .98, .98, .98, .97, .98, .98, .84, .96, .98, .97, .98, .97 for 15 subtests respectively. The coefficient for full scale score was .99. and significant at .01 level.

In order to determine the validity of WISC-IV two methods were used.

For determine concurrent validity it was found that correlation coefficient between WISC-IV and WISC-R was .97 which was significant at .01 level.

The validity of the test was also measured by contrast group method. The two contrast groups were normal and mentally retarded children. It was found that there was statistically significant difference between the mean of normal (M= 96.16) and mentally retarded (M= 52.76) children in core subtest score and also between supplement subtest score mean of normal (M= 96.26) and mentally retarded (M= 53.13) children.

2.4.3. Parental Acceptance-Rejection Questionnaire (PARQ)

The original Parental Acceptance/ Rejection Questionnaire was developed by Ronald P. Rohner (2005) and it was translated into Bangla by Kanij Fatema (2008), a student of Psychology Department of University of Dhaka.

The parental Acceptance/ Rejection Questionnaire (PARQ) is a self-report instrument designed to measure individual's perception of parental acceptance-rejection. Parental acceptance-rejection is a bipolar dimension with acceptance defining one end of the continuum and parental rejection defining the other.

Three versions of the PARQ have been developed: The adult PARQ, assesses adults' perception of their mother's or father's treatment of them when they were seven through twelve years old; the parent PARQ asks parents to assess the way they now treat their children and the child PARQ asks youth to respond about the way they feel their parents treat them.

All versions of the PARQ consist of four scales: (1) warmth/affection, (2) hostility/ aggression, (3) indifferences/ neglect, (4) undifferentiated rejection. The PARQ is available in two forms.

The long form contains 60 items and the short form contains 24 items. In this study short form of child version PARQ was used to collect data.

The PARQ should be administered only when it seems likely that the respondent will be able to complete it in a single sitting, without distraction. The child version of the standard PARQ typically takes 15 to 20 minutes to complete. Occasionally, it can take longer. The short form of the PARQ takes about half-as much time i.e. 8 to 10 minutes.

Original PARQ Reliability

The PARQ reliability coefficients ranged, in the 1975 validation study from 0.86 to 0.95, with a medium reliability of 0.91. A second study in 1975 revealed a spread of alphas from 0.83 to 0.96,

with a median coefficient of 0.91. In a pilot study in 1976, the reliability if the scaled ranged from 0.71 to 0.96, with a median coefficient of 0.84. Finally, alphas on the Child PARQ in 1975 spread from 0.72 to 0.90, with a median of reliability of 0.82. The obtained results are presented in the following table (Table2.1)

Table 4: Internal Consistency-Reliability Coefficient (Alpha) for the PARQ Scales

Test & Scale	Adult	Child
PARQ		
Warmth/ Affection	0.95 *	0.90 *
Hostility/ Aggression	0.93 *	0.87 *
Indifference/ Neglect	0.88 *	0.77 *
Undifferentiated Rejection	0.86 *	0.72 *

Source: Handbook for the Study of Parental Acceptance and Rejection. Note. * $p < .001$

Original PARQ Validity

Two forms of evidence were used to assess the validity of the Child and Adult PARQ. These were measures of convergent validity and discriminate validity. A measure of the convergent validity of each PARQ scale is presented in the following table (Table 5)

Table 5: Convergent Validity Correlations for PARQ Scales

PARQ Scales	PARQ version	r
Warmth/ Affection	Adult	0.90 *
	Child	0.83 *
Hostility/ Aggression	Adult	0.43 *
	Child	0.55 *

Source: Handbook for the Study of Parental Acceptance and Rejection. Note. * $p < .001$

PARQ (short form) consists of two parts; one is child's perception about mother and another is about father.

Bangla version of the Child parental Acceptance-Rejection Questionnaire (Child PARQ):

Mother (Short form): The Bangla version (Fatema, 2008) of Rohner's (2005) Child PARQ:

Mother (Short Form) assessed children's current perception of how their mothers treated them. It is comprised of four subscales: (1) warmth/ affection, (2) hostility/ aggression, (3) indifference/ neglect and (4) undifferentiated rejection. The questionnaire consisted of 24 items with 4 possible answers ranging from almost always true (scored as 4) to almost never true (scored as 1). Total subscale score was obtained by summing the score on each individual item in that subscale. A considerable number of studies have demonstrated that English version of short form of Child PARQ: Mother had strong reliability and validity (Khaleque & Rohner, 2002). The test-retest reliability coefficient of each subscale in the Bangla version questionnaire with an interval of two weeks was significant ($\alpha < .01$) and ranged between .73 and .90 (Fatema, 2008).

Bangla version of the Child parental Acceptance-Rejection Questionnaire (Child PARQ):

Father (Short form): The Bangla version (Fatema, 2008) of Rohner's (2005) Child PARQ:

Father (Short form) is same as the Bangla version (Fatema, 2008) of Rohner's (2005) Child PARQ: Mother (Short Form) in terms of contented structure except that children were instructed to answer thinking how their fathers treated them. The English version short form of Child PARQ: father has been reported highly reliable and valid (Khjaleque & Rohner, 2002) and the test-retest reliability coefficients of Bangla version scale with an interval of two weeks was significant ($\alpha < .01$) and ranged between .75 and .91 for the subscales (Fatema, 2008)

Scoring: Item distribution of Child PARQ (Short form) into 4 subscales is; (1) warmth/ affection (item # 1,3,9,12,17,19,22,24), hostility/ aggression (item # 4, 6,10,14,18, 20), indifference/ neglect (item # 2,7,11, 13, 15, 23) and undifferentiated rejection (item # 5,8,16,21).

Step -1: Numerical Scoring: Recording the numerical for each response as

- Almost never true – 4
- Really true - 3
- Sometimes true – 2
- Almost always true – 1

Step -2: Reverse Scoring: Item number 13 was scored as reverse scoring

Step -3: Making a sum of each column and recording the number at the foot of each column.

Step - 4: Subtracting the sum of the Warmth/ Affection score from 40 (for short form).

Step - 5: Add all the four PARQ scale- scores. The total scores on the short form must fall between 24 and 96. If scores fall outside these ranges then a coding error was made. This gives a measure of coldness.

Table 6: Lowest and Highest Possible Scores on the PARQ and PARQ Midpoints

Scale/Total Test	Possible Scores		
	Lowest	Highest	Midpoint
Warmth/ Affection	8	32	20
Hostility/Aggression	6	24	15
Indifference/ Neglect	6	24	15
Undifferentiated rejection	4	16	10
Total PARQ score	24	96	60

Source: Handbook for the Study of Parental Acceptance and Rejection

All scales on the PARQ are keyed in the direction of perceived rejection. That is, the higher the score on any scale or on the total PARQ score, the greater the perceived parental coldness/lack of affection, hostility/aggression, indifference/ neglect, undifferentiated rejection, and overall perceived rejection. As shown in the table scores on the short form PARQ spread from a possible low of 24 (revealing maximum perceived acceptance) to high of 96 (revealing maximum perceived rejection).

2.4.4. Family Adaptability and Cohesion Evaluation Scale-II (FACES- II)

Family Adaptability and Cohesion was measured by a questionnaire developed by Olson, Porter, & Bell (1982). They recommend using this version of the FACES assessments for research purposes. It was translated and adapted by the author.

FACES-II consists of 30 items rated on a 5-point Likert-type scale, indicating how often a stated behavior was used. Response choices range from almost never to almost always. FACES-II has 14 items (item # 2, 4, 6, 10, 12, 13, 14, 16, 18, 20, 22, 24, 26 and 27) that assess the level of family adaptability and 16 items (item # 1, 3, 5, 7, 8, 9, 11, 15, 17, 19, 21, 23, 25, 28, 29 and 30) that assess the level of family cohesion. A few examples of these items are (a) "family members are supportive of each other during difficult times," (b) "our family does things together," (c) "it is difficult to get a rule changed in my family," and (d) "we shift household responsibilities from person to person."

Higher scores on the cohesion measure indicate a higher level of bonding or closeness among the family members. According to the nomenclature of Olson and McCubbin (1982) the categories of cohesion proceed from disengaged to separated to connected, to enmeshed. Higher scores on the adaptability measure indicate a higher level of flexibility in the family system. According to

Olson and McCubbin's (1982) nomenclature the categories of adaptability proceed from rigid to structured to flexible to chaotic. FACES-II has demonstrated good validity with a variety of populations (Olson, 1986). Cronbach's alpha for FACES-II typically ranges from .78 to .92 (Olson et al., 1982).

Translation and adaptation of FACES II

Translation and Back Translation: After consulting the relevant literature, journal and books the author translated the items of the scale into Bangla. Discriminating characteristics and clarity of the items were considered carefully. This Bangla scale was given to a person who didn't know anything about the scale but asked for translate that scale into English. The retranslated scale was compared with the original to see the discrepancy and deviation of major components of the scale. There were few discrepancies those were corrected by author.

Validity: After a thorough scrutiny of each item the content validity of the total 30 items were assessed by four expert teachers of the Department of Psychology, University of Dhaka. One written form of items was delivered to each judge individually along with two choices – appropriate, inappropriate. The judges were also requested to give their comments and recommendations. All of them give their valuable opinions about the overall layout of the scales. Then the final translated questionnaire was prepared for administer.

Reliability: The reliability of the questionnaire was studied on a group of 60 students of Dhaka University in the age range of 20 to 22 years. The test-retest reliabilities over a period of two weeks were .86.

2.5. Data collection procedure

Total data collection period: Twenty five weeks

Step 1 (week 1 & 2) - Communicating with the school authorities. Data collection phase was started by communicating with the selected school authority and taking permission for data collection. The whole process of data collection and confidentiality were explained to them.

Step 2 (week 3 & 4) - Distributing data collection materials: One section among three was selected randomly for data collection purpose. Parents of grade 4 and 5 students were sent an envelope containing a consent letter, demographic data sheet and FACES-II, facilitated by the school authority. Along with the Principal researcher went to the targeted classes. The Principal introduced her to the students so that she was able to explain about the envelope and hand it over to the students. Students were asked to take envelope to their parents and requested them to fill it out and bring it back next week. To ensure the instructions are conveyed efficiently, researcher put a request on the consent form to return the signed consent letter and filling out the questionnaires.

Step 3 (week 5, 6 & 7) - Collecting the materials: On a prescheduled day researcher went to the classes and collected envelopes. Students with completed forms were sorted out, listed down their class role numbers and entered data in SPSS.

Step 4 (week 8 to 11) - Data collection from children (first phase): According to the previous plan with the school authority researcher went to school on their game classes. Listed students were taken to another room assigned by school authority. All students were distributed the PARQ in groups. Proper written and oral instructions were given with further clarifications. Afterwards all filled up forms were collected. The whole process took about 15-20 minutes.

Step 5 (week 12 to 25) Data collection from children (second phase): Researcher went to school on prescheduled days with one of her peers to assist in data collection. She completed post graduation in educational psychology and is trained in WISC IV administration. During students' game class the enlisted students were called individually in a calm place selected by school authority. Three verbal ability subscales of WISC-IV were administered on them. The administration time varied from 15 to 25 min for each student.

2.6. Data analysis

Data were entered in SPSS statistics 17.0 for preliminary analysis (Field, 2009).

Data analysis included conventional procedure. Multiple responses were treated as individual binary variables. Descriptive statistics were generated for all the variables; proportion of all nominal variables and mean and standard deviation for the variables.

1. Considering that the dependent variable was continuous outcome multiple linear regression was done.
2. Factors that are significantly associated were entered in the multiple linear model to explore the different factors' individual contribution controlling for the effect of other factors (Menard, 2010).
3. The theoretical model that was used was as follows:

$$y_i = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \dots + \beta_p x_{ip} + \varepsilon_i \text{ for } i = 1, 2, \dots, n$$

y_i = mean verbal score

β_0 = constant

X_{li} = a predictor variable

$\beta_{1x_{i1}}$ = coefficient for the predictor variable X_{li}

2.7. Ethical consideration

The study was conducted with utmost ethical consideration particularly ensuring that no harm to the study participants is done.

The study used a consent form in which the study method, its objectives, purpose of the study was briefly described. Upon clear understanding the participants (on behalf of children their parents) signed the consent form. The consent form ensured that the results will not be shared by outside the research team and that no identification of the child, the school or the parents will be used.

2.8. Reliability and Validity

The quantitative questionnaire was piloted and ensured that similar reliable answers were obtained from participants on different items, therefore, ensuring inter item reliability (Furr & Bacharach, 2008). Since this was self administered questionnaire, inter rater reliability was not tested.

This explorative study lacks external validity since the sample size does not adequately represent the population of the study site.

2.9. Limitations and Assumptions of the Study

Limitations and Assumptions

The following are limitations relevant for interpretation of the findings from this study:

1. The data in this study are cross-sectional.
2. The data selection procedures did not use a true random selection procedure.

3. Data collected on family measures utilized in this study are based only on Parents' reports.

The following are assumptions relevant to this study:

1. It is assumed that all responses to all measures are valid and reliable.
2. It is assumed that participants completed the questionnaires and assessments for this study in a forthright and honest manner

Chapter 6: Result

All one hundred sixteen (N = 116) students were from one government and one non-government schools situated in Mohammadpur region of Dhaka.

6.1. Univariate Analysis

Grade: All participants were from grade 4 and 5, among them 55.2% from grade 4 and 44.8% from grade 5. Majority of participants were from grade 4.

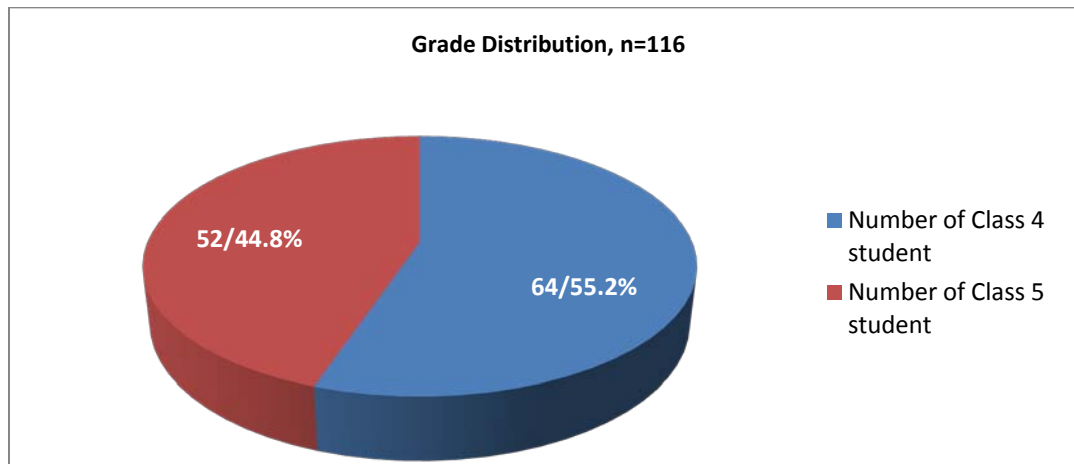


Figure 6: Proportion of children attending grade 4 and 5

Type of School: Participants were from government school 56.9% and from non-government school 43.1%. That is participants of grade 4 and government school were highest in number than participants of grade 5 and non-government school.

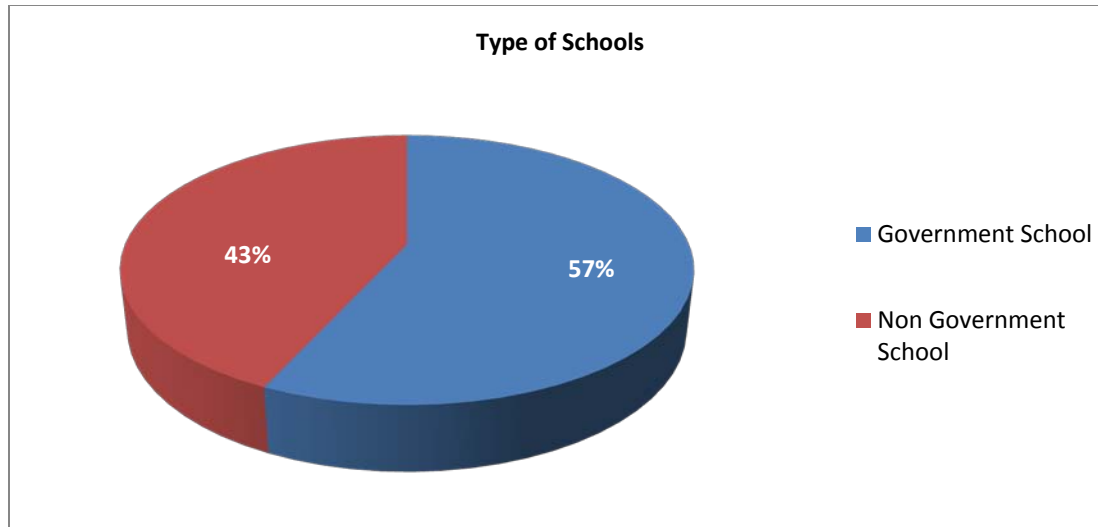


Figure 7: Proportion of children attending from government and Non-government School

Age: Age range of participants was 9Y 10M to 12Y 9M and average age was 11Y 3M (SD 0.8).

Female participants (51.7%) were more than male (48.3%) in number.

Table 7: Demographic and other characteristics of the children

<i>Age of Participants</i>					
	N	min	max	Mean	Std. deviation
Age	116	9.83 Yrs	12.75 Yrs	11.17 Yrs	0.78
<i>Verbal Ability</i>					
	N	min	max	Mean	Std. deviation
VCI	116	75	130	107.42	10.923
<i>Quality parenting</i>					
	N	min	max	Mean	Std. deviation
PARQ score	116	35	55	41.90	5.167

VCI: According to WISC-IV manual the VIC ranges from 45 to 155 and corresponding to percentile rank 0 to 100. The VCI range found in this research was 75 to 130 corresponding to range 5 to 98 percentile rank (WISC-IV: Administrative and Scoring Manual, p-237). The mean VCI was 107 (SD = 11) corresponding to the percentile rank 68. This implies that the verbal

ability of the children in this study on an average rank 68% above all kids. About 95% of the children in this study fall between the score 85 and 129 ($107 \pm 2SD$) corresponding percentile rank range was 5 to 98.

PARQ: The range of PARQ score was 35 to 55 and average was 41.9 (SD 5.2), indicating the experience of substantial loving acceptance. Respond at 60 (midpoint) or higher revealing the presence of very serious rejection. About 95% of the children in this study fall between the score 31.5 to 42.3 ($41.9 \pm 2SD$) which indicated significant parental acceptance.

Educational level of Parents: More than half of the participants' father (53.4%) and 37.1% mother completed higher education. These two percentages were the biggest among other attained educational levels of both father and mother.

Very few (7%) father had the lowest (below SSC to no education) academic qualification and 13.8% of mother confined in the group of lowest (below SSC to no education) educational level.

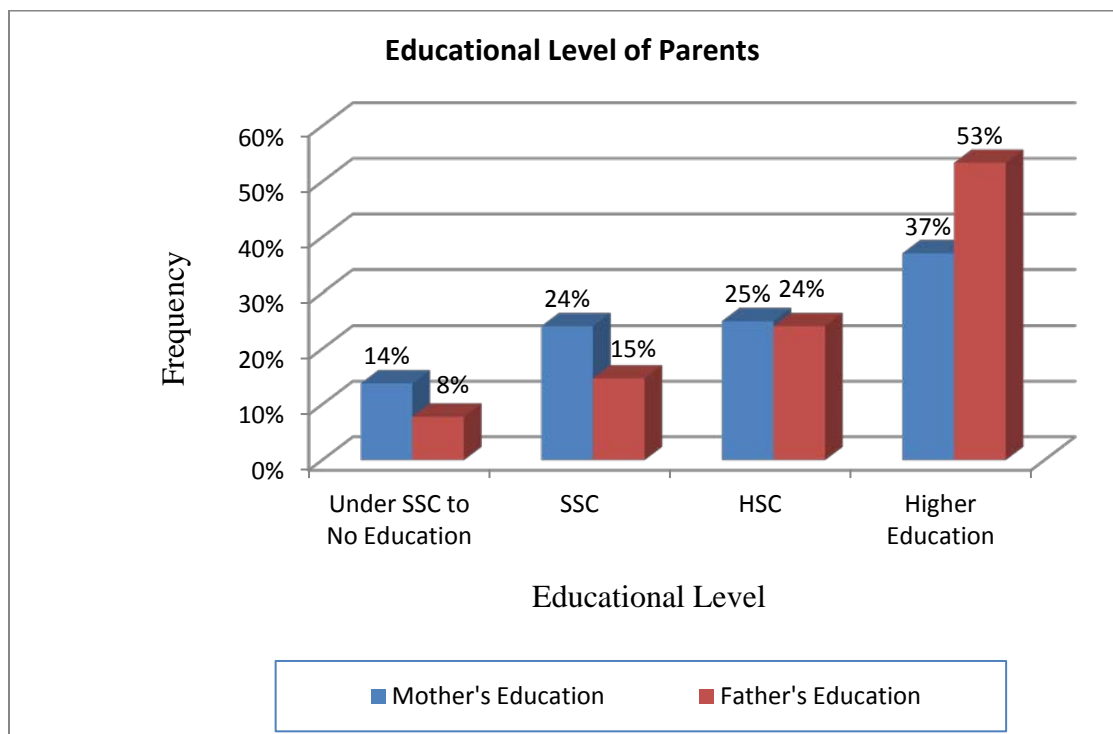


Figure 8: Frequency of parents' educational level

Occupation

More than half of the participants' father (50.9%) involved with business but they were less in number (19.8%) in private job sector. On the other hand majority of mother (33.6%) did private job than any other options of occupation like, government job, house wife and business. Few mother (12.9%, the lowest percentage among other occupations) involved in business.

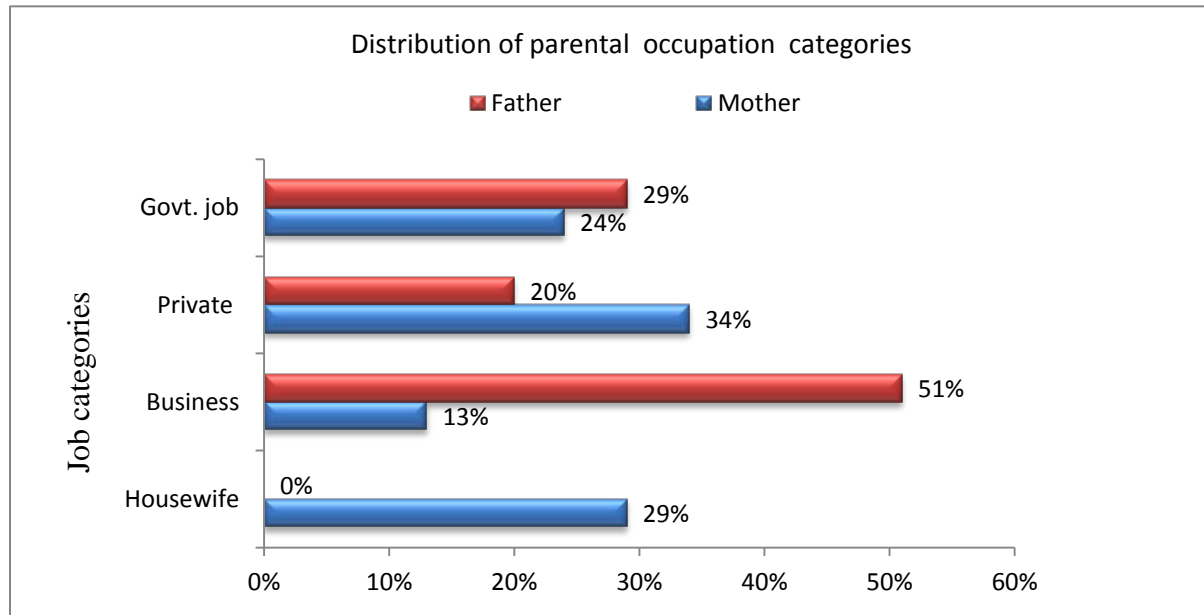


Figure 9: Frequency of parents' occupation

Family income: Very few family's' (6%) income were above 2 lac taka per month. Majority of the families' (40.5%) monthly income ranged from more than 30 thousand to 80 thousand followed by 22.4% who earn more than 80 thousand to 1lac 50 thousand taka.

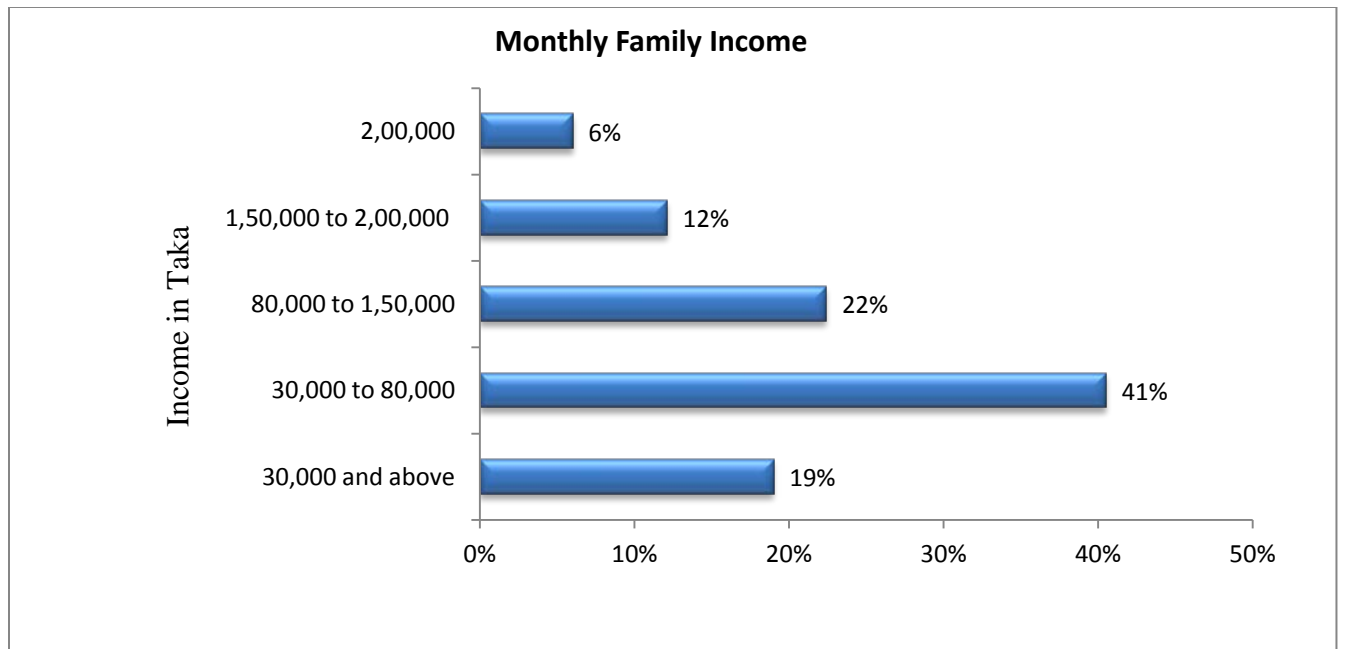


Figure 10: Frequency of monthly family income

Adult at home: Highest number of adults (age above 18 years) including parents at home were 5 and lowest was 2 and average 3.08 (SD 1.04).

Educational expense: Annual educational expense for a child ranges from 7 thousand to 23 thousand taka and average was 14,758.6 taka (SD 5,640,9).

Table 8: Family characteristics of the children

<i>Family characteristics</i>					
	N	min	max	Mean	Std. deviation
Number of adults at home	116	2	5	3.08	1.04
Educational expense	116	7,000 taka	23,000 taka	14,758.6207 taka	5640.87673 taka
Family Adaptability and Cohesion	116	50	140	100.07	22.06

FACES: Score range of FACES is 30 to 150 and mid point is 90. In the present research participants' score range was 50 to 140 and average was 100.1 (SD 22.1). The average score of

the participants in this study was above the midpoint that indicating participants' family adaptability and cohesion better than the standard average.

Media Exposure: children's media exposure or time spend with computer and TV ranges from half an hour to 4 hours and average exposure time was 2.4 hours (SD 1.2 hours).

Table 9: Media Exposure Interval of Children

<i>Media Exposure</i>					
	N	min	max	Mean	Std. deviation
Media Exposure	116	0.50 hr	4.0 hr	2.44 hr	1.18 hr

6.2. Bivariate Analysis

Bivariate association was done to identify unadjusted significant associated variables with verbal ability. Statistical analysis was done according to the nature of the variable.

Socio-demographic Characteristics

Age: Age was significantly and positively correlated with VCI. There was a moderate correlation between age and VCI ($r = 0.26$, $p = 0.005$).

Gender: Independent t test was done to see the association between gender and VCI. Verbal ability does not vary between males o females ($t = 0.09$, $p = 0.98$).

Class: Independent sample t test did not show any significant difference in variability in verbal ability between grade 2 and grade 3 students ($t = -1.51$, $p = 0.221$).

Table 10: Bivariate associations of independent variables with verbal ability index score (n = 116)

Variable	Test	Parameter estimate	Significance level
Age	Pearson's Product moment correlation	0.26	0.005*
Gender	Independent sample t test	0.09	0.98
Class	Independent sample t-test	-1.51	0.221
Father education	ANOVA	2.6	0.51
Mother education	ANOVA	3.5	0.018*
Father occupation	ANOVA	0.86	0.42
Mother occupation	ANOVA	1.027	0.384
Education expense	Pearson's Product moment correlation	0.122	0.193
Media exposure	Pearson's Product moment correlation	0.003	0.975
PARQ score	Pearson's Product moment correlation	-0.738	<0.0001*
Number of Adult at home	Pearson's Product moment correlation	0.044	0.639
Family Adaptability and Cohesion	Pearson's Product moment correlation	0.704	<0.0001*

Family Characteristics

Father's education: Analysis of variances was done to see if verbal ability score varied across fathers' education level. Verbal ability does not change across different level of father's education ($F = 2.6$, $p = 0.51$)

Mother's education: Analysis of variance reveals that children's verbal ability varied significantly across mother's education level ($F = 3.5$, $p = 0.018$).

Education expense: Amount of expenditure on children's education does not show any association with the verbal ability of a student as have been found from Pearson's correlation ($r = 0.12$, $p = 0.193$).

FACES: Family adaptability and cohesion has strong positive association with children's verbal ability. Pearson's correlation shows high correlation ($r = 0.7$, $p < 0.0001$) implying a proportional increase of verbal ability score with increase in FACES's score.

Mother's and father's occupation: Neither mother's nor father's occupation was found significantly associated with children's verbal ability score as estimated from ANOVA ($F = 1.07$, $p = 0.384$ and $F = 0.86$, $p = 0.42$ respectively).

Number of adults at home: Number of adults does not correlate with verbal ability of children (0.04 , $p = 0.64$)

Quality of Parenting

PARQ score: PARQ score shows a highly significant statistical correlation with verbal ability of children as estimated from Pearson's correlation. Correlation coefficient also depicts a high correction ($r = -0.78$, $r < 0.0001$). It is noteworthy that the correlation is negative indicating that increase in PARQ score decreases verbal ability score and vice versa.

Media exposure

TV & Computer exposure: Pearson's correlation does not show any statistically significant association with exposure duration in hours with verbal ability ($r = 0.003$, $p = 0.975$).

6.3. Multivariate Analysis

Multiple linear regression was done to find out the association between the independent variables that were statistically significantly associated with verbal ability index.

Mother's education was treated as categorical variables and entered accordingly. Beta coefficients and their standardized value were estimated with their significance level.

Table 11: Multiple regression showing association between predictor variables and verbal ability of children

Variables	Beta coefficient	Standardized beta coefficient	P> t
Age	2.05	1.47	0.015
PARQ score	-1.093323	-0.5226378	<0.0001
FACES	0.2375073	0.4847099	<0.0001
Mother education (Higher education compared to no education)	4.17	0.18	0.018

All the variables that were significantly associated with the verbal ability index in bivariate analysis were also significantly associated in multivariate analysis.

Age: Age was positively associated with verbal ability. Mathematically speaking for every year increase in child's age verbal ability score increases 2.05. It is notable that this predictor also had the highest impact on a child's verbal ability as depicted from the standardized beta coefficient.

PARQ score: PARQ score was found negatively associated with the verbal ability score of a child. For every unit increase in PARQ score verbal ability score decreases by 1 point.

FACES: This predictor was positively associated with child's verbal ability. Every unit change in FACES's score verbal ability changed by 0.23 points.

Mother's education: Mother's education was categorized into four different categories ranging from no education to higher education. However, mother's possessing higher education was the only significant predictor of verbal ability of a child. Compared to children of mothers who had no education children of mothers who had higher education had about 5 points more score in verbal ability score. Although the per unit change in verbal ability score was highest due to mother's higher education, the overall impact on verbal ability was least in the model (standardized beta coefficient 0.18).

Chapter 7: Discussion, Conclusion and Recommendation

This explorative study attempted to explore verbal ability of grade 4 and 5 school children of Dhaka city through analyzing the contextual factors of child development. In this part researcher is going to focus on answering and fulfilling the objectives of this research through describing the range of verbal ability and exploring the associations among verbal ability and family income, parent's education, family adaptability and cohesion, educational expense, perceived parental acceptance and rejection, number of adults at home. As a whole the present chapter presents the discussion of the findings and the conclusions arrived at based on the findings. It then formulates relevant and feasible recommends.

7.1. Discussion

In this section findings of the present study will be discussed under each specific objective of the study.

The range of verbal ability of grade 4 and 5 students

This component of the study obtained data from one hundred and sixteen students by administering verbal component of WISC-IV. The range of verbal composite index score was 75 to 130 and corresponding percentile rank ranged from 5 to 98. This finding indicates a wide diversity in verbal ability of children. According to the present research this diversity is because of four factors; age, family adaptability and cohesion, perceived parental acceptance-rejection and mother's educational level.

The association of Age with verbal ability

Adult cognitive development indicates that verbal ability increases with age. Present research had the similar finding. Among other socio-demographic characteristics only age was found as

important factor correlated with verbal ability. This finding also reminds the exigency of age appropriate curriculum for children.

The association of family income and educational expense with verbal ability

Present research suggests that the amount of family's educational investment is not associated with children's verbal ability. Education investment also fails to account for the observed significant association between income and children's verbal ability. These findings carry two implications: (1) family's income do affect children's verbal ability, though in Dhaka City the mechanisms of income's effects may be different from what previous theories have claimed; (2) the observed association between income and children's verbal ability is not causal, but rather an indication of other latent factors' causal effects on children. In either of the above cases, the importance of family's income needs to be qualified if the mechanisms and the latent factors are a function of other family resources. With more data available in future, it is expected that more nuanced studies will explore these questions further.

The association of parent's education with verbal ability

Mother's education is positively associated with verbal ability of children. This finding supports the previous research findings (Sarkar, R. K., 2010; McCulloch & Joshi, 2002). As mother's and fathers' educational level is highly correlated that's why only mother's education was considered for further analysis.

The association of family adaptability and cohesion with verbal ability

Family adaptability and cohesion was found to be a crucial determinant of verbal ability of children. Family's functioning style leads to children's development. It is obvious that which family's cohesiveness is high they are more involved with children and all aspects of their

development. Bivariate statistical analysis, however, had demonstrated significant association of family adaptability and cohesion with verbal ability of children.

The association of number of adults at home with verbal ability

The present finding on number of adults at home is similar to finding of McLanahan (1997) that shows that family structure does not have a strong, persistent effect on children's verbal ability scores. Number of adults in participants' family ranged from 2 to 5. This finding needs to explore further including family sociometry analysis to understand the impact of adults at home.

The association of perceived parental acceptance and rejection with verbal ability

Compared to family income, other family characteristics, particularly parenting practices is more consequential in the Dhaka City context. Present research analysis lends support to the importance of Parental Acceptance-Rejection (PAR) on children's verbal ability. According to previous research findings children's verbal ability is associated with parenting attitudes and practices (Gertler et al.2013). Consistent with previous studies, more dedicated, involved parenting and children perception to be accepted by parents relate positively to children's verbal ability. In addition, the greater responsiveness of children's verbal ability to quality of parenting than to income further suggests that good parenting is more important than economic affluence per se. Bivariate analysis had shown children's perceived parental acceptance and rejection was statistically associated with verbal ability.

The association of media exposure with verbal ability

Present analysis claims that media exposure and verbal ability is not significantly associated. This research only collected data on duration of media exposure but didn't know what type of programs they used to watch. Previous Research showed that educational TV programs (like Sesame Street) promote the cognitive development as well as verbal ability. This research

measure the Bangla verbal ability of children. In Bangladesh very few TV programs are telecasted for this age group. Most of the children of preadolescent age watch English cartoon or other adult entertainment programs may be in other languages. Possibly for these reasons present research could not find substantial association between media exposure and verbal ability.

7.2. Conclusion

The present study concludes that children in Mohammadpur region in urban Dhaka are showed diversity in verbal ability which covered a broad range. Mohammadpur is a well known place in Dhaka and represents different classes of the urban society. Therefore, the evidence from this study about diverse range in verbal ability of children should be as concerning factor by all level of professionals who work with children.

The study also found that age had the highest impact on a child's verbal ability among other factors which support the slogan of age appropriate curriculum for children. Age appropriate education can make rid of many children from marred, unnecessary struggle and failure.

Present findings refute the view emphasizing the importance of family's income and financial investment in children's education and, instead, lend support to the parenting quality and family's adaptability and cohesion level. These findings also yield the policy implication that improving a parenting quality and family functioning style will be beneficial to children's development. Good, dedicated parenting is pivotal to children's well-being, and this is not obtained merely by helping the family financially. More effective policy may need to focus on improving parenting quality and involvement.

From statistical point of view this study has confidently revealed that mother's educational level has strong impact on verbal ability of children though the overall impact was least among other three significant factors of the present research.

7.3. Recommendation

Some recommendations have come up from the study that need to address for facilitating children's verbal ability and as well as some for the further study. This is needed for preparing our next generation as the fittest citizen of the competitive world. Based on the findings and considering the reality of the context of Bangladesh following may be recommended to address the existing situation.

- It may be recommended that a large scale study is launched under the auspices of the Educational Ministry of the Government of Bangladesh to review the curriculum and assessment system to include verbal ability enhancement program and its evaluation process consequently parents and teachers will pay attention on it sincerely.
- For further study sample should be selected from a wider range of the population for covering more diversity which is needed to ensure representation of the population for generalization.
- A country wide sensitive campaign program may be recommended for all primary schools and communities showing the importance of fully flourished verbal ability for success of a child's life and the adverse effect of under developed verbal ability.
- Though the best stimulation is taken from family but also school can compensate the lacking of family stimulation and help to develop. A guideline needs to be prepared based on research evidence on how teachers and family members can stimulate the important aspects of children's life to develop verbal ability properly.
- Nationwide series of workshops to identify scopes of improving the situation followed by training programs for parents, teachers and school authorities may be recommended for developing strategies to develop verbal ability.

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Appendix

1. Consent Form for Parents
2. Demographic Questionnaire
3. Family Adaptability and Cohesion Evaluation Scale II (FACES II)
4. Parental Acceptance and Rejection Questionnaire PARQ Mother
5. Parental Acceptance and Rejection Questionnaire PARQ Father

Appendix I: Consent Form for Parents

অভিভাবকদের সম্মতিপত্র

মনোবিজ্ঞান বিভাগ, ঢাকা বিশ্ববিদ্যালয়

গবেষণার শিরোনামঃ বিদ্যালয়ের শিশুদের ভাষার দক্ষতাঃ একটি অনুসন্ধানমূলক গবেষণা

(Verbal Ability of School Children: An Exploratory study in Dhaka City)

প্রধান গবেষকঃ ফাতিমা খান বসু

গবেষণার উদ্দেশ্য

আসসালামুয়ালাইকুম/ আদাব, আমি আপনাকে জানাচ্ছি যে, আমি শিক্ষা মনোবিজ্ঞান বিভাগ, ঢাকা বিশ্ববিদ্যালয় থেকে শিক্ষা মনোবিজ্ঞান বিষয়ে এম.ফিল. ডিগ্রী সম্পন্ন করার জন্য একটি গবেষণা করছি। এই গবেষণায় ৪র্থ ও ৫ম শ্রেণির শিক্ষার্থীদের ভাষা দক্ষতার সাথে সম্পর্কযুক্ত বিভিন্ন কারনসমূহ অনুসন্ধান করা হবে।

নির্বাচিত হওয়ার কারণ

যেহেতু আপনার সন্তান ৪র্থ / ৫ম শ্রেণিতে পড়ে, তাই আপনাকে এবং আপনার সন্তানকে এই গবেষণার অংশগ্রহনকারি হিসেবে নির্বাচিত করা হয়েছে।

তথ্যপ্রদানকারির কাছ থেকে প্রত্যাশা

যদি আপনি অংশ নিতে সম্মত হন তাহলে খামের ভেতরের যে প্রশ্নপত্রটি আছে, তা পূরণ করুন এবং আপনার সন্তানকে এই গবেষণায় অংশগ্রহনের অনুমতি দিলে, আমি তার কাছ থেকে-ও কিছু তথ্য নেব এবং তার সাথে মনোবৈজ্ঞানিক পরীক্ষণ পরিচালনা করব।

এই কাজে আপনাকে সময় দিতে হবে ৫ মিনিট এবং আপনার সন্তানকে সময় দিতে হবে ২০ মিনিট।

ঝুঁকি ও সুবিধা

এই গবেষণায় অংশগ্রহণ প্রত্যক্ষ বা পরোক্ষ কোনভাবেই আপনার জন্য কোন ঝুঁকি তৈরি করবে না। কোনও অবস্থাতে-ই আপনার দেওয়া তথ্যের সাথে আপনার পরিচয়ের কোনও সম্পর্ক রাখা হবে না।

গোপনীয়তা

শুধুমাত্র গবেষণা দল (আমি এবং গবেষণা সহযোগী) ছাড়া আর কারো সাথে আপনার দেওয়া তথ্য প্রকাশ বা আলোচনা করা হবে না। এই গবেষণায় তথ্যকে এমনভাবে গোপনীয় রাখা হবে যেন কোনভাবে-ই আপনাকে সনাক্ত করা না যায়।

আপনার কাছ থেকে সংগৃহীত তথ্য অত্যন্ত গোপনীয়তার সাথে সংরক্ষণ করা হবে। গবেষণা সংক্রান্ত আপনার যে কোন প্রশ্নের উত্তরের জন্য আপনি আমার সাথে সরাসরি যোগাযোগ করতে পারেন।

ভবিষ্যতে তথ্যের ব্যবহার

এই গবেষণায় সংগৃহীত কিছু তথ্য ভবিষ্যতে ব্যবহারের জন্য সংগ্রহ করে রাখা হবে, কিছুক্ষেত্রে এই তথ্য অন্য গবেষককে দেওয়া হতে পারে, তবে এক্ষেত্রে অবশ্যই যেকোন উপায়ে তথ্যদানকারীর গোপনীয়তা রক্ষা করা হবে।

গবেষণায় অংশগ্রহণ না করার বা অংশগ্রহণে বিরত থাকার অধিকার

এই গবেষণায় আপনার অংশগ্রহণ স্বেচ্ছাসেবামূলক। এই গবেষণায় অংশগ্রহণ করা বা না করার সিদ্ধান্ত গ্রহণে আপনার পূর্ণ স্বাধীনতা আছে। যদি আপনি এই গবেষণায় অংশ নিতে চান এবং আপনার সন্তানকে অংশগ্রহণের অনুমতি দেন, তাহলে দয়া করে নিচের নির্ধারিত স্থানে আপনার স্বাক্ষর দিন।

আপনার সহযোগিতার জন্য আপনাকে অসংখ্য ধন্যবাদ।

গবেষকের স্বাক্ষর

তারিখঃ

অংশগ্রহকারীর স্বাক্ষর

তারিখঃ

Appendix II: Socio-demographic Information

জনমিতিক তথ্যপত্র

আপনার সন্তানের শ্রেণী ক্রমিক নম্বর:

বয়স:

লিঙ্গ: পুরুষ মহিলা

শ্রেণি:

পিতার শিক্ষাগত যোগ্যতা

নিরক্ষর এস এস সি এর কম এস এস সি

এইচ এস সি উচ্চতর শিক্ষা

পিতার পেশা: সরকারি চাকরি বেসরকারি চাকরি ব্যবসা

মায়ের শিক্ষাগত যোগ্যতা

নিরক্ষর এস এস সি এর কম এস এস সি

এইচ এস সি উচ্চতর শিক্ষা

মায়ের পেশা:

সরকারি চাকরি বেসরকারি চাকরি ব্যবসা গৃহিণী

পরিবারের আয় (মাসিক)টাকা

পরিবারের ধরন:

যৌথ পরিবার একক পরিবার বর্ধিত পরিবার

বাড়িতে প্রাপ্ত বয়স্ক (১৮ বছরের উপরে) মানুষের সংখ্যা:

গত বছর আপনার শিশুর শিক্ষার জন্য ব্যয়কৃত অর্থের

পরিমাণ:..... টাকা

Appendix III: Family Adaptability and Cohesion Evaluation Scale II (FACES II)

নিচের কাজগুলো আপনার পরিবারের ক্ষেত্রে কতটা সত্য তা বিবেচনা করে টিক
(✓) চিহ্ন দিন

উপাদান	প্রায় কখনও ঘটে না	খুব কম ঘটে	মাঝে মাঝে ঘটে	প্রায়শই ঘটে	প্রায় সবসময় ঘটে
১। দুঃসময়ে বা কোন সমস্যার সময়ে পরিবারের সদস্যরা একে অপরকে সহযোগিতা করে।					
২। আমার পরিবারের সদস্যরা সহজে-ই নিজেদের মতামত প্রকাশ করতে পারে।					
৩। পরিবারের ভেতরের লোকের চেয়ে বাইরের লোকের সাথে সমস্যার কথা আলোচনা করা সহজ।					
৪। পরিবারের গুরুত্বপূর্ণ সিদ্ধান্তে পরিবারের প্রত্যেকে মতামত দিতে পারে।					
৫। আমাদের পরিবারের সবাই এক-ই ঘরে একসাথে হয়।					
৬। শৃঙ্খলার বিষয়ে শিশুদের নিজেদের মতামত থাকে।					
৭। আমাদের পরিবার অনেক কিছু-ই একসাথে করে।					
৮। পরিবারের সদস্যরা সমস্যা নিয়ে আলোচনা করে এবং সমাধান নিয়ে সন্তুষ্ট থাকে।					
৯। আমাদের পরিবারে সবাই যার যার মত চলে।					
১০। বাড়ির দৈনন্দিন কাজকর্ম আমরা একে অপরের সাথে ভাগ করে নেই।					
১১। পরিবারের সদস্যরা একে অপরের ঘনিষ্ঠ বন্ধুদের চেনে।					
১২। আমাদের পরিবারে নিয়মিত যে সব নিয়মকানুন পালনীয়, তা জানা বেশ কঠিন।					
১৩। পরিবারের সদস্যরা নিজেদের সিদ্ধান্তের বিষয়ে					

উপাদান	প্রায় কখনও ঘটে না	খুব কম ঘটে	মাঝে মাঝে ঘটে	প্রায়শই ঘটে	প্রায় সবসময় ঘটে
অন্যান্য সদস্যদের সাথে আলোচনা করে।					
১৪। পরিবারের সদস্যরা যা বলতে চায় তা বলতে পারে।					
১৫। যা করতে হবে, সে বিষয়ে ভাবতে একই পরিবারের সদস্য হিসেবে আমরা সমস্যা বোধ করি।					
১৬। সমস্যা সমাধানে শিশুদের মতামত অনুসরণ করা হয়।					
১৭। পরিবারের সদস্যরা নিজেদের একে অপরের অনেক অনেক আপন মনে করে।					
১৮। আমাদের পরিবারের নিয়ম শৃঙ্খলা সবার জন্য নিরপেক্ষ।					
১৯। পরিবারের সদস্যরা নিজেদের পরিবারের সদস্যদের চেয়ে বাইরের মানুষদের বেশি আপন মনে করে।					
২০। আমাদের পরিবার বিভিন্ন সমস্যা সমাধানে নতুন নতুন উপায়ে চেষ্টা করে।					
২১। পরিবার যে সিদ্ধান্ত নেয়, পরিবারের সদস্যরা তা মেনে চলে।					
২২। আমাদের পরিবারে সবাই ভাগাভাগি করে দায়িত্ব পালন করে।					
২৩। পরিবারের সদস্যরা অবসর সময়ে নিজেদের সাথে সময় কাটাতে পছন্দ করে।					
২৪। আমাদের পরিবারে নিয়ম-কানুন পরিবর্তন করা খুব কঠিন।					
২৫। পরিবারের সদস্যরা একে অপরকে এড়িয়ে চলে।					
২৬। যখন সমস্যা তৈরি হয়, আমরা সমঝোতা করি।					
২৭। আমরা একে অপরের বন্ধুদের মেনে নিয়ে চলি।					
২৮। পরিবারের সদস্যরা তাদের মনের কথা বলতে ভয় পায়।					

উপাদান	প্রায় কখনও ঘটে না	খুব কম ঘটে	মাঝে মাঝে ঘটে	প্রায়শই ঘটে	প্রায় সবসময় ঘটে
২৯। পরিবারের সদস্যরা সবার সাথে একত্রিত হয়ে কাজ করার চেয়ে জোড়ায় জোড়ায় কাজ করে।					
৩০। পরিবারের সদস্যরা তাদের পছন্দ ও শখের বিষয় অন্যদের সাথে আলোচনা করে।					

Appendix IV: Parental Acceptance and Rejection Questionnaire

(PARQ) Mother

প্রশ্নমালা নং – ১

নির্দেশনা

এই বিবৃতিগুলো যারা মাঝে মধ্যে তাদের সন্তানদের সাথে কি ধরনের ব্যবহার করে তা ব্যাখ্যা করে। আমি চাই তোমার মা তোমার সাথে কি ধরনের ব্যবহার করে তা এই বিবৃতিগুলো হতে চিন্তা করে বল। প্রতিটি ব্যাকের পর চারটি ছক আঁকা আছে তোমার মা তোমার সাথে যেমন ব্যবহার করে সে প্রেক্ষিতে যদি উত্তরগুলো সত্য হয় তবে তুমি নিজেকে প্রশ্ন কর, “উক্তিটি কি সর্বদা পুরপুরি সত্য” অথবা “উক্তিটি কি শুধুমাত্র মাঝে মাঝে সত্য” যদি তুমি মনে করো তোমার মা প্রায় সব সময় তোমার সাথে ঐ ব্যবহার করে তবে “সর্বদা পুরপুরি সত্য” সম্বলিত ছকটিতে টিক (✓) চিহ্ন দাও। যদি উক্তিটি তোমার সাথে তোমার মায়ের ব্যবহার সম্পর্কে মাঝে মাঝে সত্য হয় তবে উক্তিটি “মাঝে মাঝে সত্য” সম্বলিত ছকটি চিহ্নিত কর। যদি তুমি মনে করো তোমার সাথে তোমার মায়ের ব্যবহার উক্তিটি মূলত অসত্য, তবে তোমার নিজেকে প্রশ্ন করো এটা কি খুব কম ক্ষেত্রে সত্য অথবা এটা কি কখন-ই পুরোপুরি সত্য নয়। যদি এটা তোমার সাথে তোমার মায়ের ব্যবহার সম্পর্কে শুধু কম ক্ষেত্রে সত্য হয়, তবে খুব কম ক্ষেত্রে সত্য সম্বলিত ছকে চিহ্ন দাও, যদি তুমি মনে করো উক্তিটি কখন-ই পুরোপুরি সত্য নয়, তবে কখন-ই পুরোপুরি সত্য নয় সম্বলিত ছকে চিহ্নিত কর। মনে রাখবে কোন উক্তির ক্ষেত্রে শুদ্ধ বা ভুল উত্তর বলে কিছু

নেই। সুতরাং যতটা পার সত্যবাদী হবে। উত্তরগুলো এমনভাবে দিবে যেন তোমার মা সম্পর্কে তোমার সত্যিকার অনুভূতির প্রতিফলন ঘটে। উদাহরণস্বরূপঃ

আমার মা	আমার মায়ের ক্ষেত্রে সত্য		আমার মায়ের ক্ষেত্রে সত্য নয়	
	প্রায় সব সময় সত্য	মাঝে মাঝে সত্য	খুব কম সত্য	একদম-ই সত্য নয়
আমি যখন ভাল তখন আমাকে আলিঙ্গন করেন এবং চুমো দেন				

	আমার মা	আমার মায়ের ক্ষেত্রে সত্য		আমার মায়ের ক্ষেত্রে সত্য নয়	
		প্রায় সব সময় সত্য	মাঝে মাঝে সত্য	খুব কম সত্য	একদম-ই সত্য নয়
১	আমার সম্পর্কে ভাল ভাল কথা বলেন				
২	আমার প্রতি কখনোই মনোযোগ দেন না				
৩	তার কাছে আমার গুরুত্বপূর্ণ বিষয়গুলো সহজে বলা যায়				
৪	আমার প্রাপ্য না হলে-ও আমাকে আঘাত করেন				
৫	আমাকে একটা বড় ঝামেলা হিসেবে দেখেন				
৬	রাগ হলে আমাকে কথর শাস্তি দেন				
৭	এত বেস্ত থাকেন যে আমার প্রশ্নের উত্তর দেন না				
৮	আমাকে অপছন্দ করেন বলে মনে হয়				
৯	আমি যা করি তাতে সত্যিকারভাবেই আগ্রহ বোধ করেন				
১০	আমাকে অনেক নরদয় কথা বলেন				
১১	আমি সাহায্য চাইলে সেদিকে খেয়াল করেন না				
১২	আমার নিজেকে কাঙ্ক্ষিত ও প্রয়োজনীয় ভাবে সাহায্য করেন				
১৩	আমার প্রতি অতন্ত মনোযোগী				
১৪	যে কোন উপায়ে আমার অনুভূতিকে আঘাত করতে চান				
১৫	যে সব গুরুত্বপূর্ণ বিষয় তার মনে রাখা উচিত বলে আমি মনে করি তা ভুলে যান				
১৬	আমি খারাপ ব্যবহার করলে আমাকে বুঝিয়ে দেন যে আমাকে ভালবাসেন না				
১৭	আমাকে উপলব্ধি করতে দেন যে আমি যা করি তা গুরুত্বপূর্ণ				
১৮	যখন আমি কোন ভুল করি				
১৯	আমি যা ভাবি তাতে আগ্রহ দেখান এবং চান যে				

	আমি তা নিয়ে কথা বলি				
২০	আমি যাই করি না কেন, অন্য শিশুদের আমার চাইতে ভাল মনে করেন				
২১	আমাকে বুঝতে দেন যে আমি কাঙ্ক্ষিত নই				
২২	আমাকে বুঝতে দেন যে তিনি আমাকে ভালবাসেন				
২৩	আমি যতক্ষণ না তাকে বিরক্ত করার মত কিছু করি ততক্ষণ পর্যন্ত আমার প্রতি মনোযোগ দেন না				
২৪	আমার সাথে নম্র ও দয়ালু ব্যবহার করেন				

Appendix V: Parental Acceptance and Rejection Questionnaire

(PARQ) Father

প্রশ্নমালা নং – ২

নির্দেশনা

এই বিবৃতিগুলো যারা মাঝে মাঝে তাদের সন্তানদের সাথে কি ধরনের ব্যবহার করে তা ব্যাখ্যা করে। আমি চাই তোমার বাবা তোমার সাথে কি ধরনের ব্যবহার করে তা এই বিবৃতিগুলো হতে চিন্তা করে বল। প্রতিটি ব্যাকের পর চারটি ছক আঁকা আছে তোমার বাবা তোমার সাথে যেমন ব্যবহার করে সে প্রেক্ষিতে যদি উত্তরগুলো সত্য হয় তবে তুমি নিজেকে প্রশ্ন কর, “উক্তিটি কি সর্বদা পুরপুরি সত্য” অথবা “উক্তিটি কি শুধুমাত্র মাঝে মাঝে সত্য” যদি তুমি মনে করো তোমার বাবা প্রায় সব সময় তোমার সাথে ঐ ব্যবহার করে তবে “সর্বদা পুরপুরি সত্য” সম্বলিত ছকটিতে টিক (✓) চিহ্ন দাও। যদি উক্তিটি তোমার সাথে তোমার বাবার ব্যবহার সম্পর্কে মাঝে মাঝে সত্য হয় তবে উক্তিটি “মাঝে মাঝে সত্য” সম্বলিত ছকটি চিহ্নিত কর। যদি তুমি মনে করো তোমার সাথে তোমার বাবার ব্যবহার উক্তিটি মূলত অসত্য, তবে তোমার নিজেকে প্রশ্ন করো এটা কি খুব কম ক্ষেত্রে সত্য অথবা এটা কি কখন-ই পুরোপুরি সত্য নয়। যদি এটা তোমার সাথে তোমার বাবার ব্যবহার সম্পর্কে শুধু কম ক্ষেত্রে সত্য হয়, তবে খুব কম ক্ষেত্রে সত্য সম্বলিত ছকে চিহ্ন দাও, যদি তুমি মনে করো উক্তিটি কখন-ই পুরোপুরি সত্য নয়, তবে কখন-ই পুরোপুরি সত্য নয় সম্বলিত ছকে চিহ্নিত কর। মনে রাখবে কোন উক্তির ক্ষেত্রে শুদ্ধ বা ভুল উত্তর

বলে কিছু নেই। সুতরাং যতটা পার সত্যবাদী হবে। উত্তরগুলো এমনভাবে দিবে যেন তোমার বাবা সম্পর্কে তোমার সত্যিকার অনুভূতির প্রতিফলন ঘটে। উদাহরণস্বরূপঃ

আমার বাবা	আমার বাবার ক্ষেত্রে সত্য		আমার বাবার ক্ষেত্রে সত্য নয়	
	প্রায় সব সময় সত্য	মাঝে মাঝে সত্য	খুব কম সত্য	একদম-ই সত্য নয়
আমি যখন ভাল তখন আমাকে আলিঙ্গন করেন এবং চুমো দেন				

	আমার বাবা	আমার বাবার ক্ষেত্রে সত্য		আমার বাবার ক্ষেত্রে সত্য নয়	
		প্রায় সব সময় সত্য	মাঝে মাঝে সত্য	খুব কম সত্য	একদম-ই সত্য নয়
১	আমার সম্পর্কে ভাল ভাল কথা বলেন				
২	আমার প্রতি কখনোই মনোযোগ দেন না				
৩	তার কাছে আমার গুরুত্বপূর্ণ বিষয়গুলো সহজে বলা যায়				
৪	আমার প্রাপ্য না হলে-ও আমাকে আঘাত করেন				
৫	আমাকে একটা বড় ঝামেলা হিসেবে দেখেন				
৬	রাগ হলে আমাকে কথর শাস্তি দেন				
৭	এত বেস্ত থাকেন যে আমার প্রশ্নের উত্তর দেন না				
৮	আমাকে অপছন্দ করেন বলে মনে হয়				
৯	আমি যা করি তাতে সত্যিকারভাবেই আগ্রহ বোধ করেন				
১০	আমাকে অনেক নরদয় কথা বলেন				
১১	আমি সাহায্য চাইলে সেদিকে খেয়াল করেন না				
১২	আমার নিজেকে কাঙ্ক্ষিত ও প্রয়োজনীয় ভাবে সাহায্য করেন				
১৩	আমার প্রতি অতন্ত মনোযোগী				
১৪	যে কোন উপায়ে আমার অনুভূতিকে আঘাত করতে চান				
১৫	যে সব গুরুত্বপূর্ণ বিষয় তার মনে রাখা উচিত বলে আমি মনে করি তা ভুলে যান				

১৬	আমি খারাপ ব্যবহার করলে আমাকে বুঝিয়ে দেন যে আমাকে ভালবাসেন না				
১৭	আমাকে উপলব্ধি করতে দেন যে আমি যা করি তা গুরুত্বপূর্ণ				
১৮	যখন আমি কোন ভুল করি				
১৯	আমি যা ভাবি তাতে আগ্রহ দেখান এবং চান যে আমি তা নিয়ে কথা বলি				
২০	আমি যাই করি না কেন, অন্য শিশুদের আমার চাইতে ভাল মনে করেন				
২১	আমাকে বুঝতে দেন যে আমি কাঙ্ক্ষিত নই				
২২	আমাকে বুঝতে দেন যে তিনি আমাকে ভালবাসেন				
২৩	আমি যতক্ষণ না তাকে বিরক্ত করার মত কিছু করি ততক্ষণ পর্যন্ত আমার প্রতি মনোযোগ দেন না				
২৪	আমার সাথে নম্র ও দয়ালু ব্যবহার করেন				