

**Piaget's Pre operational stage and the role of social  
and cultural development of a child psychology in  
Bangladeshi context**

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**Thesis**

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## **Abstract**

Piaget's theory has fame and criticism both. In his theory there are four stages where he has described development of children at different ages from birth to adolescence. In his theory of cognitive developmental stage he referred that a child maturation gradually developed by the process of direct continuation of inborn biological development rather than his surrounding environment which has been extremely criticized (Machado, 1996, p.148). In addition, among his four cognitive developmental stages Pre operational (2-7 years old) is the second stage where he has described some common characteristics of children as they are; imaginative, egocentric, confused appearance, reality and have magical thinking capability. Moreover, he also thinks that children of this age do not necessarily need any social or cultural awareness for their cognitive development. However, it has been discovered that Piaget's Pre operational stage has been greatly criticized because of underestimating child's competence at great amount (Smith, 1991, p.71). From this point of view, the aim of this study is to find out whether the characteristics of Piaget's Pre operational stage really suit the Bangladeshi students or not. Besides, are they aware of the social and cultural aspects which plays significant role for their cognitive development will also investigate here. To perform this research, survey has been taken place, 60 respondents were surveyed successfully with a written questionnaire. Hence, classroom observation was done favorably to find out whether there were similarities with Piaget's theory or not. The survey shows that most of the participants of this stage have a very few similarities with Piaget's Pre operational stage theory. Besides, similarity was found with his theory that, Bangladeshi students of 5-7 years old have egocentric problem. In contrary of Piaget's theory it was found that

although Bangladeshi students are imaginative but they have sense of logic and practicality and they do not have the characteristics of animism which have been mentioned in this certain stage. Moreover, they are aware of social and cultural knowledge with the guidance of their parents and teachers. So, it can be said that although Bangladeshi students have similarity with few characteristics of Piaget's pre-operational stage but the research proved that they are much more advance than that of Piaget's Pre-operational stage

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## Chapter -1: Introduction

### 1.0 Introduction

In the world of psychological research no theory has had greater impact on developmental psychology than that of Jean Piaget. A man of parts like Piaget was greatly interested in the study of knowledge in child psychology. His concept has been universally praised (Piaget, 1976, p.2). He believed that children move through various stages in order to develop. In order for children to develop they had to pass four stages. He names the stages as follows; Sensori motor, Pre operational, Concrete operations and Formal operational stage (Heatherly & Anna, 1974, p.3). Therefore, Piaget's theory of cognitive development of a child psychology lies under these four stages. According to Piaget's theory of "**Cognitive development**" suggests a progressive reorganization of mental processes as a result of biological maturation. This theory also asserts that it is a direct continuation of inborn biological development (Simatwa, 2010, p.366). On the other hand, critic described "With cognitive development, children acquire the ability to reason abstractly, to think in a logical manner, and to organize intellectual functions or performances into higher order structures. Language, morals, and spiritual development emerge as cognitive abilities advance" (Thomas, 2008, p.1). The above critical definition indicates that, truly cognitive development is an adaptation processes which helps one to learn to adjust to the environment. On the contrary, it is not completely persuadable that cognitive development only connected to the continuation of inborn biological development leaving social and cultural knowledge behind which has been imperfectly described in Piaget's theory (Winegar & Valsiner, 1992, p.197). In addition, his Pre-operational stage is one of the components of cognitive

developmental stage which has been greatly criticized. The reason behind this kind of criticism is because of his defective perception on the concept of child psychological development (Machado, 1996, p.148). Therefore, this study is going to present that whether the characteristics of Piaget's Pre operational stage actually suitable with Bangladeshi students or not. Moreover, the study also aims to find out student's capability of social and cultural thinking.

### **1.1. Problem statement**

By the progression of time, it is found that Piaget's research on these four stages appeared scientifically as well as philosophically wrong (Machado, 1996, p.143), because of some significant reasons that is; his theory has misjudged child's competence, typifies developmental stage negatively, neglected the role of social aspects completely, data are collected only by prediction (Murry, 1983, p.233), theory is paradoxical, logically inapt (Thomas, 2008, p.11), age norms are inappropriate especially in Pre-operational stage. His stages are fixed with age limitation but in practical sense development does not always progress in smooth manner (Smith, 1991, p.71-74). Moreover, he believed that child is born biologically equipped to make them suitable to the environment and it is a direct continuation of their intellectual development (Simatwa, 2010, p.366). Piaget portrays the cognitive development of children poorly as they are not able to understand logic, difference between animate and inanimate objects (Case, 1992, p.10). In addition, his theory concerned only with description, not explanation and these explanations are proved as false that is no practical judgment have been taken place in his so called cognitive developmental theory (Fischer, 1978, p.187). Moreover, in Piagetian theory social and

cultural development of child psychology has been sidestepped. He believed that “children everywhere go through the same stages no matter what their social and cultural background is” (Piaget, 1967, p.391). From this points of view, Piaget’s theory proved logically wrong because, when a child grow up he/she is surrounded by their society and their mental development occurs through their social and cultural environment. That is why children around the world are different from one country to another even one city to another of a particular country.

### **1.2. Purpose of the study**

Purpose of my study is to focus on the characteristics of Piaget's Pre operational stage to find out whether the Bangladeshi students have similarities or dissimilarities according to his theory. Moreover, the paper will also focus on children awareness about their social and culture view.

### **1.3 Central research question:**

The aim of the research was to know the answers of following questions:

1. Are the Bangladeshi students imaginative according to Piaget’s Pre-operational stage?
2. Is the characteristic of “Animism” of pre operational stage suitable with Bangladeshi students?
3. Are the Bangladeshi students of pre operational stage “Egocentric” according to Piaget’s theory?
4. Are the children of 5-7 years old capable of social and cultural thinking?

#### **1.4. Significance of the study:**

It is obvious that development does not occur in discrete stages, adaptation is the innate tendency of a child to interact with his/her environment. This interaction fosters the development of a progressively complex mental organization and that is why the paper will shed light on the importance of social and cultural awareness for a child's psychological development which have been utterly ignored by Piaget's theory. Moreover, children have the capability to understand logic and have practical sense rather than complete imaginative nature. They are also able to follow simple transformations, even though; Piaget noted that children at the "pre-operational" stage could not do so (Murry, 1983, p.233-235).

However, the researchers have faulted Piaget for neglecting the role of social factors in development that is "The [Piagetian] epistemic subject has no social class, sex, nationality, culture or personality" (Murry, 1983, p.231). So it is logical that the development of intelligence begins in infancy but their conscious thought, problem-solving ability, communicative skills developed with the support of society and cultural norms but not from genetically to adjust to the environment.

From these four stages the focus group will be on pre operational stage. The objective of this paper is to find out suitability of Piaget's pre operational stage in Bangladeshi context and the necessity of social and cultural knowledge to represent reliable explanations for cognitive development of a child psychology from Bangladeshi view point.

Thus, the results of this study contribute data to the body of knowledge regarding the role of pre-operational stag for cognitive development.

### **1.5 Limitation of the study**

The research paper is based on urban students but not for the rural students. More over, the paper is prepared for the English Medium students of Dhaka but not for the Bengali Medium students. Thus, the research had to limit the survey to few selected schools of Dhaka city. It is also noticeable that the rural students may be taught in different way and their mental developments may have different approach which is excluded here.

### **1.6. Operational Definition:**

**Pre-operational stage:** The stage occurs between two to six age. Language development is one of the hallmarks of this period. During this stage, the child learns to use and to represent objects by images, words, and drawings. The child is able to form stable concepts as well as mental reasoning and magical beliefs. The child however is still not able to perform operations; tasks that the child can do mentally rather than physically. Thinking is still egocentric. The child has difficulty taking the

viewpoint of others. Two sub stages can be formed from preoperative thought. (Piaget, 1967, p.391).

**Cognitive Development:** It is a mental process of understanding which assists in the gradual growth of a person/child so to become more advanced (Oxford Dictionary).

## **Chapter -2: Literature Review**

### **2.0 Introduction:**

The main objective of this paper is to show Piaget's cognitive developmental stage and critical view points. But before describing the particular stage, it is necessary to focus on the root of his "Cognitive theory". The term Cognitive development is used to cover the acquisition and improvement of knowledge and intellectual process with the help of interaction and influence of genetic and learned factor- like language, memory, problem solving, drawing etc. Cognitive theory is mainly concern with the process of development. In contrast, mental tests measure cognitive products that reflect mental development (Thomas, 2008, p.12).

### **2.1 Cognitive developmental stages of Piaget**

It is already mentioned that Piaget identified four individual stages of which occurs during the specific period of child's life (Thomas, 2008, p.17). According to Piaget each stage has an age extent with distinctive learning capabilities and these stages are given below:



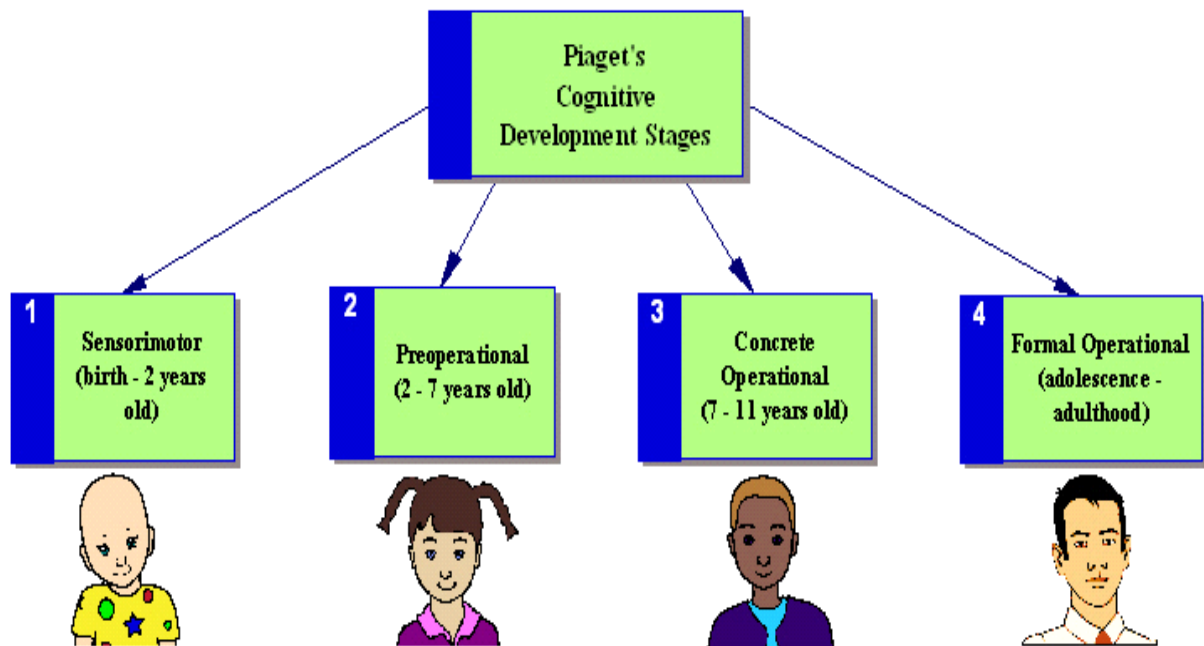


Figure1: Piaget's Cognitive development Stages (Heatherly & Anna, 1974, p3).

In each of these stages children develop their different level of knowledge, ability, function of the rate of the skills increases which are commonly comparable to the mental age and the chronological age (Heatherly & Anna, 1974, p.5-6).

## 2.2 Piaget's theory Vs Critics theory:

The first “cognitive theory”, developed about 1920 by the French psychologist Jean Piaget. His theory asserts that “Intellectual development is a direct continuation of inborn biological development. That is child is born biologically equipped to make a variety of motor response<sup>1</sup> which provide them with the frame work for the thought processes that follow.....” (Simatwa, 2010, p.366). But by the progression of time the above point of view has been proved false by a number of critics. it is described

<sup>1</sup> Motor response: During the Sensory motor stage children develop simple motor skills and change their behavior in response (Piaget, 1976, p.1-3).

by the critic that, Cognitive development signifies the process of acquiring intelligence and increasingly advanced thought and problem solving ability from infancy to adult hood which they adapt not only by birth but also from his/her surrounding society and culture (Mello, 2012, p.129).

### **2.3 Theory of vague explanation**

A number of psychologists have discovered that his cognitive theory provides vague explanation and the theory only provides much explanation rather than its realistic application (Campbell & Bickhard, 1986, p.382). Regarding this point another criticism of Piaget's theory argued that, "Piagetian stages describe age related cognitive changes well but have no explanatory power and one needs to a) describe the fact, b) identify its antecedents, and c) measure the antecedents independently of the fact to explain" (Brainerd, 1978,p.56). Furthermore, in Piaget's theory language leaning had no explicit place and it was considered as unnecessary factor of development (Piaget, 1967, p.13). That is why his theory seems paradoxical to the critics (Machado, 1996, p.154).

### **2.4 Criticism on Piaget's 4 stages in cognitive developmental theory**

Piaget's age norms are greatly criticized because his age norms are not confirmed by the data rather it is a wrong idea about his stage theory (Cruttend, 1979, p.146). In Piaget's cognitive developmental stage children of 2-7 years old children are in a specific stage that is pre-operational stage. However, recently modern brain science research has discovered that human brain developed in several stages from birth to age around 20. But significant development of their brain occurs during their critical

period that occurs from birth to age 3, from 5 to 7 and from 9 to 11 (Abiko, 2002, p.163).

Piaget's aforesaid cognitive stages are criticized by the contemporary critics. By emerges of new psychologist his stages are criticized greatly. They challenged Piaget's cognitive developmental stages and defined his stage problems. They think developmental stages of a child are not fixed and it does not progress in a smooth manner rather it is a gradual process.

Moreover, Piaget's stages are not chronological rather independent. It is natural that there must be a relation with earlier stag to later stage. But Piaget did not mention this in his developmental stage theory. Hence, he neglected the importance of culture response which is one of the most important component for the progression of child psychology (Hensen and Zambo, 2005, p.43). Children are capable in understanding certain concept in one situation if they are unable to use them appropriately in some other situation. According to Vygotsky (1978), Piaget's theory has no information on social context which is very important for the early speech of a child. Hence, children learn language to express their thoughts with the contribution of the people of their society and their language learning process is controlled by their parents and surroundings but not naturally or by their fixed age (Abiko, 2002, p.160-161). Socio-cultural in understanding is more important which is completely neglected. A child learn language and behavior through interaction from the society but not genetically (Cruttenden, 1979, p.110-111).

In future, Piaget's stages are greatly observed by a well-known Japanese researcher they are described below.

First of all they found that, Piaget's stages are distinct and independent from each other. The previous stage cannot be separated from the later stage, some character still remains.

Moreover, his stage failed to explain development in intellectual and affective or moral sphere rather than only showing the changes in cognitive development.

Last but not least, the effectiveness of these stages has remain hypothetical and recently based on Eastern Philosophies new sort of area interestingly evolving based on the Developmental stages

(Abiko, 2002, p.163-166).

## **2.5 Focused group**

For the purposes of this study the thesis paper will focus chiefly on one of the four stages, that is Pre operational stage. After observing sequences of play Piaget found that, towards the end of the second year a new kind of psychological change occurs in child's mind which occurs in between the age of 2 to 7 years old and that is known as Pre-operational stage. Piaget thinks that there are certain things that a child of this stage or Pre operational stage is unable to do. He uses the term "operational" to refer to disability of physical or mental action like, adding or subtracting, confuse appearance and reality (Abiko, 2002, p.163-165). It can be said that (Pre) Operatory thought is any procedure for mentally acting on objects (Valencia & Suzuky, 2011, p.411-413).

### 2.5.1 Characteristics of Piaget's Pre-operational stage:

It is already mentioned above that in Piaget's theory the Pre operational stage occurs between 2 to 7 years old. He has identified some characteristics of pre operational stage. The hallmark of the preoperational stage is explained below;

**Think in non-logically manner:** Children of this stage thinking in a non-logically manner that is they do not have the capability of thinking rationally. Piaget (1967) felt that children were not intellectually capable as their perception was dominating the way they saw situations.

**Imaginative:** They are also imaginative. Piaget (1967) thinks that at this stage child's thinking is influenced by fantasy. They imagine things which do not exist in practical world.

**Magical thinking:** Children think that magical things happen in real world. They believe that witch, superpower exist in this world.

**Egocentrism:** Their thinking known as egocentric because they look at any object on their own point of view rather than the others. That is Egocentrism occurs when a child is unable to distinguish between their own perspective and that of another person's. At this point they tend to pick their own view of what they see rather than the actual view shown to others (Piaget, 1967,p.13).

**Animism:** It is also a characteristic of the Pre-operational stage. When a person has the belief that everything that exists has some kind of consciousness and they have feelings like human being. An example of this is that children often believe that a car won't start because it is tired or sick, or they punish a piece of furniture when they run into it, because it must have been naughty to hurt them. The reason for this kind of

attitude is that the Pre-operational child often assumes that everyone and everything is like them. Therefore since the child can feel pain, and has emotions, so must everything else.

More over, children cannot focus or understand the concept of height while concentrating on the width and are not intellectually capable. During this age children are also learn to imitate or repetition. They are able to form stable concepts as well as mental reasoning and magical beliefs. Their verbal and written language gets matured (Piaget, 1967, p.13). Piaget believed that there were many limitations to the way children will think during this stage. Apart from these, Piaget thinks that there are so many things they can not do one of them is that children cannot focus or understand the concept of height while concentrating on the width (Heatherly & Ann, 1974, p. 4-5).

### **2.5.2 Critical viewpoints about Pre operational stage:**

The mentioned characteristics of pre operational stage became a topic of criticism at the present era. A number of critics have discussed critically about this age they are described below.

From the research of brain science it is found that the second stage begins from age 5 to 7 certain features of behavior are noticeable; memorizing, speaking, listening, dancing, singing and so on. All these features help to develop their skills to be mastered by imitation and repetition. Children also begin to think in words and images

(Abiko, 2002 , p.163).

Piaget thinks that there are certain things that a child of this stage is unable to do. He uses the term "operational" to refer to reversible ability of physical or mental action, like adding or subtracting (Hensen and Zambo, 2005, p.43). Moreover, Piaget continued to characterize Preoperational stage as not capable of conservation, class inclusion (Piaget & Szeminska, 1980, p.4 ). On the basis of the mentioned points many critics claimed that Piaget's portrayed student of preschool students as incompetent and illogical. Critics found that children of 5-6 years are capable of deductive reasoning

(Machado, 1996, p.147).

The other critic discovered, that children of pre operational stage are not completely detached from their early stage, that is why some times they don't bother about their pronunciation problem but later they recover it from their class mates .(Zittoun, Mirza& Perret-Clermont, 2007, p.66).

Other researchers have claimed, contradictory Preoperational stage, that 5-6 year old children are already capable of conditional and syllogistic reasoning and also capable of deductive or formal thinking, numeric reasoning, class inclusion, conservation (Machado, 1996, p.145). After discovering these characteristics of pre operational stage researcher found Piaget's stage description, strongly underestimated the competence of Preoperational stage and questioned "Is pre operational thought really preoperational" (Gelman & Baillargeon, 1983, p.172)

Development does not always progress in the smooth manner because children of same age may have difference in intelligence, attitude , thought depending on surrounding. According to new Brain Science research, distinct intelligence is determined by the individual's social background which is related to his or her cultural, racial and gender origins (Abiko, 2002, p.167).

### **2.5.3 New concept on developmental stage from the research of Brain Science:**

It is found that at the first stage, from birth to age 3 a child develops essential senses like seeing, speaking, listening, touching, moving and walking ability . Then in the second stage (5 to 7), the child develops further by imitation and repetition like singing, memorizing, dancing. Moreover, he/She begins to think sometimes logically/illogically and imaginatively, learn to think words and images have analytical thoughts, learn naturally and spontaneously. They tend to become very curious and ask many questions. And at this age they turn into a basic human ability (Abiko, 2002, p.163-165).

Hence, at this stage children develop thinking capability and get interest to think, discuss, debating, analyzing. Moreover, logic, rules, creativity, will, appreciation involve progressively. All these developmental stage are the consequence of interaction between psychological growth in brain and the stimuli from the external, environmental changes

(Abiko, 2002, p.163).

### **2.5.4 Importance of social and cultural development in child psychology:**

Piaget's theory stressed social factors are not sufficient but necessary for cognitive development that is why he has confessed his misjudgment. According to him "Society is the supreme unit and the individual can achieve his inventions and intellectual constructions only to the extend that he is the seat of collective interactions whose level and value depend obviously on society as whole" (Machado, 1996, p.150). Piaget's negative attitude towards the importance of social and cultural context has been criticized greatly. That is, a child develops not in isolation but through relationships within the family, neighborhood, community, and



society. This socio-cultural understanding of learning and development underpins this paper. Early childhood care and education has been challenged by a theoretical searching that has seen individualistic developmental explanations for learning and development replaced by theories that foreground the cultural and socially constructed nature of learning (Anning, Cullen & Flear, 2004, p. 1). It can be said that cognitive development is inseparable from social and cultural contexts.

**Physical development:**

It occurs when at this stage they begin run, jump, hop, in doing so become increasingly aware of their body and the space surrounding them. Moreover, balance develops to the point that they begin such culturally specific activities as riding a bicycle, using play ground and play with the neighbor children and learn to communicate with them

(Hansen & Zambo, 2005, p.43-44)

**Psychological Development:**

Distinct intelligence is determined by the individual's social background which is related to his or her cultural, racial and gender origins. The background also determines his or her greater or lesser propensity for school learning, as because his prior knowledge is responsible to learn new lesson (Ausbel, 1968, P.324). In addition, communication is a source of producing knowledge "by making use of language to achieve their ends, children have more than mastery of a communication code; they negotiate procedures and meanings and when they do this, they are learning the path of culture as well as the path of language" (Alves et. al., 2007, p.328). That is children come to learn how to communicate with other from their social and cultural environment but not by born which is illogically mentioned in Piageis theory (Heatherly & Ann, 1974, p.4-5). Young children are curious and willingly involved in

their own learning but Vygotsky (1978) find that social contribution plays more important role rather than their self-initiated discovery. That is social environment let the children learnt how to approach and how to suit in the environment like other dose.

**Role of school environment:**

A child's intelligence is developed by the schooled way of thinking. They also learn what is right or wrong from the school. Children learn how to behave with the people of distinctive ages from the society which is not possible to achieve genetically (Valencia & Suzuky, 2011, p.411-413). Moreover, individual intelligence is determined by individual's social background including children's cultural, racial and gender origins (Mellow, 2012, p.129). Hence, children's social intelligence developed in school where they learn practically how to behave with students teachers and others (Valencia & Suzuky, 2001, p.5-6).

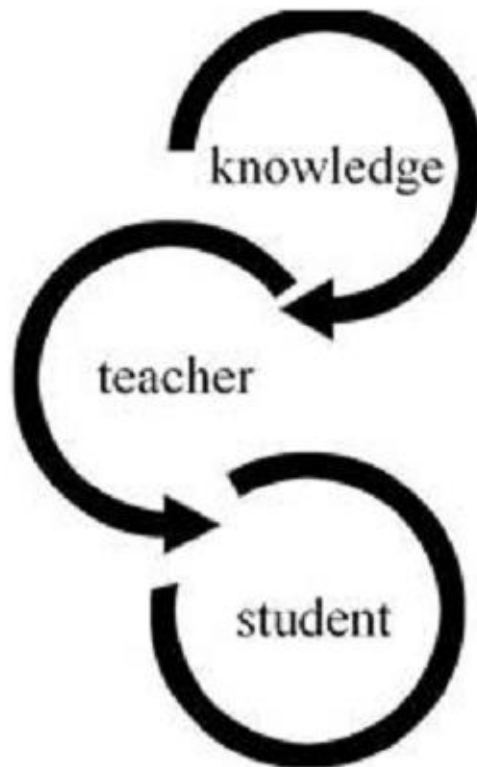


Figure2: Vertical diagram of knowledge-teacher-student relationship.

(Mello, 2012, p.128)

#### **2.5.4.1 Role of teachers for the cognitive development :**

At the Preoperational stage teachers' role is the most important because repetition and imitation is one of the characteristics which student follow. At this point they will try to do and follow as their teacher behave and teach them. That is why teacher has to be always concern about each of the students behavior and teach them discipline and manners at the beginning of the school. More over, teacher prepares the lesson instructional material based on student's prior knowledge. That is why manner of discipline comes to recognized by the student from the school (Mello, 2012, p.1127-132).

Further more, Individual intelligence is determined by the background of culture and surrounding environment and teacher plays the role like guardian to provide student

appropriate knowledge. To enriching knowledge and develop child's psychology teachers have to be very concern about books selection and other materials. For the better understanding books with picture is worth a thousand words would apply because picture will help students to learn better by visualizing and understanding the points. And Piaget's theory would have more enrich if he used picture words in his theories

(Hansen & Zambo, 2005, p.40).

Vygotsky (1978) also stressed children's active role in human development. Unlike Piaget, he believed that children's development arises from the child's attempts to deal with everyday problems. Furthermore, in dealing with these problems, the child always develops strategies collectively—that is, in interaction with others. According to Vygotsky (1978), “every function in the child's development appears twice: first on the social level and later on the individual level.”

Further more, unlike Piaget's theory that a child development must necessarily go before their learning which is criticized by Vygotsky (1978). To him social and cultural development is important for learning. Therefore, Vygotsky defense Piaget's theory of cognitive development and gave more emphasize on contributing cultural shaping, social factors and chiefly emphasis on the role of language in cognitive development (Vygotsky, 1978, p.50). Moreover, children learn much more through social interaction with skillful tutor like parents or teacher. He also looks at children's development that through education teacher teachers systematically impart ideas, concepts and behaviors that children need to be successful in school (Vygotsky, 1981, p.146-145). In addition, he believes that a child who is unable to acquire certain

knowledge, be able learn with the help of ZPD<sup>2</sup>.The zone will depend on culture, society and experience. It is the area in which learning and cognitive development can take place. It focuses on cognitive processes that are still developing. To be successful as a teacher, there must be a joint activity that creates a context for students and expert interaction. Vygotsky's (1978) ZPD is the media where the student can perform better with the guidance of active teacher.

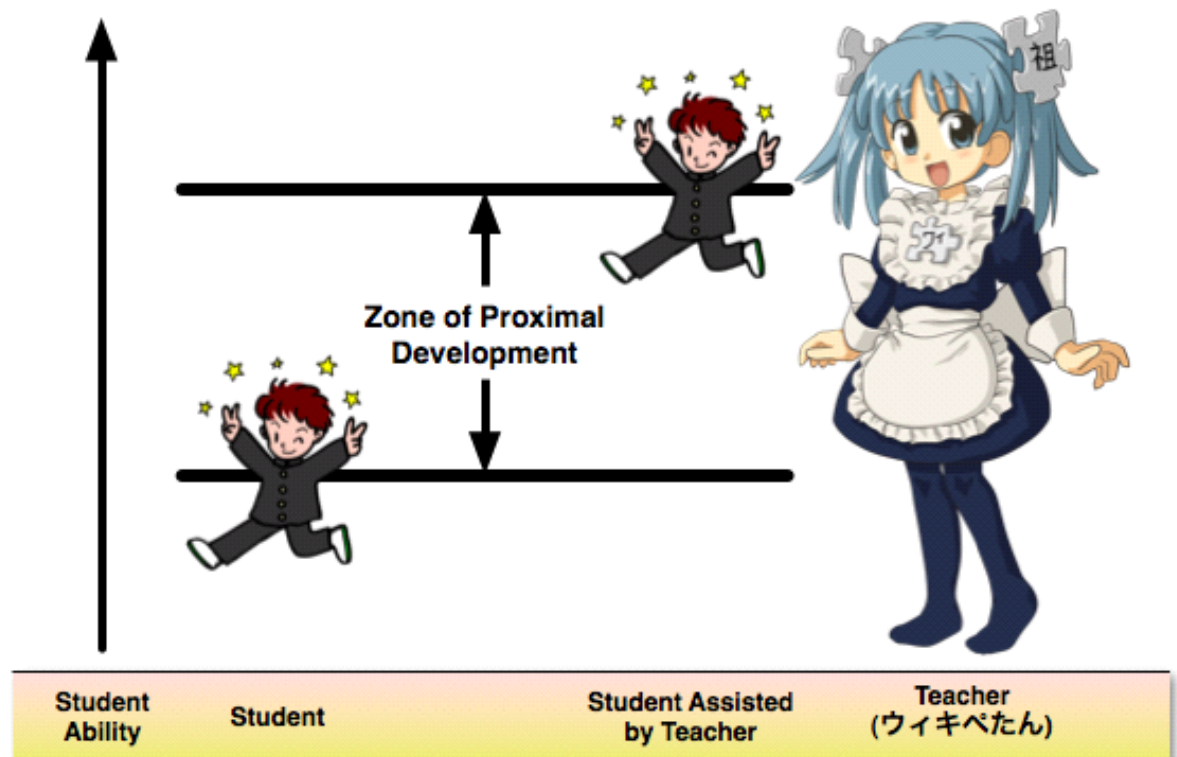


Figure3: Vygotsky's ZPD (Vygotsky, 1981, p.156).

<sup>2</sup> ZPD: Zone Of Proximal Development, which depicts a range of abilities that a student can perform with the guidance of teacher, but cannot yet perform independently (Vygotsky, 1978, p.33).

#### **2.5.4.2 Role of parents:**

During the pre operational stage a child's level of social adjustment depends on caring adults/parents who allow them to make choices and learn from their mistakes. Parents guidance is important to children with their words of encouragement and support. Children who have this support can achieve adversity and learn what is right and what is wrong (Wearn & Smith, 2003, p.209). At first basic guidance comes from the parents and then teacher guidance. For this reason each and every children of similar age are different from each other by nature unlike their parents and their way of learning. As a result it can be said that, parents also plays a very important role to teach their children about how to live in the society and how to adopt their customs and culture.

Although Piaget's stages have been criticized by several critics and researchers but it also true that his theory is not completely neglect able. He tried to establish a new form of developmental stages of child psychology and that is why his theory is still remarkable in the history of child psychology.

## **Chapter-3: Research Methodology**

### **3.0 Introduction**

This chapter presents an over view of the research methodology to find out the condition of Piaget's pre operational stage of 5-7 years old students of English medium school in Bangladesh.

### **3.1 Research design**

For the data collection both qualitative and quantitative analysis were applied. Thus, in this paper mixed method research approach has been selected for data collection and analysis. According to John Creswell, "Mixed methods research is a research design (or methodology) in which the researcher collects, analyzes and mixes (integrates or connects) both quantitative and qualitative data in a single study or a multiphase program of inquiry" (as cited in Johnson, Onwuegbuzie & Turner, 2007, p.120). Mixed method helps to analyze data in all possible ways. It provides a broader perspective of the study and helps the researcher to assemble a deeper understanding of the fact of interest. Thus it is becoming increasingly a part of research practice and also taking place of the third major research approach along with qualitative research and quantitative research (Johnson, Onwuegbuzie, & Turner, 2007, p.119).

The paper will mainly emphasize on quantitative data analysis as the participants are very young age of 5-7 years old and will be able to give quantitative data easily.

### **3.2 Theoretical framework**

According to Piaget (1976), children of this particular age are not capable of thinking logically, egocentric and they are imaginative and they don't need social cultural knowledge for their cognitive development. In addition, his theory depicted pre operational children as they are not able to express their views other than their own, then they are not intellectually capable (Cruttenden, 1979, p.110-112).

But it is found from the researchers and critics view that Piaget's theory about the psychology of pre operational stage children is illogical. Rather, from this stage their logical thinking capability gradually improves. Besides, they come to learn new things from their surroundings (Mello, 2012, p.1127-132 ). Importance of Social and cultural development has been clearly neglected in Piaget's theory. Critic Murry says "Paiget's epistemic subject has no social class, sex, nationality, culture or personality" (Murry, 1983, p.231). On the contrary, Vygotsky (1978) opposed Piage's neglecting view and explained that the importance of social and cultural development has been emphasize greatly on contributing cultural shaping, social factors and chiefly emphasis on the role of language in cognitive development .

### **3.3 Participants**

To conduct the survey 3 schools were selected. For better understanding 3 schools were named in 3 groups; A, B, C group of school. Total 60 students were selected from these three schools. These students were selected from three different English medium schools. All the participants are the students of KG-I and they are about 5 to 7 years old who are well-fitted to pre operational stage. The survey conductor visited all the participants and they were requested to complete a survey questionnaire. All



the participants were very young so the instructions were given before fill up the questionnaire. Each of the questionnaire paper was filled up one by one student at a time.

### **3.4 Setting**

The survey settings of the students were formal. Students were in the class, at the break time each of the students are requested to fill up the questionnaires. Teacher also instructed students how to fill up the questionnaires before supplying the papers.

### **3.5 Instrumentation**

To conduct the survey a questionnaire and classroom observation were used as research instrument for this study. Questionnaire is the easiest way of collecting quantitative data and it allows the researcher to get a huge amount of data from a large number of subjects in the cheapest and fastest way. Questionnaire provides qualitative data for the student and classroom observation provide qualitative data for the study.

### **3.6 Data collection procedure**

It should be noted that, as my participants are not skilled enough to understand the entire questionnaire in Second language, that is why students were asked questionnaire by using mixed language- English and Bengali both. As mentioned above, data were collected from same group of students of KG-I from three distinct English medium schools. There were total 60 students from the aforesaid schools.

For data collection, the survey conductor contacted the authority of those schools. They gave permission to conduct the survey and was allowed to observe the class and asked them questions.

To administrate the survey 18 quantitative questionnaire were prepared for the students. Besides, class room observation also took place to watch carefully teacher's teaching practices and student actions in the class.

### **3.7 Data analysis procedure**

The collected data was analyzed using quantitative method. The results of the questionnaire were turned in to percentages. Data was arranged in a table created by MS Word of 2007. In addition, in findings and analysis part, graph has been used to demonstrate the actual psychology of pre operational students of Bangladesh.

### **3.8 Obstacles encounter**

At the quantitative questionnaire sessions it was a challengeable task for the survey conductor to manage their time. She had to take each of the student's data at a time because, for this particular age of students oral instructions became sometimes unable to understand. That is why it was time consuming to some extent. Few students were districted because of long length of the questionnaire. To make them concentrate I had to convince them that if they answer all the questions then they will get stickers and chocolate.

## Chapter -4: Findings and Analysis

This section of the paper will present the results and findings of the study.

### 4.1 Data collection

The table-1 below is designed to show qualitative questioner and the percentage of students feed back. It is already mentioned that three school students were participating in questionnaire session to find out learners opinion. Each of the schools is named in 3 groups -A, B, C for better understanding of data collection.

	3 schools								
	A			B			C		
Questionnaire for students (Quantitative)	Ye s %	No %	So m e t i m e s %	Yes %	No %	So m e t i m e s %	Yes %	No %	So m e t i m e s %
1. Do you like to watch cartoon?	95	0	5	95	0	5	100	0	0
2. Do you think that your favorite cartoon characters can help you to get a good result with their <b>magical power</b> ?	25	75	0	15	85	0	20	80	0
3. Do you believe in ghost?	80	20	0	90	10	0	85	15	0
4. Do you think that ghosts in the T.V are real?	20	70	10	15	85	0	20	75	5

5. Do you think that Superman/ Spiderman can fly you like them?	35	65	0	25	75	0	30	70	0
6. Do you like toys?	80	15	5	95	0	5	90	5	5
7. If yours toys (doll/Car/robot) one of their parts get break down. Do you think they will get hurt like us?	15	85	0	20	80	0	25	75	0
8. If you get hurt by a table/chair. Do you think that table /chair must have been naughty to hurt you?	0	100	0	10	90	0	5	95	
9. Bear have teeth and they eat like us. Can bear read like us?	15	85	0	5	90	5	15	85	0
10. Plants have live and we give water and food to feed them. Can plants see like us?	10	90	0	75	25	0	95	5	0
11. If your classmate have chocolate with him/ her and gave every-one except you because there is no chocolate left. Now will you be angry with him/her?	90	10	0	75	25	0	95	5	0
12. When you watch T.V at home and if your sister/brother/mother/father asks you to change the T.V channel will you change it or no?	10	80	10	20	75	5	15	60	25
13. Do you like to attend on cultural program in you school?	95	0	5	90	5	5	85	15	0
14. Do you know about our cultural program like Eid / Puja festival, Pohela Boishak, 21 February?	90	10	0	90	10	0	85	15	0

15. Does your teacher explain to you that why do we celebrate these days?	95	0	5	90	0	10	95	0	5
16. Do your parents explain to you that why do we celebrate these days?	100	0	0	100	0	0	95	0	0
17. Does your teacher teach you how to talk to your class mates and others?	100	0	0	95	0	5	100	0	0
18. Do your parents teach you how to talk to your class mates and others?	95	0	5	95	0	5	100	0	5

**Table1: Students response to the questionnaire**

From the above Table-1, first 1-5 numbers of questions are prepared to find students intelligence and their imaginative thinking. Then, 6-8 questions are selected to analyze their animism characteristics. Number 9,10 are about to figure out their logical thinking capability. Question 11-12 are to get information on their ego-centric attitude. Last 6 questions that is, from 13 to 18 are related to social and cultural knowledge its learning sources.

## 4.2 Findings

In the finding parts the questionnaire will be discussed successively. While discussing the questionnaire the evolving themes from the questions will be explained. Mainly the questionnaire is involved with the information about the participants' psychology. From each questions we will come to know the average opinion of the 60 participants. The results of the questionnaire were turned in to percentages in Table-2 below.

Questionnaire for students (Quantitative)	Out of 60 Students		
	Yes %	No %	Sometimes %
1. Do you like to watch cartoon?	99.6	0	3.3
2. Do you think that your favorite cartoon characters can help you to get a good result with their <b>magical power</b> ?	16.66	80.0	0
3. Do you believe in ghost?	85.0	15.0	0
4. Do you think that ghosts in the T.V are real?	18.33	76.66	5.0
5. Do you think that Superman/ Spiderman can fly you like them?	23.33	70.0	0
6. Do you like toys?	88.33	6.66	5.0
7. If yours toys (doll/Car/robot) one of their parts get break down. Do you think they will get hurt like us?	20.0	80.0	0
8. If you get hurt by a table/chair. Do you think that table /chair must have been naughty to hurt you?	5.0	95.0	0
9. Bear have teeth and they eat like us. Can bear read like us?	11.66	86.66	1.66
10. Plants have live and we give water and food to feed them. Can plants see like us?	8.33	88.33	1.66

11. If your classmate have chocolate with him/ her and gave every-one except you because there is no chocolate left. Now will you be angry with him/her?	86.66	13.33	0
12. When you watch T.V at home and if your sister/brother/mother/father asks you to change the T.V channel will you change it or no?	15.0	71.66	13.33
13. Do you like to attend on cultural program in you school?	90.0	6.66	1.66
14. Do you know about our cultural program like Eid-/ Puja festival, Pohela Boishak, 21 <sup>st</sup> February?	88.33	11.66	0
15. Does your teacher explain to you that why do we celebrate these days?	91.66	0	6.66
16. Do your parents explain to you that why do we celebrate these days?	98.33	0	1.66
17. Does your teacher teach you how to talk to your class mates and others?	98.33	0	1.66
18. Do your parents teach you how to talk to your class mates and others?	95.0	0	5.0

**Table 2: Response to the questionnaire from average students**

#### **4.2.1 What to find from the questionnaire**

The above questionnaire is prepared to find out whether the Bangladeshi students are egocentric, imaginative and do they have the characteristics “animism” as Piaget

(1967) described in his Pre operational stage. Also, how much capable they are in hanging logic at this stage will be discovered. Moreover, finding part will also reveal where they get knowledge about their social and cultural act.

#### **4.2.2 Analysis relating to the Piaget and other critics theories**

It is clearly described in Piaget's theory that children of pre-operational stage are imaginative and have magical thinking and cannot think logically (Heatherly & Anna, 1974, p.2-3). However, after analyzing the question 1 and 2 (see Table-2) have been proved wrong because Bangladeshi students are capable to think logically and they do not have imaginative thinking in practical judgment. Moreover, in question no-4(see Table-2) it has been discovered that Piaget (1967) stated that, at this stage child's thinking is influenced by fantasy but it is not true in all circumstances which have been clearly notified after the data analysis. In addition question 6,7 and 8 are mainly tries to investigate whether the children of Pre operational stage have the characteristics of animism or not. Piaget has described about the characteristic of "animism" when a child assumes that everyone and everything is like them. Therefore, the child can feel pain, and has emotions, so must everything else (Piaget, 1967, p.13) but after collecting data, Piaget's theory was proved wrong. At this age they have the realization that toys or furniture has no feelings like human being. From the data it is clear that Bangladeshi children of pre operational stage do not have the characteristics of "animism" which was mentioned in Piaget's theory wrongly. For his wrong judgment about child psychology his theory was criticized greatly by questioning "Is pre operational thought really pre operational" (Gelman & Baillargeon, 1983, p.172). In the next questions 9 and 10 (see table-2), participants were asked logical question. Piaget (1967) think that, children of this stage thinking in



a non-logically manner that is they do not have the capability to thinking rationally. To find the truth of Piaget's logic the above questions were being asked to the participants. The analysis disclosed that students have the capability to think logically in some extent. However, 11 and 12 no questions are concerned with the egocentric attitude of the participants. Egocentrism or Egocentric is the characteristics of a child of pre operational stage when they look at any object on their own point of view rather than the others (Piaget, 1967, p.12). But the after analyzing the questions proved that Bangladeshi children are egocentric and still can't think from others point of view yet which is depicted in Piaget's stage theory (Heatherly & Anna, 1974, p.3).

Furthermore, cognitive development depended on children's social environment which has been neglected and did not mention its significance in Piaget's theory (Cruttenden, 1979, p110-111). So after analyzing questions 13-18 it has been found that students are conscious about their social and cultural knowledge which is very necessary for their cognitive development. According to Vygotsky (1978) social and cultural approach is necessary for the cognitive development of a child but Piaget overlooked these two important aspects in his cognitive developmental stage. Moreover, critics also said about the source of socio-cultural knowledge that; individual intelligence is determined by the background of culture and surrounding environment and teacher plays the role like guardian to provide student appropriate knowledge (Mellow, 2012, p.129).

#### **4.2.3 Overall analysis based on questionnaire**

In this part single questions from the table-2 will be described.

In response to question no-1(see table-2) it was found that from all the participants 98.35 % like to watch cartoon mainly because their favorite cartoon character (Doraemon / Ben-ten/ Poke-mon) can do what ever they want and apply magic/ power to solve any problem. On the other hand only 3.3% students do not like to watch cartoon because they love to play in computer games, reading story books and play instead of watching cartoon. It reveals that Piaget pointing out about children of this age have magical thinking.

But from question no-2 (see table-2) it more interesting result found that, 16.6% participants believe that their favorite cartoon character have real magical power and can help them to get a good result. On the other hand, 80% majority participants do not think that their preferable cartoon character can help them to get a good result with their magical power because all the characters doesn't exist in their real life. They show logic that cartoon always remain in the T.V and it is only possible to watch these characters through T.V. But they do not know the reason.

From the above results of two questions, depicts that Piaget's theory about Pre operational stage are not completely acceptable for Bangladesh students because children can better understand that magical power does not exist in this practical world.

Question number 3 and 4 (see table-2) are chosen to identify whether the participants thinking are imaginative or not. So, from the collected data analysis of question -3, it shows that 85% children afraid of ghost and they believe that the ghost does exist in this world. More over, they also think that they have seen ghost around them. In contrary, only 15% children do not believe in the existence of ghost.

The next question (4) provides significant data that, 18.3% participants believe that ghost in the T.V are real and 5% believe that sometimes ghosts in the T.V are real. Nevertheless, 76% think that ghost in T.V are not real. Although they look frightening but they are human being like us.

From the above results of these two questions it shows that Bangladeshi children are imaginative in certain point of view. Apart from this, the result also proves that their thinking capability is advance more than Piaget's description. Their intelligence and commonsense works properly and able to understand what is true and what is imaginative thinking.

To get more information about their imaginative believe question no 5 (see table-2) was selected. From the majority opinion it indicates that, 76 % students do not believe that Superman/ Spiderman can fly them. They know that these characters are not able to fly in real life then how can they help others to fly. On the other hand, 23.3% students live in the world of imagination who thinks that these super heroes can fly them.

Question 6,7 and 8 (see table-2) are mainly tries to investigate whether the children of Pre operational stage have the characteristics of animism . So, students are being asked about whether their toys get hurt if one of their parts broke down. About 80% students say that their toys will not get hurt because toys are not human being. Moreover, 20% students believed that toys get hurt if one of their parts broke down.

In response to the question number 8, only 5% participants still believe that they get hurt by table/chair. Nevertheless, 90% participants confidently said that furniture can not hurt them willingly because of their carelessness they get hurt by themselves.

From the above data it is clear that Bangladeshi children of pre operational stage do not have the characteristics of “animism” which was mentioned in Piaget’s theory wrongly.

In this part of questions, 9 and 10 (see table-2), participants were asked logical question. To find the truth of Piaget’s logic the above questions were being asked to the participants. It was found from the question no 9, 11.66% participants think that bear can read like us because they saw bear to read in the T.V. Hence, 1.6 % says sometimes bear can talk and read like us. On the other hand, 86% participants answered “No” because they think bears are not like us and they are animal so they can not read like us.

From the next question it was detected that only 8% students can not answer logically as they believe that plants can see like us and 1.6% think that sometimes plants can see. In addition, 88% students confirmed that although plants grow up and take foods but they can not see. Most of the students come to know about this from their school and also from their parents.

Questions no 11 and 12 (see table-2) are chiefly concerned with the egocentric attitude of the participants. From these two questions only 13.33% and 15% students considered the situation because they not only think on their own point of view but also try to think from others point as well. Apart from this, interesting answer revealed from this data analysis that, 86% and 71% students think only from their

own point of view that is why their opinions were individual. Some students think that he did not give it willingly. Moreover, they also comment ‘if he/She gave me at first then I will get it.’ He did it willingly because he don't like me", “why didn’t he bring more chocolates”. Hence,13.33% students say sometimes about it.

Piaget’s theory stressed social factors are not sufficient but necessary for cognitive development from this reason his theory was a point of criticism toward the critic (Machado, 1996, p.150). Questions 13 and 14 (see Table-2), are associated with children’s knowledge about social and cultural awareness. It is found from the data analysis that 90% student like to attend in the cultural program. But 6.6% students have no interest in attending cultural program. The reason identified that their family do not let them to attend in any program. The other 1.6% liked to attend in the program sometimes.

Cognitive development depended on children’s social environment which has been neglected and did not mention its significance in Piaget’s theory. But it is important to know about culture and social aspects by the children that is why Q.14 (see table-2), was asked the participants. 11.6% students do not have idea about their culture and social aspects. Nevertheless, 88.3% students are aware of socio-cultural knowledge.

Denoted questions 15 and 17 (see table-2) are selected to point out teacher’s role in developing social and cultural knowledge. In Q.no.15, students about 91.6% know about their socio-cultural information and only 6.6% have a little idea because they think teacher explain these sometimes. On the other hand, teacher’s influence on developing social behavior will be identified from the Q.17 (see Table-2) The data analysis detected that,1.6% think that sometimes teachers tell them about social behavior but not most of the time. However, 98.3% students come to know about the social behavior from their teacher guidance. It can be said that teacher’s role are very

important to guide the students, let them aware and recognized about the culture and society of Bangladesh. From the preceding questions 16,18 role of parent in developing social and cultural thinking has been identified.

From, Q.16 (see Table-2) 98.3% participants agreed that their parents are aware of cultural and social thinking. But 1.6% participants said that their parents have a little idea because they think their parents explain these sometimes. Therefore, from the last Q.18 (see Table-2) data analysis detected that, 5% participants think that sometimes parent tell them about social behavior but not most of the time. However, 95% participants come to know about the social behavior from their parental guidance.

From the above discussion it can be said that students are capable of social as well as cultural thinking because they come to know about it from their parent and teacher guidance.

#### 4.2.4 Answer to the central research questions:

This part will chiefly discuss about the final findings of the central research questions.

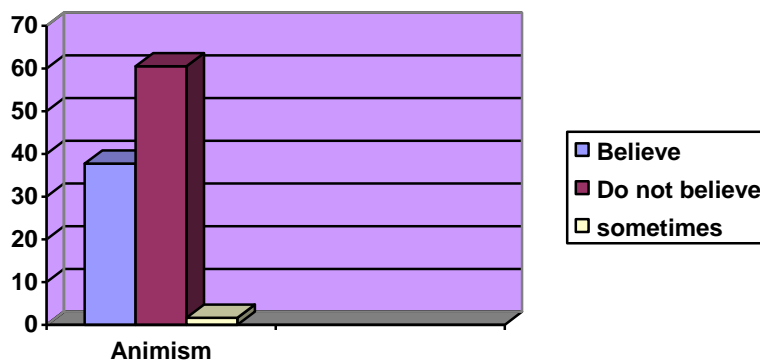
#### 1. Are the Bangladeshi students imaginative according to Piaget's pre operational stage?



Chart 1: Imaginative thinking in practical task

In Piaget's theory it has been described that children of pre-operational stage are imaginative and have magical thinking and cannot think logically (Heatherly & Anna, 1974, p.2-3). From the above chart analysis it is as clear as day light that almost 53.88% students have the capability to differentiate real life and act of imaginative thinking in their realistic life .On the other hand, 44.44% students accept it as true tht imaginative act happen in present world and 1.66% sometimes believe it. So it can be said that, Bangladeshi children are not as imaginative in all circumstances as Piaget asserted in his pre operational stage theory. Moreover, 56.66% children of this stage love to watch magical things but they can also understand that this magical power will not help them practically. And only 1.66% children sometimes think magical thing happen.

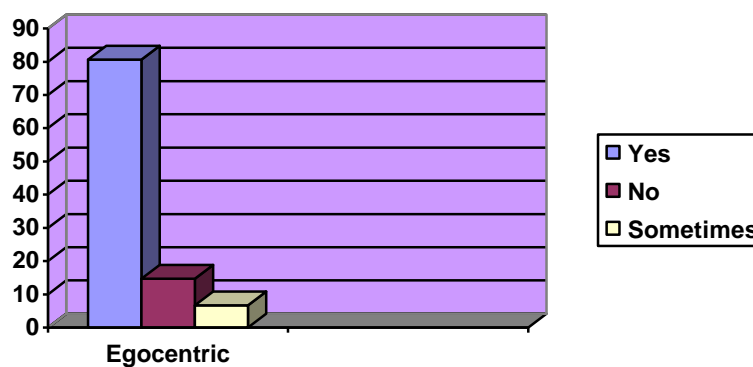
## 2. Is the characteristic of “Animism” of pre operational stage suitable with Bangladeshi students?



**Chart 2: Believe on the presence of “animism”**

Piaget described “Animism” as during pre operational stage child assumes that everyone and everything is like them. Therefore, the child can feel pain, and has emotions, so must everything else (Piaget, 1967, p.13). But the aforesaid chart displays that, 60.55% Bangladeshi children have the capability to identify the living and nonliving things at this age. In addition, 33.77% children also believe that nonliving things also can feel pain, and has emotions like them and 1.66% sometimes think that nonliving things has feelings.

### 3. Are the Bangladeshi students of pre operational stage “Egocentric” according to Piaget’s theory?



**Chart 3: Presence of egocentric characteristic**

Egocentrism or Egocentric is the characteristics of a child of pre operational stage when they look at any object on their own point of view rather than the others (Piaget, 1967, p.12). After collecting data an interesting data can be seen that is only 14.16%



Bangladeshi students considered the situation because they not only think on their own point of view but also try to think from others point as well. Apart from this, 86% students think only from their own point of view that is why their opinions were individual. The above graph also asserts that Bangladeshi children are mostly egocentric at this age and still can not think from others point of view which is depicted by Piaget (Heatherly & Anna, 1974, p.2-3).

#### 4. Are the children of 5-7 years old capable of social and cultural thinking?



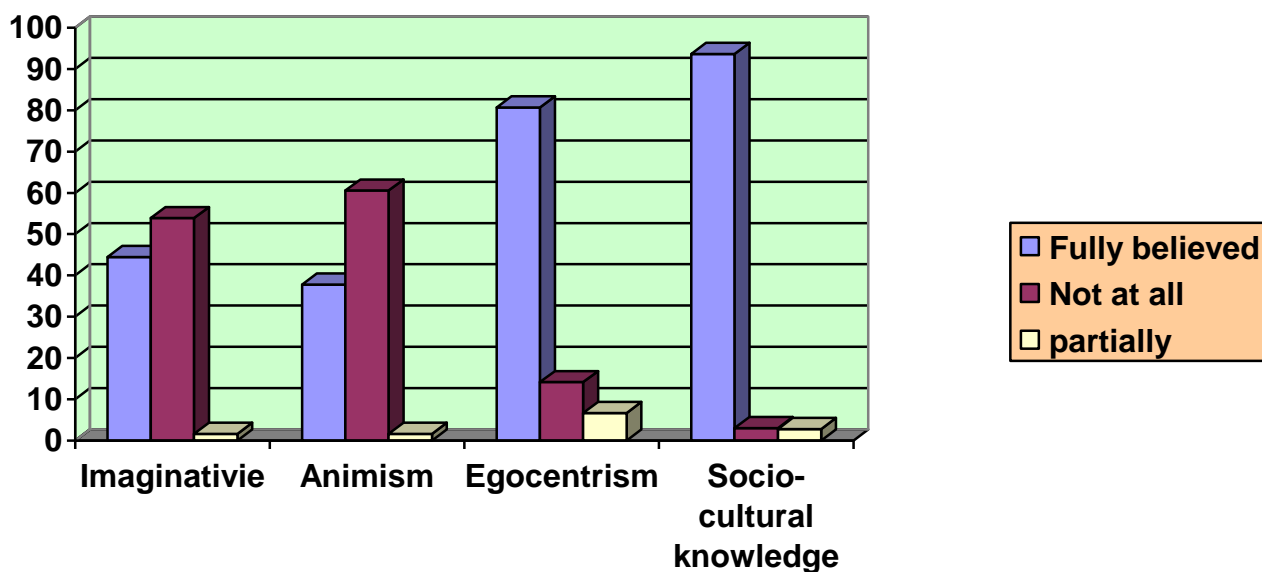
**Chart 4: Capability in social and cultural thinking**

The aforesaid chart shows that the capability of Bangladeshi children to know about social and cultural knowledge and the provider of these source of knowledge chiefly rely on their parent, teacher and the place where the children lives. The above data shows that 93.60% Bangladeshi students have the capability of social and cultural thinking mainly because their parents and teacher provides them systematic information towards their children. Further more, only 3.05% children are unable to

explain social and cultural context because they do not know. Apart from these, 2.77% said that their parent and teacher explain them about social and cultural aspect a very little. From mentioned point of view it can be said that the importance of social knowledge is inevitable and to gather information of socio-cultural knowledge role of parents as well as teachers has new no bound. It is said that children come to learn how to communicate and behave with other from their social and cultural environment but not by born which is illogically mentioned in Piaget's theory (Heatherly & Ann, 1974, p. 4-5). According to Vygotsky (1978), "every function in the child's development appears twice: first on the social level and later on the individual level."

#### **4.2.5 Overall findings from the data analysis:**

From the above findings of data analysis the major results are given below.



**Chart 5: Major findings from the data analysis**

The above chart shows that, Bangladeshi children have the capability to understand the difference between practicality and imaginative thinking. Moreover, they also understand the living and nonliving things. But there is a similarities found with Piaget theory that children of this stage are egocentric and a very few children have the realization to think others point of view. Last but not least, the above chart significantly shows that the Bangladeshi children have the capability of thinking their social and cultural context which is provided by their parents and teachers chiefly.

#### **4.3 Class room observation**

The main purpose of the study is to find out that the Bangladeshi children have affinity with pre operational stage which has been asserted in Piaget's cognitive

developmental stage. Thus, it is very important to observe the class to understand children as well as the teacher psychology practically.

During the class room observation the research conductor has selected 3 schools students of kg-I in English medium schools. To observe the activities of the students and teachers it took 5 days for each school observation. During the class room observation, the researcher was performed without informing the teachers and the students in advance. That is why it was done to collect data in natural setting. The complete process of what happen with in a regular classroom was followed carefully.

It has been found from the class room observation that especially boys like to play pretend themselves as if they are Superman / Spiderman and girls love to play with dolls at the break time. Moreover, at the running and playing time if they get hurt they do not blame the thing by which they get hurt. And this proved practically that they do not have the characteristics of animism at this age. Hence, it has also been observed that students do not want to listen to their class mates' opinion rather than believing in their own opinion. For example, one of the students wants to play outside the class room but the other student wants to play in side the class room and both of them do not wan to listen each other because of their egocentric attitude.

Further more, Piaget has completely neglected social and cultural importance which plays vital role for the development of children's psychology. From the above three schools observation it has been found that schools are very aware of developing students' social and cultural thinking. That is why various kind of programs take place on account of; Eid-party, Pohela boishak, 21<sup>th</sup> February, 16<sup>th</sup> December etc. All these programs are held to let the students know about what their culture is and what sort of role they should play in the society. Moreover, different kinds of students get together

in school and to let them know about discipline and social behavior teachers' plays most significant role. From this age they come to know about social behavior learnt by their teacher as well as from their classmates. In addition, all these students they have the capability of solving sums and puzzle which help them to develop their brain more active and matured. Besides, they are very much fashion conscious and can talk with logical explanation. After class room observation it is also discovered that all the students are very advanced in thinking as their teachers are very supportive for the progression of students' intelligence and good command in English language. What is more, Science fair, spoken English club, sports club, creative drawing class etc are offered for student's cognitive advancement. For this level of students Science class and "knowledge about Bangladesh" classes let the student aware of their social and cultural knowledge easily.

## **Chapter 5: Conclusion**

### **5.1 Summary of the findings**

After all the data collection and class room observation it can be said that, Piaget's most of the negative ideas about Pre operational stage has been proved wrong . It has been found from the research on English medium students of Bangladesh that, although students of Pre operational stage are imaginative in some parts but they also develop thinking capability and they have logical thinking capability. Moreover, they do not have the characteristics of animism rather they understand the differences between the existences of animate and inanimate objects. But egocentric attitude has been observed which is also mentioned in Piaget's theory. Therefore, significance of social and cultural aspect is unavoidable and Bangladeshi students are conscious about that fact and their school teachers and parents play great role on this context. From the schools they come to know about manner, culture and their parents play great role as well. That is why it can be say that, is not possible to overlook Piaget's ideas about characteristics of preoperational stage nor wholly acceptable in Bangladeshi context.

### **5.2 Practical implication**

The information gained from this study would be beneficial to individuals to publish houses which provide educational resources to student who are in this stage. Hence, the paper will help to understand that how does student learn to communicate in the society. Moreover, parents and teacher can be aware of children's egocentric attitude to guide the students to change their negative of behavior. Also, parents come to understand about the psychology of their children clearly and can be more conscious.

The paper also provides sufficient information about intelligence, social cultural behavior level of Bangladeshi students. Further more, it also provides information about teacher's role to construct student's brain more active and advance. Their learning source of cultural and social norm also described in this paper. In addition, what sorts of environment and materials does a school need for the cognitive development of student's has been described.

### **5.3 Recommendations**

Students of pre-operational age are energetic, lively and spontaneous and it is easy to motivate them. So, every class teachers should make the best use of it. All the class teachers may not handle their class properly. But if they are trained up properly and if they do a need analysis at the beginning it would be very helpful for the teacher knowing the students better. Moreover, if they give the student library facilities, give instruction to operate computer then their brain will be develop further.

### **5.4 Conclusion**

Piagets' concepts of 4 stages are wide-ranging and influential. However, his Pre-operational phase is neither completely negligible nor satisfactory. We know that contribution of social factors plays great deal of importance for the advancement of child psychology. That is why, his negligence on cultural and social role of a child development has been greatly criticized by famous critic like Heatherly (1974), Vygotsky(1978) ,Cruttend (1979), (Mellow 2012) etc. However, his contribution in child developmental age is not completely correct. From the above data analysis it is

discovered that, actual age of a child may have vast difference regarding to the social environment where he/she lives but not by their age limitation. A child can learn much more through social interaction with skillful tutor like parents or teacher but not automatically or from their by born instinct. Further more, cognitive development of a child completely depends on his/her environment. Here, environment suggest; school, society, friends, place of playing etc where he/she always get in to touch with.



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## **Class room observation**

### **Qualitative questionnaire**

1. Did all the students greet teacher at the entrance in the class?
2. Did teacher greet students at the entrance of the class?
3. Do the students have any symptom of animism characteristics during their play time?
4. Do the students have any ego centric attitude during their conversation with the classmates?
5. If any student face difficulties again and again did the teacher get angry?
6. What is the medium of instruction? (English/ Bengali)
7. What is the interaction pattern between teacher-students?
8. If a student / a group of students disturb the class what kind of action did teacher takes?
9. Did the teacher pay attention to the negative behavior of the students?
10. Did the teacher influence the student about how to behave and how to talk with other?
11. When they get holiday notice, did the teacher explain about the reason of holiday notice?
12. During the tiffin period did teacher ask them to wash their hands before having their foods?

## **Appendix**

### **Survey questionnaire**

This survey questionnaire is designed for English medium students of 5-7 years old of Bangladesh. This survey aims to explore the characteristics of Piaget's pre operational stage really suits the Bangladeshi students and are they aware of the social and cultural aspects which are necessary for their cognitive development.

Age..... Gender..... Date.....

Please read the questions carefully and tick any one (**Yes/No/Sometimes**) inside the box.

Questionnaires	Yes	No	Sometimes
1. Do you like to watch cartoon?			
2. Do you think that your favorite cartoon characters can help you to get a good result with their magical power?			
3. Do you believe in ghost?			
4. Do you think that ghosts in the T.V are real?			
5. Do you think that Superman/ Spiderman can fly you like them?			
6. Do you like toys?			
7. If yours toys (doll/Car/robot) one of their parts get break down. Do you think they will get hurt like us?			



8. If you get hurt by a table/chair. Do you think that table/chair must have been naughty to hurt you?	Yes	No	Sometimes
9. Bear have teeth and they eat like us. Can bear read like us?			
10. Plants have live and we give water and food to feed them. Can plants see like us?			
11. If your classmate have chocolate with him/ her and gave every-one except you because there is no chocolate left. Now will you be angry with him/her?			
12. When you watch T.V at home and if your sister/brother/mother/father ask you to change the T.V channel will you change it or not?			
13. Do you like to attend on cultural program in you school?			
14. Do you know about our cultural program like Eid-/ Puja festival, PohelaBoishak , 21 February?			
15. Does your teacher explain to you that why do we celebrate these days?			
16. Do your parents explain to you that why do we celebrate these days?			
17. Does your teacher teach you how to talk to your class mates and others?			

18. Do your parents teach you how to talk to your class mates and others?

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Thank You

## **Classroom observation**

### **Qualitative questionnaire**

1. Did all the students greet teacher at the entrance in the class?
2. Did teacher greet students at the entrance of the class?
3. During their play time do the students have any indication of animism characteristics?
4. Do the students have any ego centric attitude during their conversation with the classmates?
5. If student says any sentence wrong .Did the teacher correct it instantly?
6. Did the students pretend themselves like any imaginative characters?
7. What is the interaction pattern between teacher-students?
8. If a student a/ a group of students disturb the class what kind of action did teacher takes?
9. Did the teacher pay attention to the negative behavior of the students?
10. Did the teacher influence the student about how to behave and how to talk with other?
11. When they get holiday notice, did the teacher explain about the reason of holiday notice?
12. During the tiffin period did teacher ask them to wash their hands before having their foods?