

**RURAL MOTHERS' PERCEPTIONS OF PLAY FOR
CHILDREN'S LEARNING AND DEVELOPMENT
IN BANGLADESH**



**A Thesis Presented to the
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Executive Summary

This research was conducted to explore Bangladeshi rural mothers' perception about the role of play in promoting children's (ages 3-5) learning and development. It also revealed whether mothers' perception varies with their (mothers') and fathers (husband's) education and family income.

The researcher was motivated by the lack or gap of data/research on this issue, related to early childhood development/education policy and the National Children's Policy of Bangladesh. A theoretical framework was obtained by doing a literature review on play and mothers' as well as parents' perception of play in children's (ages 3-5) development and learning.

An exploratory study was conducted among 60 rural mothers from two villages in the Gazipur District (near Dhaka). They were selected by means of purposive sampling. The sample was selected from a population of mothers who were to some extent, representative of rural mothers in Bangladesh.

Quantitative and qualitative methods were utilized. A structured checklist and focus group discussions (FGDs) were conducted respectively. It was intended that in mixed methods study, each methodology will complement the other and finally provide more comprehensive findings despite a limited sample. For that reason, standardized steps in both methodologies were used as much as possible. For the qualitative study, a five-point Likert scale was prepared using a recognized and standard process. From the initial 53 items, 18 items were determined and finalized by incorporating the opinions of experts and suggestions from reviewers in the academic committee. Using SPSS 11.5 software, quantitative data were analyzed.

For the qualitative study, two types of focus group discussions (FGD) were conducted. The first group comprised of eight mothers of less than primary education and the second group was comprised of eight mothers of above primary education. The FGDs were facilitated by an experienced FGD moderator (expert in qualitative study/ethnography) and notes were taken by the prime researcher. The FGDs were

recorded using voice recorders. Later the FGDs were transcribed for analyses and interpretation. Due to a small number of FGDs, data were coded and analyzed manually instead of using any computer-assisted qualitative data analysis software such as ATLAS.ti, CAQDAS, NUD*IST etc.

The findings of the study indicated that mothers' perception of play is positive. Their perception of play helps in children's development which includes physical development, cognitive development, language and communication development, social development, emotional development, creativity development etc. However, in qualitative study social development, emotional development, and creativity development etc. did not come into discussion despite repeated probe questions which indicates that the mothers have lack of knowledge in this regard. They prefer academic activities to play. Regarding gender issues with play, 58.3% mothers strongly disagreed with statement "for boys and girl play should be different", however, 26.7% mothers strongly agreed with that statement. For the statement "for boys and girls play-materials should be different" about 53% mothers strongly agreed with this statement and about 38% mothers strongly disagreed. The qualitative study findings showed that less educated (less than primary education group) mothers think that girls should play with girls and boys with boys and mother should dictate children for playing in gender identified group.

Similarly, regarding parents' role in children's play, quantitative and qualitative study shows that mothers have positive perception of their role in children's play. Findings of quantitative study shows that mothers have knowledge about some benefits of play in children's development; however qualitative study (FGDs) reveals lack of clear and specific knowledge about benefits of play for children, such as play support to brain's neuron-connections, motor development, psychological well being/development, foundation of life skills and so on. Although mothers have some knowledge about positive effect of play in children's development, in most cases the knowledge was not complete even in satisfactory level. Educational level of mothers was found as an influential factor in developing positive perception or knowledge.

Through this mixed methodological study, the researcher found some important findings which have been presented above. Never-the-less, there is a no way to generalize these study findings due to some limitations. For this reason, further study is

needed for generalization. In spite of these limitations, this study would be the basis or foundation of further study on this issue. That should have to be done on different stratified sample from whole Bangladeshi parents' perception of play in children's learning and development.

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GLOSSARY: Acronyms with Abbreviations

ANOVA	Analysis of Variance
ATLAS.ti	Archiv fuer Technik, Lebensweltund Alltagssprache (when translated from the German means an archive for “technology, the life world, and everyday language,”) and the extension “ti” stands for “text interpretation.”(Ref. http://www.nipissingu.ca/faculty/danj/DOCUMENTS/RESEARCH/ATLAS%20BASICS%20(JARVIS).pdf)
CAQDAS	Computer-assisted (or computer-aided) qualitative data analysis system
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CRC	Convention on the Rights of the Child
ECD	Early Childhood Development
FGD	Focus Group Discussion
FGD-A	Focus Group Discussion A: Mothers of less than primary education (Singardighi village, Maona union, Sripur Upazila, Gazipur District)
FGD-B	Focus Group Discussion B: Mothers of above primary education (Village: Kopatiyapara, Maona union, Sripur Upazila, Gazipur District)
IED, BRACU	Institute of Educational Development, BRAC UNIVERSITY
MICS	Multiple Indicator Cluster Survey
NUD*IST	Non-numerical unstructured data indexing searching and theorizing
PEDP-II	Second Primary Education Development Program
SD	Standard Deviation
SES	Socio-Economic Status
SPSS	Statistical Package for the Social Sciences
TOM	Tools of the Mind
UNCRC	United Nations Convention on the Rights of the Child
UNICEF	The United Nations Children's Fund (originally United Nation International Children's Emergency Fund)

CHAPTER I

GENERAL INTRODUCTION

1.1 Introduction

This study deals with the problem of lack in data and research evidences on parents' perceptions of play for child development and learning in Bangladesh. In early years (0-8 years), children generally grow according to the plan of their parents, the society and the nation. It depends on the initiative of primary caregivers' and associated care giving institutions how young children's would get the opportunity to grow and develop appropriately. It is very well known that play is very important element as well as an effective way of child development and learning. It depends on social and national attitude towards play which is reflected in parents' perception and their role. Never-the-less, there is a lack of data as there is no such study about parents' views on the role of play in their children's development.

Statistics shows that among about 130 million population of Bangladesh (Census 2001 by Bangladesh Statistical Bureau), there are about 1 6.08 million of under five years children. There is a lack such survey information or statistical data about those children's development and learning which is related to child-play. It is not even known whether their parents provide them the opportunity to play or not. There is also lack of data about parents from different location (i.e. Rural and urban) and from different background (i.e. no or low educated and enough or higher educated), others difference in parents whether they put impact on children's play opportunity or not. None of these studies were conducted directly on this issue; even though indirectly in any study, it was not focused. Socio-culturally how Bangladeshi people see this issue (play for 3-5 years' children) is necessary to know in terms of early childhood policy or children's national policy preparation. Though this study may demand big initiatives, it was not possible for address all, due to large number of population with much diversity. So, this research was conducted to investigate Bangladeshi rural mothers' perception about the role of play in promoting children's (ages 3-5) learning and development. It

also exposed whether their perception varies with their age, education, husband's education and family income.

Never-the-less, it was a limited sample for short time study as part of master thesis fulfillment. But as standardized steps of methodologies in every step have been adopted consciously, it could be taken as a basis or first step of national survey study in this issue. So, this study can produce important contribution in this regard. For example, in this research, sample population was selected from a rural area. At the same time, the area is near to Dhaka city where maximum population came from different regions of the country and in terms of methodology where mixed methodology study was adopted for getting a more complete picture of that population.

1.2 Background and Literature Review

"Play is fun and for most young children, something that occurs naturally" (Sluss, 2005, p. xi). Many researchers in different disciplines from different aspects investigated the play and found that it is almost identical with early childhood education (Ailwood, 2003) and the most essential as well as the main activity for children in all cultures (Bloch & Pelligrini, 1989; Eheart & Leavitt, 1985).

Play theorists and researchers defined play differently and there is no standard definition for play (Fleer, 2009). However, recognizing play's characteristics would be very useful that Sluss (2004) has defined by compilation researchers' remarks that include: play is voluntary; play requires active involvement; play is symbolic; play is free of external rules; play focuses on action rather than outcomes; and Play is pleasurable. As her recommendation if these characteristics are found in children's activities or behaviors, it would be defined as play.

There is a long history of play associated with child development theories. For instance, Plato viewed the play as practice in preparation for serious future activity. This was proposed by Christopher Friedrich von Schiller (1759–805) and modified by Herbert Spencer's (1873) as the surplus energy theory. Maurice Lazarus' (1883) Recreation theory holds that children restore their energy levels by playing. Hans Groos' (1898) instinct-practice theory of play suggested that through play, children practice the skills they needed in adult life. G. Stanley Hall's (1906) recapitulation theory of play suggests that children enact the stages of human evolution through play.

Psychoanalytical theories of play, based on the work of Sigmund Freud (1856–1939) and his colleagues, and advanced by Melanie Klein (1932), support the use of play for helping children deal with emotional problems (e.g. play therapy).

To Piaget play as part of the whole of “infantile dynamics” closely tied to the growth of intelligence, and as a pure condition of assimilation. In Piaget’s view, changes in cognitive development provide the basis for changes in play. According to Piaget, play does not lead to further cognitive development. Play simply reflects the level of cognitive development that has been attained. This view of the relationship between play and development differs significantly from the view of Vygotsky (Saracho, 1995).

To Vygotsky, play is one of the most important sources of learning for young children (Vygotsky 1967, 1978, 1990). To him, playing with a more advanced partner such as an adult, or an older child is very important in that it enhances the child's skills and gives confidence to take part in higher quality play (Howes & Unger, 1989). Research reveals that in the Tools of the Mind (TOM) program- a Vygotskian-inspired Early Childhood Curriculum- through play and play-planning children’s underlying cognitive skills (e.g. self-regulation, focused attention) - as well as overt skills such as language, literacy, and numeracy develop well (Saifer, 2007).

The play activity affects the size of the brain (Begley, 1997; Nash, 1997; Shonkoff & Phillips, 2000) and enables children to learn and gives higher score in literacy skills if teacher uses the Vygotskian strategies in play (Bodrova, & Leong, 2001).

Neuro-scientists and play scholars have given importance to the linkage between brain development and play during the early childhood years. They found that high quality play quickly increases neurons’ connections at a significant rate (Angier, 1992).

Through play, children especially preschoolers get holistic development affecting all domains of development: e.g. motor, social-emotional, autonomy/self-help, creativity, cognitive, mathematical, and language and literacy etc.

Ginsburg and the committee on Communications and the committee on Psychological Aspects of Child and Family Health (2007) found that through play children can recreate and explore their world. They argued that "Play helps children develop new competencies that lead to enhanced confidence and the resiliency they need to face future challenges" (p.183). They also added that through play, especially undirected play, children get opportunities to exercise socialization skills i.e. group work, sharing, negotiation, conflicts mitigation, and self-advocacy. He also stated that if play is child-driven, children's other life skills develop that are very essential for their future life to thrive (i.e., decision-making, to know one's own pace, to discover one's areas of interest).

Studies show that "the link between play and many foundational skills and complex cognitive activities (Bodrova & Leong, 2003, p. 3)" that are significant for early childhood development and learning. Bodrova & Leong (2003) analyzed different case and reviewed many literatures where found that play also helps to build the foundation that are essential for school success and beyond for children. So, play is necessary for child development as well as for academic success. Besides, It has already been recognized by scholars that such as Piaget, Vygotsky, Bruner, Sutton-Smith, Smilansky, Pelligrini, Reifle, and Smith play is a medium for and supportive to learning during early childhood development (Sluss, 2004).

There is an association between parents' play perception and children's competencies in different developmental domains (Parker, Boaik, Griffin, Ripple, & Peay, 1999). Studies show that parents who do not understand the importance of play, their role in play with their children is almost an interfering factor rather than an interactive one. (Levenstein & O'Hara, 1993; Oksal, 2005). In the context of play, children are receptive to parental suggestions, and they play in a more sophisticated manner when their caregivers join with them (O'Reilly & Bornstein, 1993). Research reviewed by Bornstein and Tamis-LeMonda (1989) suggests that when social and didactic modes can be successfully integrated in parent-child play, there can be long lasting social and cognitive benefits for the child (Vandermass-Peler, 2002).

Play for children's learning and development almost depends on mothers' perception which has been showed in Edwards (2000) cross cultural study of play. He added that, mothers' perceptions derive from and are determined by socio-cultural norm, for example, whether the play was stimulated or neglected, it may be actively

encouraged or discouraged or no allowed by them. Vandermass-Peler (2002) found that there are cultural variations in parents' perception of the importance of play for children's development and learning and the role of parents in supporting children's play in various cultures. The amount of attention and importance to play in a particular society depends on the cultural beliefs towards the nature of childhood. Literature also suggests that adult roles in children's play and type of interactions with the child differ in different society due to socialization values and goals (Haight, Wang, Fung, Williams, & Mintz, 1999). So, identifying the mothers' perception in cultural context is very significant.

Frost, Sue, and Reifel present some example of study findings in *Play and Child Development* (2005) Chinese parents perceive play as valuable for children, and that's why they engage in play as a partner (Haight, Wang, Fung, Williams, & Mintz, 1995). Like Chines, Taiwanese mothers engage highly in their preschoolers' play (Chang, & Reifel, 2003), which provide developmentally appropriate pretend play scope and support that increases as well as change as children grow older (Haight, & Miller, 1992, 1993, & Haight, 1998). On the other hand, parents with Korean backgrounds are less likely to play with their children as a result Korean children more likely engaged in academic play, solitary and parallel play and less involved in pretend play (Tudge, Lee, & Putnam, 1998; Farver, Kim, & Lee, 1995).

Gender differences in play an important issue which is associated with socio-cultural or biological condition or some things else. There may be a variety of reasons for this (Goldstein, 1994). In most societies there are plenty of presures for girls and boys to play differently. "Generally boys have a greater licence to play outdoors, this is not a uniform pattern, since other variables will come into play and children develop strategies for negotiating time and space for play. There may also be subtle differences in the way that space for play is valued" (Play Right Magazine's suppliment, March 2010, P-9). Scarlett, W.G. et al. (2005) suggest that "The play of both groups follows the same general lines of structural development and develops at the same rate, as descibed by Piaget, Vygotsky, Parten, and others (p-65)." Scarlet also adds that if boys and girls get equal opportunity in play and play materials as well other support they perform at the same level and in terms of ability and development there are no significant gender differences occur (2005).

Education as an influential factor relating to parents perception of play for children's development was studied in a Turkish study "PERCEPTION OF PLAY IN TURKISH CULTURE" conducted by Aynur Oksal in 2005. But, There was not significant correlation to education and parents' perception. It is noted in this regard that adult education rate in Bangladesh very poor. Different survey statistic on adult education and literacy rate collected by Bangladesh government institute and others are not same. As approximately literacy rate is literates and illiterates would be about 50:50%. This unbalanced rate could be influence mothers perception.

Literature suggests that income levels of parents family have an effect on children's play. Their low income may effect on children's play. Children of low income family may has been deprived from high quality play environment (Johnson, 1998). Over socioeconomic status (SES) and difference in young children's play Sara Smilansky (1968) conducted a study and concluded that "lower-SES children's play was less imaginative, more repetitive, more imitative, and, overall, less developed" (Scarlett, 2005, p-66). however as Scarlett found that more recently smilansky's study results have been question marked. Because, it is confounded with other variables such as culture and race. Some recent studies suggest that "children from middle-class communities generally, across the minority and majority worlds, participate in structured and pre-set activities, with few signs of spontaneous play in public space; those from lower SES groups have more freedom although the neighbourhoods may carry more risk"(Play right magazine's suppliment, March 2010, P-9). Other literature also revealed that parents perception can be linked to economic constraints and influences (Garcia Coll et al., 1996).

1.3 Rationale

Very limited study shows that even though Bangladeshi parents do play with their young children, they have little or no understanding of how play affects children's development and learning and how play helps prepare children for school (Haider et al., 2001). UNICEF Bangladesh's statistics also shows that, in Bangladesh parents create opportunity for sports/games (and encourage mixing with others) for their children age 0-2 years only 1% and 2-5 years 3% (Progatir pathey - MICS 2003, and PEDP-II Baseline survey, 2005). In urban areas of Bangladesh, children are very much deprived of play (Ahmed & Sohail, 2008).

Bangladesh is one of the first few countries to ratify the UN Convention on the Rights of the Child (CRC). Bangladesh, as a signatory to the Convention on the Rights of the Child (CRC) and the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), is fully committed to improve the status of children and gender discrimination of the country. In article number 31 of CRC, play has been mentioned as a child right, "That every child has the right to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts." Therefore, the opportunity to play is considered as children's rights. On the other hand, there was a lack of or very limited data on cultural trends as well as mothers'/parents' perception of play for child development and learning. Eventhough, so far we also do not have any data regarding the reason why Bangladeshi parents are culturally less or not involved in play with their children. Considering the UNCRC's obligation of child development and learning should be included in ECD policy or other related policies in Bangladesh. In particular, due to lack of data and evidence in play for child development issue this study was significant and conducted.

To bring a positive change in parents' role in play, we need to identify their perception of play for children on the basis of their relationship and their interaction level with their children in play. Their relations, interactions and role with their children are associated with their perception. Despite Oksal's (2005) study was not significant correlation to education levels of with parents' perception of play for children, but it was drawn attention. Along with researchers hypothesis was that mothers' educational levels could be correlated to their perception and educational level. In Bangladesh context, where adult education rate very poor; about 50% are illiterate. So, whether correlation between education level (literate and illiterate even low literates) of mothers and their perception have or not it was drawn attention by researcher. Another correlating factor was found in literature review parents' family income level. But, these factors were not found in any study in Bangladesh context. So, in order to conduct policy advocacy on this issue for Bangladesh and to prepare an awareness-raising and parenting program, at first, we need to conduct research in this regard. Therefore, to explore rural mothers' perception of play for children's learning and development and mothers' perception relating to parents' educational levels and their family income level can be very significant.

1.4 Operational Definition

Play is a voluntary, intrinsically motivated activity involving flexibility of choice in determining how the item is used (Landreth, 1991, p 13). The researcher has defined play for this study in terms of the following characteristics (Sluss, 2004): 1. **Play is voluntary:** fundamentally play should be motivated by children. Adults role should be only as assisting and supportive in and for play. 2. **Play requires active involvement:** play should be meaningful and have to have children's active engagement. 3. **Play is symbolic:** children use symbolism or pretending in play. 4. **Play is free of external rules:** children establish the rules of play for themselves. As mentioned in UNCRC's article 31 that "freely" and the UNCRC Handbook then (2007) describes play as possibly "the most interesting (of the group of concepts) in terms of childhood in that it includes activities of children which are not controlled by adults". 5. **Play focuses on action rather than outcomes:** In play, action and process are more important that make distinction between play and work. It comprises event that changes at a as children's choices and directions. 6. **Play is pleasurable:** Children get pleasure in play.

1.5 Objectives and Research Questions

1.5.1 Objectives

Objective 1: To identify rural mothers' perception of play for children's (ages 3-5) learning and development in Bangladesh.

Objective 2: To determine whether rural mothers' educational variation among the level of educational correlates to any variations in their perceptions.

Objective 3: To identify whether mothers' perception of play for children's (ages 3-5) learning and development in Bangladesh influenced by fathers (their husband's) level of education.

Objective 4: To identify whether mothers in rural Bangladesh view play differently based on their income or not?

1.5.2 Research Questions

Research Question 1: What are rural mothers' perceptions of play for children's (ages 3-5) learning and development in Bangladesh?

Research Question 2: Do mother's perceptions of play varies with their level of education?

Research Question 3: Do mother's perceptions of play differ based on fathers (their husband's) different level of education?

Research Question 4: Do mothers in rural Bangladesh view play differently based on their family income?

CHAPTER 2

METHODOLOGIES

2.1 Introduction

In order to identify mothers' perception of play for children's (ages 3-5) learning and development in Bangladesh mixed methods research: combining quantitative and qualitative research has been adopted in the study. The main rationale for the use of mixed methods research was to get more complete answer of a research question and to reduce biases associated with each method (Bryman, 2008). It is intended that the quantitative study by survey gave us the focus points of mothers'/parents' perceptions of play which provided the basis for exploring perceptions and beliefs of the parents regarding play in depth by qualitative method (FGD).

This quantitative study has complemented the qualitative study and through the mixed methods of research we have got a complete picture about mothers' perceptions of play for children's development and learning.

2.1.1 Place of study: It was conducted in two villages of Gazipur, near to Dhaka. 1st Village- Singardighi, Union- Maona, Upozila (Subdistrict): Sripur, District: Gazipur; 2nd Village- Kopatiyapara, Union- Maona, Upozila (Subdistrict): Sripur, District: Gazipur.

2.1.2 The reason why only rural area and two same type of villages: Only the rural areas and two same type of villages have been selected in the present study as the rural and urban situation of play is different. So, for population of different situation study conduction would be difficult in terms of time limitation. In this case more representational population should be selected. Rural people are major percentages in Bangladesh context. Considering the time limitation and that the majority of the population resides there, we decided to conduct study only in rural villages in Bangladesh. On the other hand, though the reason for selecting similar villages is merely to increase the number in the sample. Similarly, it also gives a bit of geographic diversity.

2.1.3 Study Sample: 60 Mothers of children ages 3-5 in a rural area was study population for the quantitative survey (Appendix 1 & 2). Among them eight from one village (Table 2) and another eight from another village (Table 3) in total 16 mothers have been selected for focus group discussion and they have also been participated for quantitative study.

2.1.4 The reason why mothers were selected: Only mothers were selected in the present study is that in Bangladesh as it is the mother who is responsible for the majority of the child's needs and activities. Though, the role of father and the importance of fathers' involvement in children's play have been recognized by development theorist, none the less, fathers were not covered due to some limitation. But, some indirect data about fathers' perception, role and engagement in children's play was obtained from the mothers.

2.1.5 The reason to select only mothers of children ages 3-5 years: In this study, the focus is on the mothers of children ages 3-5 years, because we found in literature review that in different cultures, children ages 3-5 years (preschoolers) are considered as learners and in this stage parents start to consider the importance of academic learning rather than play. So, considering our time constraint and the importance of this age group, in this study, this issue (play) includes only the mothers of preschoolers.

2.2 Quantitative Study Methodology

2.2.1 Study type: Cross sectional design.

2.2.2 Study Sample: 60 mothers who were selected purposively (Appendix 1 & 2).

- *Inclusion criteria:* Sample mothers with children ages 3-5 years were Included.
- *Exclusion criteria:* The mothers who refused to give informed consent, mentally retarded/disordered, were excluded.

2.2.3 Research instrument development and validation: A structured checklist was used as data collection instrument for the quantitative data. The checklist was made by

using likert rating scale. Five-point likert scale was used in this study. Options were as follows:

1. Strongly Disagree.
2. Disagree
3. Undecided/Neural
4. Agree
5. Strongly Agree (Appendix-3)

The rationale to select Likert scale is that it is the most widely used attitude, perception scaling/ rating technique in quantitative study method. Besides, specific reasons include: 1) yields reliable scores, 2) relatively easy to construct considering time limitation, and 3) flexibility in its ability to measure many types of effective characteristics.

2.2.3.1 Demographics

In questionnaire format, mothers reported their age, religion, occupation and husbands, education, family type, number of child, SES etc. Mothers were also asked to provide their children's age, gender...

2.2.3.2 The Process for Scale Development and Validation

The scale was created in collaboration with academic team of faculty of Masters of Science in ECD at IED, BRAC University along with Experienced ECD Programme specialists, and ECD experts same time hold research background in Bangladesh.

Experts were consulted to examine the multidimensional domains of play perception and to verify the comprehensiveness of the item pool in capturing mothers' perception of play for child development and learning. These experts also reviewed the measure to evaluate its ability to inform their work with understanding families and their play beliefs.

In selection process of items, proposed content based clustered had been considered and tried to cover all significant items of the cluster as far as possible. Eighteen items were selected considering research objectives and research questions most and more relevant and significant issues and areas by. These were from six developmental domains - 9 Items, from life skills- 2 items, from emphasis on either

learning/Academics or play- 2 items, from play opportunity indoor and outdoor- 2 items, from gender difference in children's play- 2 items, from parents involvement in children's play- 1 item (Table 1).

Table 1. Finalized items (18) in 11 issues/areas

Issues	No. of Items	Items
Physical dev.	1 item	Play does not help children's physical development.
Social dev.	1 item	Through play children learn to live with peoples as social being
Cognitive dev.	3 items	Play is detrimental in increasing children's knowledge.
		Play helps children in learning math skills.
		Through play children learn logical thinking.
Language and Communication dev.	1 item	Children's development of language skills is hampered when they play.
Emotional dev.	2 items	Through play children learn to express their emotional feelings appropriately.
		Children learn to accept a victory or defeat in play.
Creativity dev.	1 item	Play encourages children's creativity.
Life skills	2 items	Through play children encourage solving problems by own.
		Through play children learn to follow rules and instructions.
Emphasis on either Learning or play	2 items	Play is detrimental to children's learning.
		Play should have in regular class routine as a subject in preprimary education.
Play opportunity (indoor & outdoor)	2 items	Play opportunity should not need to have at home for children.
		There is no need to have outdoor open play field (playground) for children.
Gender difference in children's play	2 items	For boys and girl play should be different.
		For boys and girl play-materials should be different.
Parents involvement with children's play	1 items	Parents should play with their children.

It is noted that each and every items selected and finalized throughout the process e.g., for validity of items a validation panel consisting of five experts in the areas of education and was enlisted and asked to rate the relevance and clarity of each item. Proper revisions and modifications were made as deemed necessary from the panel's critique and evaluation. Pre-testing of the checklist was conducted for reliability, consistency, understandability of the items. Thesis proposal reviewer's suggestions, experts' opinion, pretest, piloting....etc. were incorporated appropriately.

Specially two (2) items of statements in gender issue have been taken to concern according to the suggestion of honorable reviewers.

Following the expert opinion, an 18 items of statements' pilot version of the measure was developed and tested with uncontaminated sample group of 10 mothers of 3-5 years children. These mothers were a convenient sample attending (SBK) parents meeting of Grameen Shikkha. The mothers' perception of play scale ratings were made on a 5 point scale ranging from "Strongly disagree" to "Strongly agree". In piloting the sample statements mothers group were given opportunity to provide rating to a wide range options of each statement. From that the best option of each statement was selected for pretest in practice.

Later the scale was piloted in 5 mothers. They were individually asked to response to each item and also were used to review item wording, which ensure reliability and clarity of all items and directions. Finally, 18 items of statements' language have been prepared and determined to apply.

After the selection of the 18 statements, as if the mothers were not influenced by one kind of statement, about half of the statements were accomplished negatively those are more suspected to be influenced by respondents as well as draw attention from respondents towards statements. At last, positively and negatively stated items were randomly mixed on the survey for getting their real and reducing biased or influential response as best as possible.

2.2.4 Procedure

2.2.4.1 Data Collection

Consent was taken from the respondents before collecting data from them (appendix-4). All of the ethical issues were considered during the data collection procedure. Principle investigator took part directly in data collection. As majority of the respondent were illiterate or low literate and literate, for that reason face to face interview method was adopted in data collection procedure. On the other hand, if any one, even literate respondent, faced problems to understand the questionnaire, she instantly got a solution. The survey was conducted by a research assistant and the researcher himself. For the research assistant, training was arranged including a small sample field practice before the final survey was conducted by her.

During the first phase of data collection, mothers were informed about the purpose and procedure and duration of the study. Shortly thereafter, a survey questionnaire containing instructions, a consent form was given to mothers. Every mother was given information as per demographics questionnaire. Mothers were asked on all items of the questionnaire face to face and following their answer-response to the item the researchers was completed the questionnaire.

2.2.4.2 Data preparation and Data Analyses

Afterward, data preparation, data entry, for computer analysis checking and verification were done respectively.

For the survey, data was entered and analyzed using statistical software SPSS. Data analysis included descriptive statistics of mothers' responses. For example, frequencies, percentages, and means score with range and standard deviation. Data analysis also included bivariate statistics to explore the variations between mothers' responses as per their SES, family income, educational background and comparing responses to the age of the respondents. Because, mothers may take play differently as their age difference.)

2.3 Qualitative Study Methodology

2.3.1 Study Type: Qualitative study design was adopted for this study.

2.3.2 Study Sites: Two villages in Gazipur were selected where quantitative study was conducted (1st Village- Singardighi, Union- Maona, Upozila (Subdistrict): Sripur, District: Gazipur; 2nd Village- Kopatiyapara, Union- Maona, Upozila (Subdistrict): Sripur, District: Gazipur.)

2.3.3 Research Method: Focus group discussion (FGD)

2.3.4 Study Sample: The focus groups' participants were selected from the quantitative study survey samples 60 mothers based on set criteria. Two types of groups of mothers were recruited purposively ($N=(8+8)16$). One FGD named as FGD-A comprised of mothers of less than primary level of education from Singardighi village (Appendix 5), and other as FGD-B comprised of mothers of primary and above level of education from Kopatiyapara village (Appendix 6).

2.3.5 The reason why these two type of groups: Despite the limitation of time, two types of FGD were recruited. Along with obtaining main objective, it was intended that to determine whether educational variation among the two types of FGD groups correlates to any variations in mothers' perceptions.

2.3.6 Sample Size: $N=(8+8)16$. The homogenous purposive sampling technique was used. Two groups of mothers in different level of education e.g. one group named FGD-A: Mothers of less than primary education from the Singardighi village (Appendix 5) other group named FGD-B: Mothers of above primary education from Kopatiyapara Village (Appendix 6).

2.3.7 Instrument: A guideline with prompts was used as instrument for qualitative data collection (Appendix-7).

2.3.8 FGD Team: Research assistant-1(for moderation and transcription etc.), Note-taker-1=2. Due to fund constraints, another note taker and organizer would not be deployed.

2.3.9 Procedure

Two focus group discussions were conducted accordingly. Each group was separated in discussion sessions. The FGD session was moderated by an experienced research assistant (ethnographer) while note taking and organizing tasks were done by the researcher himself. It has been tried to overcome moderation bias by maintaining stringency in training and selection of experienced moderator. Emphasizing on it, the training programme included for facilitation exercises and field practice, which was organized and conducted by principle researcher.

Group members were informed 2 weeks before the FGD, and reminded on the day before the meeting. They were informed about the purpose of the study. They filled-up the consent form after listening code of conduction. They were assured about the confidentiality of information that the information would only be used for research purpose without mentioning name of respondents in report.

The FGD with the mothers was held in a location of their choice.

At the beginning of each FGD, its goal was explained and participants were assured that the information would only be used for research purpose. They were asked to give informed verbal consent and were reassured that they could withdraw from the discussion at any time.

After welcoming everyone at the beginning of the session, the moderator started discussion with very general, open question such as, "What do your children do throughout the day? Among these activities which are plays or games for them, which are not and why? Do your children play? Talk about it, please. Who do they play with? How much and when do they play?" Moderator did not show any bias and was very careful not to disrespect respondent's (mothers) own beliefs about play.

After that, moderator described the operational definition of play which has been determined by prime researcher. And then moderator introduced the thematic questions with prompts (questions) to address the desired information.

Each session was recorded by voice recorder with the permission of the respondents. A hired research assistant moderated all the sessions and the investigator took notes as well as organized and monitored the all the FGD sessions. The duration of the discussion was 41 minutes.

2.3.10 Analyses of Transcription

Recorded discussion was transcribed very carefully by an ethnographer, the research assistant, and the researcher himself. The transcription was made in Bangla and subsequently translated in English. After transcription it has compared to measure accuracy. The focus group moderator resolved the discrepancies in content. The transcriptions were then coded independently by the one research assistant and principle researcher. Due to a small number of FGDs, data were coded and analyzed manually instead of using any computer-assisted qualitative data analysis soft ware such as ATLAS.ti, CAQDAS, NUD*IST etc. These computer-assisted qualitative data analysis soft wares consolidate large volumes of documents and keep track of all notes, annotations, codes and memos in all fields that require close study and analysis of primary material.

Over transcripts coding, categorization and then identified major themes were identified by the main researcher and the independent research assistant simultaneously. Validity was ensured by comparing with that. Finally findings prepared by the main researcher himself in guidance of supervisors.

2.3.11 Ethical Approval

Ethical clearance was obtained from the Ethical committee of BRAC University.

CHAPTER 3

FINDINGS

3.1 Introduction

The findings of the rural mothers' perception of play for children's learning and development in Bangladesh are based on sets of quantitative and qualitative data described below. The quantitative findings provide a succinct impression of the outcomes of the study. The qualitative findings provide a more in depth understanding regarding perception of mothers regarding play for children's learning and development. On the basis of study objectives and research questions in both studies collected all data were prepared, processed, analyzed and finally the findings have been explored. Subsequently, it has been discussed jointly and drawn conclusion sequentially. In this chapter both type of data has been presented bellow:

3.2 Quantitative study Findings

3.2.1 Mothers' agreement/responses with the statements

To know mothers' perception of play 18 items of statement have been used. Mother's perceptions were categorized into strongly disagree, disagree, undecided, agree and strongly agree and score allocated form them 1, 2, 3, 4 and 5 respectively. The highest score for each of the statement was 5 and the lowest was 1. One table was prepared for each of the statement. Each of the table presents the frequency of response by category.

Table 2. Response to the statement “through play children learn to live with peoples as social being”

Responses/agreements	Frequency	Percentage
Undecided/ Neutral	1	1.7
Agree	2	3.3
Strongly agree	57	95.0
Total	60	100.0

It was found that 95% of mothers strongly agreed with the statement “through play children learn to live with peoples as social being”. None of the respondents disagreed with statement. Only 1.7% of mothers was undecided.

Table 3. Response to the statement “Play is detrimental in increasing children's knowledge”

Responses/agreements	Frequency	Percentage
Strongly Disagree	43	71.7
Disagree	5	8.3
Neutral	6	10.0
Agree	2	3.3
Strongly Agree	4	6.7
Total	60	100.0

With statement “play is detrimental in increasing children's knowledge” more than 70% of the respondents strongly disagreed with this statement and about 8% was disagreed with that. About 10% of the respondents agreed with the statement and 10% was undecided.

Table 4. Response to the statement “Play encourages children's creativity”

Responses/agreements	Frequency	Percentage
Neutral	1	1.7
Agree	6	10.0
Strongly Agree	53	88.3
Total	60	100.0

It was found that 88.3% percentage of the mothers show that they strongly agreed with the statement “play encourages children's creativity”. There was not any disagreement and about (1.7) percentage mothers (N 1) was undecided to give response.

TABLE 5. Response to the statement “Play does not help children's physical development”

Responses/agreements	Frequency	Percentage
Strongly disagree	42	70.0
Disagree	6	10.0
Agree	2	3.3
Strongly Agree	10	16.7
Total	60	100.0

With the statement “play does not help children's physical development” 70% respondents strongly disagreed and 10% disagreed with that. About 20% of the respondents agreed (strongly agree 16.7+agree3.3) with the statement.

Table 6. Response to the statement “Through play children learn to express their emotional feelings appropriately”

Responses/agreements	Frequency	Percentage
Strongly Disagree	4	6.7
Neutral	2	3.3
Agree	3	5.0
Strongly Agree	51	85.0
Total	60	100.0

With the statement ‘through play children's learn to express their emotional feelings appropriately’ 85% (N 51) mothers strongly agreed and 6.7 % of mothers strongly disagreed and 3.3% mothers were undecided.

TABLE 7. Response to the statement “Children's development of language skills is hampered when they play”

Responses/agreements	Frequency	Percentage
Strongly Disagree	52	86.7
Disagree	3	5.0
Neutral	1	1.7
Strongly Agree	4	6.7
Total	60	100.0

With the statement “children's development of language skills is hampered when they play” more than 86% of the respondent strongly disagreed and 5% disagreed. More than 6% was agreed with this statement and only more than 1% was Undecided/neutral.

TABLE 8. Response to the statement “Play helps children in learning math skills”

Responses/agreements	Frequency	Percentage
Strongly Disagree	1	1.7
Agree	6	10.0
Strongly agree	53	88.3
Total	60	100.0

With the statement “Play helps children in learning math skills” 88.3% mothers strongly agreed. Only 1.7% mother showed strong disagreement to it.

TABLE 9. Response to the statement “Through play children learn logical thinking”

Responses/agreements	Frequency	Percentage
Neutral	3	5.0
Agree	4	6.7
Strongly Agree	53	88.3
Total	60	100.0

With the statement “Through play children learn logical thinking” 88.3% mothers responded with strong disagreement, and 5% was undecided. None of respondents disagreed with the statement.

TABLE 10. Response to the statement “Through play children have been encouraged solving problems by own”

Responses/agreements	Frequency	Percentage
Strongly Disagree	2	3.3
Agree	7	11.7
Strongly Agree	51	85.0
Total	60	100.0

With the statement “through play children have been encouraged solving problems by own” 85.0% mothers strongly agreed and only 3.3% mothers (N 2) strongly disagreed.

TABLE 11. Response to the statement “Through play children learn to follow rules and instructions”

Responses/agreements	Frequency	Percentage
Agree	4	6.7
Strongly Agree	56	93.3
Total	60	100.0

With the statement “Through play children learn to follow rules and instructions” 93.3 mothers strongly agreed. None of respondents disagreed with the statement.

TABLE 12. Response to the statement “Play is detrimental to children's learning”

Responses/agreements	Frequency	Percentage
Strongly Disagree	45	75.0
Disagree	4	6.7
Neutral	1	1.7
Agree	7	11.7
Strongly Agree	3	5.0
Total	60	100.0

With the statement “Play is detrimental to children's learning” 75% mothers strongly disagreed and about 6% disagreed with that. About 16% of the respondents agreed with statement (5.0+11.7) and about 1% was undecided.

TABLE 13. Response to the statement “Children learn to accept a victory or defeat in play”

Responses/agreements	Frequency	Percentage
Agree	1	1.7
Strongly Agree	59	98.3
Total	60	100.0

With the statement “children learn to accept a victory or defeat in play” 98% mothers expressed their strong agreement. None of the respondents disagreed with the statement.

TABLE 14. Response to the statement “For boys and girl play should be different”

Responses/agreements	Frequency	Percentage
Strongly Disagree	35	58.3
Disagree	4	6.7
Neutral	1	1.7
Agree	4	6.7
Strongly Agree	16	26.7
Total	60	100.0

With statement “for boys and girl play should be different.” 58.3% mothers strongly disagreed, 26.7% mothers expressed strong agreement. Only 1.7% mothers was undecided/neutral.

Table 15. Response to the statement “Play opportunity should not need to have at home for children”

Responses/agreements	Frequency	Percentage
Strongly Disagree	54	90.0
Disagree	2	3.3
Strongly Agree	4	6.7
Total	60	100.0

Regarding the statement “Play opportunity need not have at home for children” 90% of the respondents strongly disagreed, and about 3% mothers disagreed. About 6% of respondents agreed with statement.

TABLE 16. Response to the statement “There is no need to have outdoor play-field (playground) for children”

Responses/agreements	Frequency	Percentage
Strongly Disagree	50	83.3
Disagree	3	5.0
Agree	3	5.0
Strongly Agree	4	6.7
Total	60	100.0

With the statement “there is no need to have open play-field (playground for children” about 83% of the respondents strongly disagreed and 5% disagreed with that. About 11% mothers agreed.

TABLE 17. Response to the statement “Parents should play with their children”

Responses/agreements	Frequency	Percentage
Strongly Disagree	2	3.3
Agree	4	6.7
Strongly Agree	54	90.0
Total	60	100.0

With the statement “parents should play with their children” Mothers” 90.0% mothers was strongly agreed. Only about 3% (3.3) strongly disagreed.

TABLE 18. Response to the statement “Play should have in regular class routine as a subject in preprimary education”

Responses/agreements	Frequency	Percentage
Strongly Disagree	4	6.7
Agree	2	3.3
Strongly Agree	54	90.0
Total	60	100.0

With the statement “play should have in regular class routine as a subject in preprimary education” 90% mothers strongly agreed. Only about 7% (6.7) mothers made disagreement with the statement.

TABLE 19. Response to the statement “For boys and girl play-materials should be different”

Responses/agreements	Frequency	Percentage
Strongly Disagree	23	38.3
Disagree	1	1.7
Agree	4	6.7
Strongly Agree	32	53.3
Total	60	100.0

With the statement “for boys and girl play-materials should be different” only about 53% (53.3) mothers made strong agreement. On the other hand about 38% (38.3) mothers made strong disagreement.

3.2.2 Correlation between mothers' agreement and their level of education

Table 20. Distribution of mean score for different statement by level of education of mothers

	Mother Education	N	Mean	Std. Deviation
Through play children learn to live with peoples as social being	less than primary	14	5	0
	Primary and above	46	4.91	0.354
Play is detrimental in increasing children's knowledge.	less than primary	14	1.71	1.204
	Primary and above	46	1.63	1.218
Play encourages children's creativity.	less than primary	14	5	0
	Primary and above	46	4.91	0.626
Play does not help children's physical development	less than primary	14	1.64	1.447
	Primary and above	46	1.93	1.569
Through play children learn to express their emotional feelings appropriately.	less than primary	14	4.29	1.49
	Primary and above	46	4.72	0.886
Children's development of language skills is hampered when they play.	less than primary	14	1.29	1.069
	Primary and above	46	1.37	1.04
Play helps children in learning math skills.	less than primary	14	4.64	1.082
	Primary and above	46	4.89	0.315
Through play children learn logical thinking.	less than primary	14	4.86	0.535
	Primary and above	46	4.83	0.486
Through play children encourage solving problems by own.	less than primary	14	4.86	0.363
	Primary and above	46	4.72	0.861
Through play children learn to follow rules and instructions.	less than primary	14	5	0
	Primary and above	46	4.91	0.285
Play is detrimental to children's learning	less than primary	14	1.64	1.447
	Primary and above	46	1.65	1.215
Children learn to accept a victory or defeat in play.	less than primary	14	5	0
	Primary and above	46	4.98	0.147
For boys and girl play should be different (gender-oriented)	less than primary	14	3	1.961
	Primary and above	46	2.17	1.704
Play opportunity should not need to have at home for children.	less than primary	14	1	0
	Primary and above	46	1.39	1.145
There is no need to have outdoor play-field (playground) for children.	less than primary	14	1.29	1.069
	Primary and above	46	1.52	1.206
Parents should play with their children.	less than primary	14	4.29	1.437
	Primary and above	46	4.96	0.206
Play should have in regular class routine as a subject in preprimary education.	less than primary	14	4.36	1.447
	Primary and above	46	4.8	0.833
For boys and girl play-materials should be different (gender-oriented)	less than primary	14	3.57	1.989
	Primary and above	46	3.28	1.917

Table 21. Independent Samples T Test for comparing Level of education of mother and perception

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Through play children learn to live with peoples as social being	Equal variances assumed	3.709	0.059	0.913	58	0.365
	Equal variances not assumed			1.664	45	0.103
Play is detrimental in increasing Children's knowledge.	Equal variances assumed	0.003	0.954	0.226	58	0.822
	Equal variances not assumed			0.228	21.738	0.822
Play encourages children's creativity.	Equal variances assumed	3.527	0.065	0.516	58	0.608
	Equal variances not assumed			0.942	45	0.351
Play does not help children's physical development	Equal variances assumed	0.766	0.385	-0.62	58	0.538
	Equal variances not assumed			0.648	23.118	0.523
Through play children learn to express their emotional feelings appropriately.	Equal variances assumed	6.994	0.011	1.344	58	0.184
	Equal variances not assumed			-1.03	15.896	0.318
Children's development of language skills is hampered when they play.	Equal variances assumed	0.138	0.711	0.262	58	0.794
	Equal variances not assumed			0.259	21.07	0.798
Play helps children in learning math skills.	Equal variances assumed	8.587	0.005	1.398	58	0.168
	Equal variances not assumed			0.848	13.676	0.411
Through play children learn logical thinking.	Equal variances assumed	0.094	0.76	0.205	58	0.838
	Equal variances not assumed			0.194	19.985	0.848
Through play children encourage solving problems by own.	Equal variances assumed	1.446	0.234	0.589	58	0.558
	Equal variances not assumed			0.875	51.746	0.386
Through play children learn to follow rules and instructions.	Equal variances assumed	6.298	0.015	1.135	58	0.261
	Equal variances not assumed			2.07	45	0.044
Play is detrimental to children's learning	Equal variances assumed	0.036	0.85	0.024	58	0.981
	Equal variances not assumed			0.022	18.927	0.983
Children learn to accept a victory or defeat in play.	Equal variances assumed	1.258	0.267	0.548	58	0.586
	Equal variances not assumed			1	45	0.323
For boys and girl play should be different (gender-oriented)	Equal variances assumed	2.749	0.103	1.534	58	0.131
	Equal variances not assumed			1.421	19.362	0.171
Play opportunity should						
	Equal variances	7.657	0.008	-	58	0.209

not need to have at home for children.	assumed			1.272		
	Equal variances not assumed			- 2.319	45	0.025
There is no need to have outdoor play-field (playground) for children.	Equal variances assumed	1.349	0.25	0.657	58	0.514
	Equal variances not assumed			- 0.701	23.98 6	0.49
Parents should play with their children.	Equal variances assumed	39.41 2	0	-3.12	58	0.003
	Equal variances not assumed			- 1.741	13.16 3	0.105
Play should have in regular class routine as a subject in preprimary education.	Equal variances assumed	6.801	0.012	1.459	58	0.15
	Equal variances not assumed			- 1.102	15.71	0.287
For boys and girl play-materials should be different (gender-oriented)	Equal variances assumed	0.001	0.971	0.489	58	0.626
	Equal variances not assumed			0.48	20.90 5	0.636

The mean score was compared among mothers groups of different educational level. Analysis shows that there was no significant difference found except the following statements: 1) The statement “through play children learn to follow rules and instructions” suggests that better perception was found among the mothers of low educational level; on the other hand for the statements. 2) “Play opportunity should not need to have at home for children” and 3) “Parents should play with their children” better perception was found among higher education group mothers. (Table 20)

3.2.3 Correlation between mothers’ agreement and the level of fathers’ education

Table 22. Father’s Education t test for determining the Correlation between mothers’ agreement and the level of fathers’ education

Dependent Variable	(I) Fathere Education	(J) Fathere Education	Mean Difference (I-J)	Std. Error	Sig.
Through play children learn to live with peoples as social being	less than primary	Secondary and above	.17	.118	.257
	Primary to secondary	Secondary and above	.10	.106	.504
Play is detrimental in increasing children's knowledge.	less than primary	Secondary and above	.31	.448	.691
	Primary to secondary	Secondary and above	-.36	.404	.548
Play encourages children's creativity.	less than primary	Secondary and above	.17	.209	.616
	Primary to secondary	Secondary and above	.10	.189	.791
Play does not help children's physical development	less than primary	Secondary and above	.17	.588	.936

Through play children learn to express their emotional feelings appropriately.	Primary to secondary	Secondary and above	-.03	.530	.998
	less than primary	Secondary and above	-.57	.392	.238
Children's development of language skills is hampered when they play.	Primary to secondary	Secondary and above	.06	.353	.979
	less than primary	Secondary and above	-.04	.398	.992
Play helps children in learning math skills.	Primary to secondary	Secondary and above	.05	.359	.981
	less than primary	Secondary and above	-.27	.221	.351
Through play children learn logical thinking.	Primary to secondary	Secondary and above	-.01	.199	.996
	less than primary	Secondary and above	-.07	.188	.897
Through play children encourage solving problems by own.	Primary to secondary	Secondary and above	.04	.170	.960
	less than primary	Secondary and above	.44	.291	.217
Through play children learn to follow rules and instructions.	Primary to secondary	Secondary and above	.24	.262	.531
	less than primary	Secondary and above	.17	.094	.135
Play is detrimental to children's learning	Primary to secondary	Secondary and above	.10	.085	.360
	less than primary	Secondary and above	.36	.470	.634
Children learn to accept a victory or defeat in play.	Primary to secondary	Secondary and above	.74	.424	.145
	less than primary	Secondary and above	.00	.049	1.000
For boys and girl play should be different (gender-oriented)	Primary to secondary	Secondary and above	-.03	.044	.664
	less than primary	Secondary and above	1.23	.659	.113
Play opportunity should not need to have at home for children.	Primary to secondary	Secondary and above	1.16	.595	.094
	less than primary	Secondary and above	-.33	.381	.564
Play opportunity should have at home for children.	Primary to secondary	Secondary and above	.12	.344	.907
	less than primary	Secondary and above	-.18	.445	.873
Parents should play with their children.	Primary to secondary	Secondary and above	.20	.401	.825
	less than primary	Secondary and above	-.59	.273	.062
Play should have in regular class routine as a subject in preprimary education.	Primary to secondary	Secondary and above	-.06	.247	.945
	less than primary	Secondary and above	-.47	.384	.349
For boys and girl play-materials should be different (gender-oriented)	Primary to secondary	Secondary and above	-.32	.346	.525
	less than primary	Secondary and above	-.55	.733	.650
	Primary to secondary	Secondary and above	-.31	.661	.836

a Dunnett t-tests treat one group as a control, and compare all other groups against it.

Comparison was made to explore the relationship between the level of fathers' education and the agreement with the statement of the respondents (Table 22). There was no significant difference found among the groups.

3.2.4 Correlation between mothers' agreements and the level of their family income

Table 23. Multiple Comparisons for identifying relationships between mothers' agreement and the level of their family income (Dunnett t (2-sided))

Dependent Variable	(I) Income group	(J) Income group	Mean Difference (I-J)	Std. Error	Sig.
Through play children learn to live with peoples as social being	<3500	>10000	.00	.139	1.000
	3500-10000	>10000	-.11	.122	.552
Play is detrimental in increasing children's knowledge.	<3500	>10000	.07	.542	.984
	3500-10000	>10000	.21	.476	.842
Play encourages children's creativity.	<3500	>10000	.13	.247	.800
	3500-10000	>10000	.05	.216	.959
Play does not help children's physical development	<3500	>10000	.02	.686	.999
	3500-10000	>10000	-.41	.602	.674
Through play children learn to express their emotional feelings appropriately.	<3500	>10000	-.88	.452	.094
	3500-10000	>10000	-.09	.396	.958
Children's development of language skills is hampered when they play.	<3500	>10000	-.59	.459	.307
	3500-10000	>10000	-.61	.403	.208
Play helps children in learning math skills.	<3500	>10000	.05	.263	.963
	3500-10000	>10000	-.09	.231	.885
Through play children learn logical thinking.	<3500	>10000	.11	.222	.815
	3500-10000	>10000	.09	.195	.822
Through play children encourage solving problems by own.	<3500	>10000	.55	.341	.172
	3500-10000	>10000	.39	.299	.300
Through play children learn to follow rules and instructions.	<3500	>10000	.00	.111	1.000
	3500-10000	>10000	-.11	.097	.416
Play is detrimental to children's learning	<3500	>10000	.13	.564	.956
	3500-10000	>10000	.39	.495	.607
Children learn to accept a victory or defeat in play.	<3500	>10000	.00	.058	1.000
	3500-10000	>10000	-.03	.051	.793
For boys and girl play should be different (gender-oriented)	<3500	>10000	.68	.797	.561
	3500-10000	>10000	.72	.700	.443
Play opportunity should not need to have at home for children.	<3500	>10000	-.50	.450	.399
	3500-10000	>10000	-.13	.395	.905
Play opportunity should have at home for children.	<3500	>10000	-.09	.525	.974
	3500-10000	>10000	.18	.461	.876
Parents should play with their children.	<3500	>10000	-.59	.315	.107

	3500-10000	>10000	.10	.276	.892
Play should have in regular class routine as a subject in preprimary education.	<3500	>10000	-.36	.454	.605
	3500-10000	>10000	-.34	.398	.556
For boys and girl play-materials should be different (gender-oriented)	<3500	>10000	-.66	.851	.612
	3500-10000	>10000	.20	.747	.935

a Dunnett t-tests treat one group as a control, and compare all other groups against it.

ANOVA test was carried out to explore the relationship among the statements given by the mothers in different family income groups (Table 25). No significant difference was found among different income group mothers.

3.3 Qualitative Study Findings

For obtaining the objective 1, 2 and 3 of the study, in qualitative study, two types of groups of mothers were recruited purposively ($N = (8+8)16$). One FGD called FGD-A comprised mothers of less than primary level of education (Appendix 5), and other was called FGD-B comprised mothers of primary and above level of education (Appendix 6). Mothers of two groups' given opinions were presented under some themes where FGD-A and FGD-B used without repeated use of their group characteristics.

3.3.1 Defining play for 3-5 years children

In response to the question, 'What do your children do throughout the day? Among those activities which are plays or games which are not and why?

Group A and B responded in the same way that throughout the day this age group child play all the time with joy; only apart from specific works such as eating, drinking, bathing etc. During play, they remain very active, involved, and free from any other things.

In answer to the question "which activities do you define as play for children (3-5 yrs age) and why?" FGD A and B replied that generally their children play following plays or games: Playing with doll/toys, football, cricket, cooking, running competitively, rough and tumble play, collecting leafs from tree, making different things/ toys by mad, throwing water, dance, wearing sari (a traditional women's dress), cutting leafs of banana tree, driving car or bicycle, shop keeping with playing role of a

seller and buyer, sometime as like a farmer dig the soil/ mud by digging tool or like as instrument.

They (FGD-A&B) defined play in which children get fun, do pleasurable activities (early years') throughout the day. Children voluntarily stay busy and involved, and joyful in their play. Even the risky activities the children like to play without any control of adults, with fun, pleasure, from mothers' perspectives, all are play. They differentiate and do not recognize play as only to some hazardous activities such as swimming, climbing up the trees etc. In terms of young children's age and risk concern mothers mentioned those works as 'harmful play', 'Unhealthy play' and "naughty works" etc.

All mothers said, "Unless mothers call their child for eating, drinking, bathing etc., they are there play continuously, without any break. How much fun and pleasure much in play we do not know, we do not even understand. Only our children know well how fun and pleasure are there in play."

Table 24. List of play or games got in FGD-A & -B

-
- Playing with Toys,
 - Ball,
 - Cricket,
 - Cooking,
 - Running,
 - Collecting leafs from tree,
 - Making different things/ toys by mud,
 - Throwing pieces to pond or some thing like that,
 - Riding up to (on) the tree,
 - Dance,
 - Wearing sari (a traditional women's dress),
 - Cutting leafs of banana tree,
 - Driving car or bicycle,
 - Shop keeping with pretending/playing role as a seller and buyer,
 - As like a farmer digging the soil.

3.3.2 Benefits of play and detrimental side of the play for children age 3-5

Participants of FGD A & B were asked, 'What are benefits of play and detrimental side of the play for children age 3-5?' Both groups affirmed that play supports to develop language skills through opening up young children's speaking and exercising conversation. During play, their math skills are developed and increased. For instance, there are some plays e.g. shopping and buying, and cricket, where children count marbles, leafs and runs. They perceived physical play as physical exercise for the

children. Play and game make and keep their body healthy. Specially, FGD-B mentioned that through play like running, rough and tumble play increases children's weight, physical strength. As a result of physical activity or movement based play or game, their body remains slim, increase speed in movement, can walk fast, and gain strong body. Even, as some mother mentioned that the children who do the physical activity based play become faster in all other side such as academic side. FGD-B mothers also added that during play children hold sound mind, remain happy and do not show any challenging behavior, and do not behave naughty.

They perceived that knowledge is increased by play. For example, children apply and exercise their knowledge when they make toys/dolls, mobile phone, fruits using clay. By this way, children gather knowledge on these real things.

Regarding "detrimental side of the play for children age 3-5" Mothers' opinion was straight foreword that there is no detrimental or disadvantage things in play; unless and until children participate in hazardous, harmful and risky play or games.

In brief, mothers of both group mentioned the benefit of play in developing language skills, physical growth, cognition, and psychological well being/states (shaping mental health). They seem that there are no detrimentals or disadvantages in play.

3.3.3 Emphasis to either play or leaning and academic activities

In response to questions, 'What is the relationship with play and learning or academic activities?' The respondents of FGD A and B mentioned that there is a relationship between play and learning. For instance, through play children's knowledge is increased, they learn counting.

Regarding emphasis when mothers were asked by question and further probe question they stated that play and academic activities, both are important for 3-5 year children. However, comparatively at this age play is more important than academic activities. But, to children, play is more important than other activities. So, their academic and learning works should be done through play. But, mothers said that at preschool play should have made, as an outdoor activity rather than classroom academics. As for break in between study/academic activities children can go to play-field to change the mind by playing for some time. Particularly mothers' perception is

negative regarding keeping play in classroom as per routine work. They think that there is no need to inclusion of as like as other academics or leaning activities; no need to have play with doll, ball, toys, and other play-materials in classroom. Rather, children can go to playground for a while for running and for changing the mind.

Only one respondent was some thing special, who said that there is a need to have the opportunity to play as routine activities for 3 to 5 years children in their school regular activities (as curriculum content). Her rationale was that academic learning could be achieved through play.

In response to another sub-point of this theme they responded that play or game is not a detrimental to the learning/academics. Mothers' opinion is that children have the right to have 'play' as like as academic activities. So, they need to get time for play, same way they get time for academic activities. For this reason, there is a need to determine the specific time for play, like they get time for eating and academic learning. But they were asked to emphasis, mothers preferred academic activities rather than play. However, they perceived that 3-5 years children are not fully ready for academic activities. There fore, at this age, academic activities and play both are needed. They agreed that play may be going on simultaneously with academic activities. Their tendency and views had been reflected in a remark as they said: "If our children engage in academic activities that make us happy. Engaging in play make less happy. Academic activities for children are very good. If they are less engaged in play and much in academic activities, that would be the best for children."

3.3.4 Play opportunities for children at home

When mothers were asked 'What is the opinion about having play opportunities at home?' FGD-A and B mothers responded similarly that for this age group child should have opportunities to play at home or very near to home. A cautionary tension arises when children go outside of home and at out of sight due to lack of care can bring out any risk. So, mothers prefer to have their child play at home or very near to home.

However regarding the types of play opportunity at home, their opinion is slightly different. FGD-A mothers' opinion is that there is a need to have different play arrangement for these children. For example- a little space could be made at home as

play setup, where children would join and play with calm and quiet and safe. The play space at home could be small play cottage, specific underneath of tree where some 4 to 5- children can sit together for play easily. As a result, children get specific place to play and do not go here and there for playing.

FGD-B mothers seem that at any place of home such balcony or opened in front place of house, or underneath of tree could be a place for their choice.

3.3.5 Outdoor Play Opportunity for Children

When mothers were asked, “what is the opinion about having (outdoor) play opportunities at out side your home?” FGD-A mothers think that there is a need to have play space at out side of home. Its advantages would be better for children. They can play in safe and secured. Their time will go on well. Children get natural light and fresh air. They could enjoy open space. Mental state could be good. These mothers also informed about their existing outdoor play opportunities and added that there is no adequate formal structured play arrangement at outside their home.

Considering some reasons, FGD-B mothers’ perceive that for 3-5 years children courtyard of the home is enough. Said reasons are: due to social system here mothers can not go outside, that’s why children do not get their mothers’ participation in outdoor play and do not get support to go outside for play as well. Another significant reason is the safety of the children. Children should keep in mothers’ eyesight for that. As mothers seem that this age children individually not possible to capable to keep safe and secure himself. That’s why at this age, children should play at courtyard or any outdoor open playing-field or play-space (playground) which is near to home and mothers’ eye limits. Only one mother was exceptional, who said that “for the sake of child’s development they might have to go out side to participate in play.” However, for outdoor play or game, in general FGD-B mothers have support to have an ideal playground which means the western concept of “playground” (climbing equipment, swings, slides, etc). They positively think that it would be beneficial for children. For example: In playground children get opportunity to interact and oriented each other and mother could remain free from injury, accident or any jeopardy. At ideal outdoor play space children can play football, run freely etc.

Regarding existing outdoor play opportunity, mothers’ from FGD-A & B found same information that traditionally as they feel there is a need to have outdoor play

space for playing children; and they keep it near to home though that is so small and informally developed even though not ideally organized. Even though, these outdoor play places and field not created or modified by any one as play space; rather children find out the place as meeting up their playing need.

3.3.6 Gender Differences in Children's Play

In response to question, 'How do you feel about gender differences in play?' FGD A and B Mother responded similarly that generally boys and girls play different play. Their play materials and toys are also different (as different gender identity). Maximum boys are interested and attend to play or game are as FGD-A said: ball, playing flute, Cycling, cricket and bat... FGD-B said: playing ball, Running, Carom cricket (Table 25).

Maximum girls play similar items which is different from boys. In this response FGD-A and FGD-B were almost same: FGD-A: cooking, playing doll, use utensil, doll etc. FGD-B- cooking, playing doll, dance, wearing women's traditional dress, use utensil, doll etc. (Table 25).

The reasons for gender difference in play mothers asked by moderator but both groups (FGD-A and-FGD-B) did not or could not answer.

When mothers were asked, '*Whether boys and girls should play together or as in different gender?*' FGD-A Mother responded that stereotypically almost (time) boys and girls play in different group and place. Generally, girls like to play at home in the courtyard or under the trees, at open veranda (balcony) and back to the house etc. Mothers are aware about their little/young girl; they might play out of sight from mother. As their opinion, this attitude is due to safety for their girl-child. Mothers remarked that out of sight their girl child might be hurt or face problem by aggressive boys. So, their girl children have been forbidden to go outside. Mothers keep them at home giving some stereotypical and preferred play materials and saying, 'play here with these utensils. So, children's play dictated and influenced by mothers' gender stereotyped attitude.

But, boys generally like to play outside of the home, playground, or open space. However, these little children sometimes and in some play/game boys and girls play together. For example in cooking and shopping they played different gender-based role, but play together. Likewise, when boys play cricket or football (3-5 yrs) girls

participate as a fielder. On the other hand, in the play running both equally - i.e. without any gender difference role - they participate and remain active.

Mothers want most likely it should be girls who will play with other girls, boys will play with other boys. Specially, when adequate numbers of children join from neighboring family mothers instruct their children to form boys group and girls group for playing together in gender oriented group.

Table 25. Gender difference in liking play and play materials as per common interests

Girls' interested play/game	Boys' interested play/game
• Cooking (FGD-A&B) • Playing doll (FGD – A&B) • Use utensil (FGD –A&B) • Dance (FGD-B) • Wearing women's dress (FGD-B)	• Playing ball (FGD A&B) • Playing flute (FGD -A) • Cycling (FGD-A) • Cricket (FGD-A&B) • Running (FGD-B) • Carom (FGD-B)

As mothers' response (views), there is not any problem or hazard in playing these 3-5 years boys and girl together. The reason why gender difference in play group formation mothers were asked by moderator, FGD-A group said that girls and boys, when play together could cause any harm. However in the FGD-A 7 of 8 participant's mother agreed that there is no problem or odd situation not to be occurred in 3-5 years little kids due to young age. However, this remark is not appropriate for above 5 years stage children. In FGD-B, also maximum mothers (7 mothers) stated in the same way. Only one exceptional mother from this boldly remarked that mothers should insist children to play differently as gender identity since the beginning of their life as they will play and lead their life in gender difference. Same some responses were also found in FGD-A.

FGD-B mothers stated that, mothers should not dictate to play in playing different group as per gender identity. Rather mother should give the opportunity to make the boys and girls might play together or in isolation. Because, if mother instruct them to play in different place that might be discrimination. Consequently children may become mean minded. They will be deprived of playing with different gender child and deprive of some specific play materials and specific type of play.

Some mothers described their thinking that "girl may wish to play with ball; boys may wish to play with doll. If we differentiate play material for girl and boys differently that could be as deprivation for them." So, FGD-B mothers agreed that there should have the scope to choose the play and play materials and the person where the child is playing with. Some mothers from this FGD-B said that, "if boys and girl get

opportunity to play together, children get fun and pleasure and enjoy a lot, and they learn from both side in various way.”

3.3.7 Parents' Role in Children's Play

When mothers were asked, “*What do you think about parents' role in children's play?*” FGD-A and B mothers answered similarly that there is a need that the parents should play with their children. They should allocate a good amount of their time for playing with children. According to them, these little kids can not spend time alone. Again, if parents play with their children they don't go to any risky places. So, they do not face any risk and difficulty. And children become happy if parents play with them. Consequently they become attentive to the mother. That's also the time when children listen and obey, and follow the parents' instructions. Besides, when parents play with their children, they feel good, get pleasure, and become happy. By the way children get benefited.

Mother said that sometime they are bound to play when their children insist them to be play partners, generally due to lack of play partners. Some mothers (not all) feel proud to give time for play with their children and they enjoy it. Their positive opinion is- “through involving in play with children parents-child relation becomes friendly.”

Mothers engage and support in their child's play at home (in indoor play).

Generally, fathers engage less in children's play. As mothers were mentioned the cause that, fathers stay outside of the home most of the time and return at night when young child go to bed. Although, in some cases, if fathers get time they do not give value the play; rather they like to get involved in other jobs. As because, mothers agreed that fathers are liable to other family work than childcare affairs.

CHAPTER 4

DISCUSSION

4.1 Introduction

The objectives of this mixed methods study were to identify Bangladeshi rural mothers' perception about the role of play in promoting children's (ages 3-5) learning and development. It also revealed whether mothers' perceptions vary with their education, fathers (husband's) education and their family income. By the ways, it is intended that support to government policies providing data in this regard. More specifically, a quantitative survey and qualitative focus groups were conducted to fulfill the objectives and research questions.

In this study, the focus groups were mainly used to illustrate the findings of the survey. The focus groups provided valuable additional information, especially on the reasons, rationalizations and arguments behind people's understanding of the play (for children) issue.

4.2 Rural Mothers Perceptions of Play for Children

As answer to the research question-1 "what are rural mothers' perceptions of play for children's (ages 3-5) learning and development in Bangladesh?", some findings came out from mixed methods studies which has been placed in previous chapter. From those findings, some surprising and special as well as uncommon findings have been discussed below:

4.2.1 Benefits of Play: Play and Children's Physical development

Towards some items of statement mothers responses was very surprising and unusual. Among them with the statement "play does not help children's physical development" 70% of respondent strongly disagreed and reversely about 17% of respondents strongly agreed with that. The most surprising things were that we thought that mothers were more aware of this statement than other statements. But the reality is that the least of awareness shown to it than others. It means that relatively an important

percentage of respondents (strongly agree 16.7 agree 3.3=20%) were not aware about the benefit of play in development of children. Qualitative study findings in this theme also reveal that- They perceived physical play as exercise for the children. Besides this, they did not show their knowledge on how children's development as a whole gets benefited. However, only one mother was found exceptional who mentioned that those who do the physical activity based play become faster in all other side such as academic side than those who do not do so. But, rest of all sample groups of mothers is not aware of the total benefit of play in children's development.

The quantitative study findings show that mothers have knowledge about some benefits of play however qualitative study revealed that though a big number of mothers have positive attitude towards play but they have lack of clear and specific knowledge about the benefits of play for children's physical development, such as literatures show that play makes active and healthy bodies, support to healthy brain development (Neuron's connection) and as curative strategy of the obesity epidemic (Ginsburg and the Committee on Communications and the Committee on Psychosocial Aspects of Child and Family Health, 2007).

4.2.2 Benefits of Play: Play and children's Cognitive Development

Some of the mothers have wrong perception about play and children's cognitive development. With the statement "play is detrimental in increasing children's knowledge" a poor percentage of respondents was undecided (10%) and agreed (Strongly agree 6.7+ Agree 3.3=10%) with that which also means this percentage (in total 20%) of respondents' have lack of awareness on the benefits of play for children's cognitive development.

Qualitative study findings also reveal the lack in this issue. Although some of the respondents mentioned that knowledge increases by play; but their example shows lack of clear understanding about the matter such as literatures show that through play children get mastery about world, and develop new knowledge and achieve competencies for facing future challenges (Tsao, 2002).

4.2.3 Emphasis on Play and Academics

Literatures show that the conflict in focusing between children's academic learning and play opportunity at preschool classroom and beyond exist around the

world and at the same time emphasis is being given to academics than play which is alarming (Sluss, 2004). Sluss remarked that “as the traditional nursery schools changes to become more focused on academic learning, play is at risk in the preschool classroom” (p. 157). In light of literatures in the quantitative study two items were used to find the mothers perception in this issue. In the first item “play is detrimental to children’s learning” found that about 16% mothers agreed and 1.7 was undecided with this statement.

In qualitative study, mothers of FGD-A and FGD-B similarly perceived that ‘play/game is not a detrimental to the learning/academics’. Mothers’ opinion is that children have the right to play along with academic activities. So, they need to get time for play the same way need to get time for academic activities. For this reason, there is a need to determine the specific time for play, like there is time for eating and academic learning. But concerning emphasis on either play or academic activity mothers preferred academic activities rather than play. However, they perceived, 3-5 years child are not yet fully ready for academic activities. For that reason, at this age both academic activities and play are needed.

In the second item on this issue from quantitative study found that with the statement “play should have in regular class routine as a subject in preprimary education” 90% mothers strongly agreed. Only about 7% (6.7) mothers disagreed with the statement. But, qualitative study has given a different clear perception. Both FGD-A and FGD-B group of mothers’ perception were similar and it was negative concerning to have play in classroom as per routine work. They do not think that there is a need to have play with doll, ball, toys, and other play-materials in classroom like other academics or leaning activities. They thought that keeping play out of class play can be going on simultaneously between academic activities. However, it is very surprising that among two FGD’s 18 participants, only one respondent gave opinion with boldness, who said that there is a need to have opportunity to play as a routine activities (content) for 3 to 5+ children in their school’s regular activities (as curriculum content). Her rationale was that academic learning could be happened through play. It is indeed true that apart from that exceptional mother, the rest mothers’ tendency is that the academic activities should get more emphasis. They expressed their views in a remark: “If our children engage in academic activities that make us happy. Engaging in play make less happy. Academic activities for children are very good. If

they engage less in play and much in academic activities it would be the best for children.”

It is surprising that finding of quantitative second item in this issue and related qualitative findings is very conflicting. In the quantitative study findings, a big number of mothers’ perception of play should have in regular class routine as a subject in preprimary education; on the other hand, a little percentage of mothers holds different perception. But qualitative study, to some extent supports that mothers has intension to support academics instead of play. Their opinion about play as a classroom activity overall was not supported by them. During two focus group discussion, it has been tried to bring mothers’ real perceptions through repeated probe questions. So, this qualitative study finding is acceptable to us.

4.2.4 Gender Differences in Children’s Play

Frost (2005) noted that in early life child becomes known about their gender individuality. He also added that “One source of gender segregation is culture. ...family and parenting are a factor in gender difference in play” (p-110).

Both type of studies revealed that gender issue in children’s play is a debatable subject to the mothers. For instance, among gender based two items with one statement “for boys and girls play should be different” about 58% of the respondents strongly disagreed. On the other hand, about 26% of respondents strongly agreed. It is very significant that despite a big percentage of respondents strongly disagreed; the percentage that strongly agreed is also not so small.

In another statement on gender “for boys and girls play-materials should be different” about 53% of the respondents strongly disagreed. If we accept/take 6.7 mothers who were agreed with the statement, in total it would be 60%. This means rest 40%, a big percentage of mothers’ respondents, disagreed with this statement. It is also surprising that mothers’ perception of play in gender issue at any scale of agreement highest and significant percentage of mothers’ trend does not exist. There fore, by this study, it is an important finding that Bangladeshi mothers’ perceptions are in conflicting situation. Because, it has been seen that mothers’ agreement towards two statements over this issue are reverse. These reciprocally conflicting responses are more

likely reflection of this society that is Bangladeshi mothers suffer in indecision and conflicting mind regarding gender issues for early year's children. This is also clear from the focus group discussion. FGD-A mother keep them at home giving some girls' stereotypical treatment and imposing play materials like utensils, dolls etc. They showed the reason that out of sight, their girl child might be hurt or face problem by aggressive boys. So, their girl children have been forbidden to go outside. So, children's play has been dictated and influenced by mothers' gender stereotypical attitude. These Mothers want most likely that it should be girls' play with other girls, boys play with other boys. Specially, when adequate numbers of children join from neighboring families, mothers instruct their children to form boys group and girls group for playing together in gender oriented group.

FGD-B mothers stated that, mothers should not dictate in playing with different group as per gender identity. Rather, mother should give the opportunity to play together regardless of boys and girls differently. Because, if mother instruct them to play in different place that might be discrimination. Consequently, children may become mean minded. They have been deprived of getting to play with different gender child, from some specific play materials and specific type of play.

Some mothers described their thinking in this way that "girl may wish to play with ball; boys may wish to play with doll. If we differentiate play material for girl and boys differently that could be as deprivation for them." So, FGD-B mothers agreed that there should be the scope to choose the play and play materials and meets with whom to play. Some of mothers from this FGD-B said that, "If boys and girl get opportunity to play together, children get fun and pleasure and enjoy a lot, and they learn from both sides."

Besides, other literatures also suggest that "parents can foster play that is gender-neutral. Parents can treat their children's play in an equitable manner. Equal time should be spent with children of either gender or equal emphasis placed on toys and activities. Fathers and mothers should include girls in traditional male games and engage their sons in cooking and other activities in the home once thought to be females territory" (Foster, 2005, p-152).

4.2.5 Parents' Role in Children's Play

Parents have important role children's play. As frost (2005) noted that "they serve as facilitators, models, supervisors, and participants in children's play". In this study it has been searched from the mothers' perception.

In quantitative study, it has been found that with the statement "parents should play with their children" 90.0% of mothers strongly agreed. Only about 3% (3.3) strongly disagreed.

Similarly in qualitative study, it has been found that mothers have positive perception of their role in children's play. But maximum mothers' perception about their role in child-play is to participate when they become bound due their children's demand. Besides, very few of them participate in child-play. Sometimes they provide support to child-play by giving some play-materials, buying toys etc. They look after or supervise their children while they are playing and keep them under protection. That's why mothers keep their children near to her working place. But, mothers did not mention that they were involved and supported their children's play by their own.

We knew from both FGD-A & FGD-B of qualitative study that mothers are engaged in play with their child very short time, only when children make them bound. So, as per mothers' opinion, in most of the case, their participation is the result of following the children's need, claims rather than mothers' awareness and realizing importance of play for their children's development and learning. They want to say that it happens because they always remain busy with household duties.

So, they show their positive attitude towards only on facilitating role when demands come from children and they play participant role some time as per children's need. Mothers are not sufficiently involved and do not serve essential role from their own. But they have positive attitude towards facilitating and some time as per children need they become participants. Literatures also show that "most adults are so engaged with work that they do not have time to play with their children, which is a common pattern in subsistence cultures" (Frost, 2005, p. 201).

Frost (2005) added from different research study results that "adult involvement is most effective when the adult becomes a co-player or provides suggestions and materials to enrich play. Adults are least effective when they are uninvolved or merely

observe play. At the other extreme, they are equally ineffective when they become instructors or directors of play” (p. 152).

In other side of this issue is that though in quantitative study mentioned “parents” (mothers and fathers) but there was not enough scope to identify the fathers’ perception and role in children’s play separately.

However, during focus group discussion (FGD) it has been carried out from mothers’ discussion that there is a lack of knowledge regarding importance of fathers’ involvement in play with their children. For this reason, fathers’ perception is that it is (play and interaction with child) only mothers’ duty, his (fathers’) duty is beyond that. Even though these mothers’ groups also perceived like that. The qualitative study also shows that - as mothers mentioned that generally fathers engage less in children’s play. Because, most of the time, fathers are stayed outside of the home and returned at night when young children already have gone to bed. Even though fathers get time they do not give value to the play, rather, they like getting involved in other job. Because, Fathers are (mothers seem that) liable to other family work than childcare affairs.

But literature shows that fathers’ involvement in children’s play is very important. Frost (2005) noted that “mothers and fathers play differently with infants and toddlers. ...When parents play with toddlers, differences in play activities persist (p-115).” Mothers help their toddlers play one way, and fathers other ways. Even though, researches show that comparatively, toddlers are more responsive to fathers than to their mothers (Frost, 2005). So, lack has been found in this issue; parents’ both mothers and fathers role in children’s play. Though mothers expressed positive attitudes towards facilitating and supervisory role in children’s play and very limited time in participant role when asked by children, fathers are very lesser involved in children’s play at all.

4.3 Mothers’ perception in relation to their education and other factors

To find out research question 2 & 3, both quantitative and qualitative study was conducted. From quantitative study through comparison of two subgroups of mothers education level, it has been analyzed and variation of perception was found only in following statements: 1) “through play children learn to follow rules and instructions” here better perception was found among the mothers of low educational level; 2) “Play opportunity should not need to have at home for children” and 3) “Parents should play

with their children” better perception was found among higher education group mothers for the last two statements (Table 20). In influence of father’s (husband’s) education on mother’s perception was also analyzed to explore the relationship between different subgroups’ in particular factors and mothers’ agreements. But significant difference and relationship was not found.

From two types of FGD there was found some findings which should be discussed. FGD-B mothers showed their knowledge and positive perceptions about play and in supporting their views they presented the advantages of play for child development and learning. On indoor play opportunity FGD-A mothers suggested the need to have it and FGD-B did not support it. Similarly, FGD-A realized the need to have outdoor play space and present advantages about play space at outside of home; but FGD-B did not suggest it along with their rationales. In perception to gender differences in children’s play, despite FGD-A and FGD-B mothers thought similarly; but they showed different opinion only regarding mothers’ dictation in play as per gender identity. FGD-B showed different point that mothers should not dictate to play in playing different group as per gender identity.

As a whole, these difference in quantitative and qualitative studies, compare to similarity between mothers’ perception and their different level of education, and correlation between mothers’ perception and fathers (husbands) different level of education not so significant. Therefore, it is revealed that mothers’ educational levels do not correlate to mothers’ perceptions of play for children’s development and learning. Similarly, along with fathers’ levels education does not influence mothers’ perception in this regard. Prior research also supports these findings that in a Turkish research on this issue where it also was not found any significant correlation between educational levels of parents and variations in their perceptions (Oksal, 2005). However, due to small sample study findings from current research dose not give a conclusion for generalization and, therefore, further study is needed.

Response to the research question-4 relationship between mothers’ perceptions and their family income were analyzed through different subgroups’ agreements with statements where significant difference and relationship was not found. Due to some limitations, in qualitative study relationship between mothers’ perceptions and their family income was not investigated. In future, further study could be conducted in this regard.

4.4 Strengths and Weaknesses/Limitations

There were some strengths and weaknesses/limitations in this study which has been given below:

4.4.1 Strengths:

- In spite of the short time-bound study for master thesis fulfillment, standardized steps in both methodologies have been adopted consciously.
- Mixed methods study has been adopted for getting complete picture from the selected population.
- It was intended that through collecting real and without missing data, the more acceptable findings could be brought into study.
- For quality concern and for self learning, the prime researcher tried to be present in each step of study (both methods) and accomplished the works by his own (instead of taking direct support).
- To reduce biasness in both studies, independent research assistants were adopted as in necessary steps. Specially, in qualitative study giving importance and considering quality an experienced research assistant adopted for FGD moderation and transcription who accomplished her duty independently.
- Training for research assistants was conducted by prime researcher contingently
- To work closely with mothers, female research assistants were engaged for better understanding and communication.
- Each and every comments of both national and international supervisor had been taken into consideration with importance and incorporating task had been done very carefully.

4.4.2 Weaknesses/Limitations

- The main weaknesses and limitations of the study was time constraint. For that -
 - Small sample (N 60) and not representative sample of nation/Bangladesh was taken in the study.
 - Only mothers were targeted.

- Only rural area was targeted.
- For time constraint only 3-5 years age group of children's mothers that means preschoolers' mothers were addressed.
- Geographically coverage was done in only one area of Bangladesh
- Only 2 Focus group discussions have been done in one area.

4.5 Policy Implications

For ensuring and increasing children's play facilities, its importance should be included in all of the child development policies which are directly and indirectly associated with child development. Specially, for building parents' positive perception towards play for children, as a content 'importance of play and parents role' and related issues and contents should be included in ECD policy, National Plan of Action for Children of Bangladesh, children's law etc.

The findings, though limited due to a small (convenient) sample, until further stratified study in this issue would not conducted, it can contribute to the knowledge base on play and parenting in Bangladesh.

The concept of developing some (or more) playground spaces as initial initiative could be an important public policy recommendation from this paper, as mothers expressed concern about the availability of safe, outdoor play spaces.

5.6 Recommendations

It is recommended that further studies are needed for generalization. In spite of above mentioned limitations this study could be a basis or foundation of further study on this issue. In that study, study population should have to be selected through different stratified sampling from whole Bangladeshi parents' (mother and fathers'). For that reason, geographically, socio-culturally, based in rural and urban setting different groups should be covered. Besides this, in parallel of mothers groups with these different settings fathers groups should be included.

Also it would be good to do an observational study of play in homes for reducing confounding factors (and others) and bringing the fact by checking the difference between people's oral statements and actual condition or activities.

CHAPTER 5

CONCLUSIONS

In conclusion, the combination of survey and focus group discussion findings gave a more comprehensive view on rural mothers' perceptions of play for children's learning and development. The key findings has been found that though the quantitative study findings show that mothers have knowledge about some benefits of play in physical development, cognitive development, language development, but it was not supported fully by qualitative findings. Qualitative study revealed that mothers have positive attitude towards play but they have lack of knowledge related to play and specific development of children like brain's neuron-connections, motor development, psychological well being, and foundation of life skills and so on.

Although mothers have some knowledge about positive effects of play in children's development, in which the knowledge was not at satisfactory level almost in all cases. In the gender difference in children's play, rural mothers showed conflicting opinion regarding gender issues for early year's children. In both types of study some mothers showed stereotyped perceptions others were reverse. Mothers suggest giving emphasis to learning instead of play for children. Regarding parents role in play with children their perception was positive; but their role as per their agreement in survey and opinion in focus group discussion not developmentally appropriate for children.

Educational level of the mother was found as an influencing factor for developing positive perception or knowledge in some quantitative items and in FGD. But as a whole it is not so significant for generalization and drawing conclusion. So, further study is needed in this regard.

Through this mixed methodological study researcher found some important findings that have been presented above. Never-the-less, as the research sample was not nationally representative due to time constraints and fund limitations; at the same time, sample was selected only from rural area and was not stratified from whole part of the

country. But as researcher adopted standardized steps of methodologies in every step consciously, as for example, in this research, population of sample selected from rural area same near to Dhaka city maximum of who come from different region of the country. Mixed methodology study was adopted for getting more complete picture of the population. Despite these strengths, there is no way to generalize the study findings due to said limitations. However, the study findings could be a basis of further study for generalization; where should have to be followed stratified sampling from whole populations.

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APPENDICES

Appendix-1

30 Samples from Singardighi Village (with information)

Sample's code number	Mother's Age	Mother's Education	Mother's occupation	No. of Children	House holds	family type	Father's Education	Father's occupation	Family Income (TK)
Mo # 1	25	V	HW	2	4	NF	Illit	Van puller	2000
Mo # 2	25	Illit	HW	2	5	JF	Illit	S	4000
Mo # 3	30	V	HW	3	9	JF	VIII	S	10000
Mo # 4	25	V	HW	2	4	NF	VII	Busi	20000
Mo # 5	40	III	HW	2	07	JF	III	Agri	2000
Mo # 6	25	V	HW	2	4	NF	IV	Agri	1000
Mo # 7	20	III	HW	2	4	NF	V	Mason man	2000
Mo # 8	30	V	HW	2	4	NF	V	Agri	8000
Mo # 9	26	Illit	HW	2	4	NF	Illit	Agri	4000
Mo # 10	22	V	HW	2	4	NF	V	Agri	2000
Mo # 11	22	IV	HW	1	7	JF	IX	Busi	5000
Mo # 12	28	V	HW	2	5	JF	VIII	Agri	10000
Mo # 13	28	Illit	HW	3	5	NF	V	Day Labor	5000
Mo # 14	30	Illit	HW	2	4	NF	V	Bussi	2500
Mo # 15	30	IV	HW	2	4	NF	IV	Agri	2000
Mo # 16	22	X	HW	1	3	NF	MA	Teaching	30000
Mo # 17	25	VIII	HW	1	4	JF	V	Busi	15000
Mo # 18 /	28	X	HW	3	5	NF	VII	Busi	10,000
Mo # 19	22	X	HW	1	3	NF	V	S	5000
Mo # 20	25	X	HW	1	5	JF	IX	Masson man	5000
Mo # 21	20	IX	HW	2	4	NF	V	Agri	5000
Mo # 22	22	VIII	HW	1	3	NF	IX	S	4000
Mo # 23	26	SSC	HW	2	4	NF	HHC	S	6000
Mo # 24	23	IX	HW	1	3	NF	V	Mason man	5000
Mo # 25	23	X	HW	2	5	JF	V	Busi	15000
Mo # 26	24	VIII	HW	2	4	NF	V	Agri	3000
Mo # 27	25	viii	HW	1	3	NF	SSC	Busi	30,000
Mo # 28	29	x	HW	3	5	F	iv	S	5000
Mo # 29	40	Illit	HW	5	7	JF	Illit	Agri	6000
Mo # 30	30	Illit	HW	2	4	NF	Illit	Agri	6000

JF=Joint Family, HW=House wife, S=Service, NF=Nuclear Family, Illit=Illiterate, Agri=Agriculture, Busi=Business,

Appendix-2

30 Samples from Kapatiyapara Village (with information)

Sample's code number	Mother's Age	Mother's Education	Mother's occupation	No. of Children	House holds	family type	Father's Education	Father's occupation	family Income (TK)
Mo # 1	22	V	HW & S	3	5	NF	Illit	Busi	5000
Mo # 2	27	viii	HW	2	4	NF	SSC	Service	7000
Mo # 3	22	ix	HW	1	3	NF	ix	Driving	6000
Mo # 4	40	SSC	HW	1	3	NF	SSC	Busi	4000
Mo # 5	32	SSC	HW	3	5	NF	SSC	Doctor	10,000
Mo # 6	20	vii	HW	2	4	NF	X	Shop keeping	6000
Mo # 7	20	vii	HW	1	3	NF	v	Busi	5000
Mo # 8	22	vi	HW	3	5	NF	ix	Masonry	4000
Mo # 9	22	vi	HW	1	3	NF	v	Driving	5000
Mo # 10	22	v	HW	1	3	NF	viii	Shoe repairing	5000
Mo # 11	24	v	HW	3	5	NF	Illit	Rickshaw	4000
Mo # 12	25	Illit	HW	2	5	JF	Illit	Shoe repairing	5000
Mo # 13	29	SSC	HW	5	7	Nuclear	SSC	Agri	3000
Mo # 14	26	SSC	HW	4	6	NC	BA	Busi	15000
Mo # 15	21	SSC	HW	1	7	J F	SSC	S	5000
Mo # 16	30	SSC	HW	2	4	NF	SSC	Doctor	5000
Mo # 17	28	SSC	HW	2	5	JF	SSC	S	5000
Mo # 18	21	IX	H.W.	1	3	NF	XII	S (Driving)	7000
Mo # 19	28	VIII	HW	3	5	NC	VIII	S	5000
Mo # 20	22	VIII	HW	1	3	NF	V	S	15000
Mo # 21	30	VIII	HW	3	7	JF	MA	S (Teaching)	15000
Mo # 22	20	VI	HW	2	4	NF	V	Agri	3000
Mo # 23	28	V	H.W.	1	3	NF	V	Agri/Rik	2500
Mo # 24	30	V	HW	3	5	NF	Illit	Agri/Rick	2000/
Mo # 25	27	V	HW	3	5	NF	V	S	5000
Mo # 26	25	V	HW	2	4	NF	Illit	Agri	5000
Mo # 27	25	Illt	HW	3	5	NF	Illit	Agri	2000
Mo # 28	24	Illt	HW	2	4	NF	Illit	Rickshaw	2000
Mo # 29	22	SSC	HW	1	3	NF	SSC	Busi	7000
Mo # 30	30	Illt	HW	2	3	NF	Illit	No/Died	1000

JF=Joint Family, S=Service (in Different Discipline) NF=Nuclear Family, Illit=Illiteratem
 Agri=Agriculture, Bussi=Business Rick=Rickshaw puller

Appendix-3

Survey Response Items

Sl	Response Items	1= Strongly Disagree	2= Disagree	3= Neutral	4= Agree	5= Strongl y Agree
1.	Through play children learn to live with peoples as social being. (খেলার মাধ্যমে শিশু সবার সাথে মিলে মিশে বাস করতে শেখে।)					
2.	Play is detrimental in increasing children's knowledge. (খেলা শিশুর জ্ঞান বাড়তে সাহায্য করে না।)					
3.	Play encourages children's creativity. (খেলা শিশুকে নতুন কোনো কিছু তৈরি করতে বা বানাতে শেখায়।)					
4.	Play does not help children's physical development. (খেলা শিশুর শরীর গঠনে/ গড়ায় সাহায্য করে না।)					
5.	Through play children learn to express their emotional feelings appropriately. (খেলার মাধ্যমে শিশু সঠিকভাবে আবেগ অনুভূতি প্রকাশ করতে শেখে।)					
6.	Children's development of language skills is hampered when they play. (শিশু যখন খেলা করে তখন শিশুর ভাষা দক্ষতার বিকাশ ক্ষতিগ্রস্ত হয়।)					
7.	Play helps children in learning math skills. (খেলা শিশুকে হিসাব-নিকাশ শিখতে সাহায্য করে।)					
8.	Through play children learn logical thinking. (খেলার মাধ্যমে শিশু কোনো বিষয়ে যুক্তি দিয়ে চিন্তা করতে শেখে।)					
9.	Through play children encourage/learn to solve problems by own. (খেলার মাধ্যমে শিশু নিজে নিজে সমস্যা সমাধান করতে শেখে।)					
10.	Through play children learn to follow rules and instructions. (খেলার মাধ্যমে শিশুর নিয়ম মানা শেখে।)					
11.	Play is detrimental to children's learning/education. (খেলার মাধ্যমে শিশুর লেখাপড়ার ক্ষতি হয়।)					
12.	Children learn to accept a victory or defeat in play. (খেলার মাধ্যমে শিশু জয়-পরাজয় মেনে নেওয়া শেখে।)					

13.	For boys and girl play should be different (gender-oriented). (ছেলে ও মেয়েদের খেলা আলাদা হওয়া উচিত।)					
14.	Play opportunity should not need to have at home for children. (বাড়িতে শিশুর জন্য খেলার ব্যবস্থা থাকার দরকার নেই।)					
15.	There is no need to a outdoor open play space (play ground) for children. (বাড়ির বাইরে শিশুদের জন্য খেলার মাঠের দরকার নেই।)					
16.	Parents should play with their children. (শিশুর সাথে বাবা-মার খেলা করা প্রয়োজন।)					
17.	Play opportunity should have in regular class routine as a subject in preprimary education. (৩-৫ বছরের শিশুদের স্কুলে বিষয় হিসেবে খেলার সুযোগ থাকা উচিত।)					
18.	For boys and girl play-materials/toys should be different (gender-oriented) (ছেলে ও মেয়েদের খেলনা আলাদা হওয়া উচিত।)					

ID No.

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Institute of Educational Development

Master's Thesis Program

Early Childhood Development

Consent Form for Participant/Sample

Institute of Educational Development (IED), BRAC University has taken a research initiative as part of Master's course in early childhood development in your area. The research will focus on your children health and your family related information under the study of Nutritional Status and cognitive development of preschool children under ECD programs in Bangladesh. The aim of this research is to assess the relationship between nutritional status and cognitive development of preschool children in Bangladesh. The study will also try to determine how these relationship happened by their socioeconomic status and family conditions.

If you want to take part and/or allow your children to participate in this research, please sign the form below after you read [or listen to] this form telling you what the study is about. Your participation is totally voluntary, and you may change your mind and withdraw at any time before and during the study. If you agree to participate, we will ask or determine your child and you some specific areas about information on the issues mentioned above such as nutritional status of the children, family related data and other child related information under age 5 years and mother. Height/length and weight of the participant/children will be measured using standard wooden scales and digital weighing scales. In addition, we will also collect information about socio-economic status of your household, social problems that you may experience by family member or others (*you may restrain from giving this information if you do not want to disclose/ talk about this issue at all*). Two experienced female research assistants will be involved in collecting information from you. It will take approximately an hour and a half to complete the oral interview that will follow according to the questionnaire/process.

We will maintain your privacy and confidentiality about any information (sensitive information). Your child and your family members' names will not be written on any of the material, and only the researchers will have access to your information. All materials with your information in it will be stored in a safe, locked location. The researchers named below will be responsible to ensure the protection of the information.

The research will not benefit you personally. The information you provide will however, have significant contribution in learning and improving IED's development programs and may benefit you in the long run.

If you are willing to participate in this research or disclose information about yourself, we would request you to sign this consent form. Your participation in this research is voluntary therefore you may refrain from taking part in this research. You may also withdraw your participation at any time during the interview or later while the information is analyzed. Directly or indirectly, you will not be deprived of any of the services or benefits that you are currently receiving or are likely to receive in the future from IED if you do not participate or withdraw from the study.

If you want to know more about this research and/or your participation rights, or if there is pertinent clarification that you may require, please contact the following persons.

Mahmuda Akhter <i>HEAD</i> ECD Resource Centre (ECDRC) Institute of Educational Development (IED) BRAC House-113, Road- 2/A, Niketon Gulshan-1, Dhaka 1212 Phone: 9881265, Ext: 2112	Md. Shahid Ullah <i>Principal Investigator</i> ECD Resource Centre (ECDRC) Institute of Educational Development (IED) BRAC House-113, Road- 2/A, Niketon, Gulshan-1, Dhaka 1212 Phone: 9881265, Ext: 2137, Mobile: 01712-564423
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I have read the consent form or my acquaintance read the consent form to me. I completely understand my rights about participation and I am willing to participate in this research.

Name (Please print): _____ Signature: _____
Date _____
Name of child 1 _____ child's age _____
Name of child 2 _____ child's age _____

I have read the consent form or my acquaintance read the consent form to me. I completely understand the rights about my child/children's participation and I am willing to let him/her as a subject of this research.

Name (Please print): _____ Signature: _____
Date: _____

Appendix 5

FGD –A: Participants' information: Mothers of less than primary education (Village: Singardighi)

Participant's code #	Mother's Age	Mother's Education	Mother's occupation	Husband's Education	Husband's occupation	Family Income In TK
Mother # 1	25	Illit	HW	Illit	Service	4000
Mother # 2	40	III	HW	III	Agri	2000
Mother # 3	22	IV	HW	IX	Busi	5000
Mother # 4	30	IV	HW	IV	Agri	2000
Mother # 5	30	V	HW	V	Agri	8000
Mother # 6	22	V	HW	V	Agri	2000
Mother # 7	25	V	HW	Illt	Van puller	2000
Mother # 8	25	V	HW	IV	Agri	1000

HW=House wife, S=Service, Illit=Illiterate, Agri=Agriculture, Busi= Business,

Appendix 6

FGD-B: Participants information: Mothers of above primary education (Village: Kopatiyapara)

Participant's code #	Mother's Age	Mother's Education	Mother's occupation	Husband's Education	Husband's occupation	Family Income In TK
Mother # 1	29	SSC	HW	SSC	Agri	3000
Mother # 2	28	SSC	HW	SSC	S	5000
Mother # 3	40	SSC	HW	SSC	Busi	4000
Mother # 4	21	IX	HW	XII	S (Driving)	7000
Mother # 5	32	SSC	HW	SSC	Rural Doctor	10000
Mother # 6	30	VIII	HW	MA	S (Teaching)	15000
Mother # 7	22	VIII	HW	V	S	15000
Mother # 8	27	VIII	HW	SSC	S	7000

S=Service, Illit=Illiteratem Agri=Agriculture, Busi=Business

Appendix 7

FGD Themes with probes question

1. Theme: Defining play for 3-5 years children

Probe Questions:

- What do your children do throughout/across the day?
- Among these activities which are play or game for them which are not and why?
- Who do they play with? How much and when do they play?

2. Theme: Gender differences in play

Probe Questions:

- What do you consider while you buy toys, play materials for children?
- Do you consider toys, play materials different for boys and girls or same? (why)
- Should play be different for boys and girls?
- How do you feel about gender differences in play?

3. Theme: Mothers' perception of play for children: Is play beneficial or detrimental for children

Probe Questions:

- What are advantages and disadvantages of play for children? Please give your opinion on this.

4. Theme: Play and academic / learning activities?

Probe Questions:

- *What is the relationship between play and academic activities?*
- *Should play for 3 to 5+ children in their school regular activities?*

5. Theme: Play opportunity at home and beyond?

Probe Questions:

- *What is the opinion about remaining play opportunity at home and out of home i.e. at society?*
- *Should have or not the play opportunity at home? And what type of play opportunity needed at home?*

- *Should have or not the play opportunity at home? And what type of play opportunity needed at the society?*

6. *Parents – child play (Parents involvement in child play)*

Probe Questions:

- *What do you think about Parents – child play?*
 - *What are merits and demerits of Parents – child play?*
 - *Mrs. X said this/these specific merit/demerits, how about you all?*

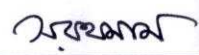
Appendix 8

Consent Form (for student's regarding plagiarism):

I have read the policy on Plagiarism. I understand the consequences of plagiarism including receiving a zero for my work to being dismissed from the program.

Student Signature: 

Date: 27.04.2010

Student's Supervisor: 

Date: 27.04.2010