

**The impacts of school based Occupational Therapy intervention for
children with Autism: the mother's experiences**



By

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ABSTRACT

Background: Autism spectrum disorders (ASD) is increasing day by day in the World. Autism is a developmental disorder and autistic children are that they have difficulty in social interaction, play and education. They do not easily understand anything like normal children. They need special care. In special schools Occupational Therapists play an important role. However, there was no study to find out the impact on school based Occupational Therapy service for children with autism. The study was focused on mother's experience about impact on school based Occupational Therapy service for children with autism.

Aim: The aim of the study is to explore the mother's experience about the impact of school-based Occupational Therapy service for children with autism.

Methodology: This is a qualitative research and used Qualitative Content Analysis (QCA). In this study, 7 participants were selected. The investigator used convenient sampling and semi-structure questions. The investigator applied face to face interview for data collection. The participants of this study were selected from the Beautiful Mind School and Savar Proyash.

Result and Discussion: This study showed that overall all participants' children had a good change in socialization and most of the participant's children had a good change in play skills. Three (3) mothers told that they found good changes in academic skills for their child. Another three mothers found changes in education side but this child does not follow the school rules and pays poor attention in class and only one mother did not see any change in academic side. But they thought that they will see a good change after long time taking Occupational therapy service.

Conclusion: Children with autism have faced many difficulties in school settings and school related task. It is very important for specialized children especially autistic child to get Occupational Therapy. Occupational Therapists easily understand the child's ability and skills and help to this child to find out the problem and solve it.

Keywords: *Autism, Effects of school based Occupational Therapy service.*

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List of Abbreviations

CWA- Children with Autism

ASD- Autism Spectrum Disorder

OT- Occupational Therapy

AWF-Autism Welfare Foundation

QCA- Qualitative Content Analysis

CAOT- Canadian Association of Occupational Therapists

ADL- Activities of Daily Living

SI- Sensory Integration

IEP-Individualized education program

CWD-Children with disabilities

BHPI-Bangladesh Health Professions Institute

CRP-Centre for the Rehabilitation of the paralyzed

IDEA- Individuals with Disabilities Education Act

WFOT-World Federation of Occupational Therapist

WHO- World Health Organization

CHAPTER 1 INTRODUCTION

1.1. Background

Autism is a developmental disorder that some people are born with or develop early in life. This is called the autism spectrum disorder (Autism, 2014). This disorder affects the brain and children find difficulty communicating and interacting with other people, such as playing, hanging out, or socializing with others more difficult (Autism, 2014). It is a complex group of disorders that impaired socialization and reduce the child's interests in every activity (Ruble, Dalrymple and McGrew, 2010).

According to the Centers for Disease Control and Prevention (CDC), two to six per 1,000 children (ages 3 to 10 years of age) have ASD (CDC, 2005). The Autism Society of America (2006) suggests that ASD is even more prevalent, and reports that 1 in 150 children born today will develop this disorder. The Autism Society of America (ASA) also notes that 1.5 million Americans including children and adults have ASD, while another 15 million Americans (e.g., family, educators, and health care workers) are affected by this disorder (Mancil, 2007).

Recent estimates suggest that the incidence of autism spectrum disorders (ASD) in the United States is approximately 6 per 1,000 children, equating to around 114,000 children younger than age 5 years (Watling & Dietz, 2007). According to Census Statistics of Bangladesh for Autism 2010, approximately 280,000 people have autism and its prevalence rate is 1 in 500 (Census, 2014).

An autistic child has problem in expressing learning, performing ADL, and engaging in classroom and student routines and other school-related tasks. Autistic children seem indifferent to other people, lacking the eye contact and interaction with others that non-autistic children are expected to exhibit. Also they have difficulty in understanding what is happening around them and an inability to predict what will happen.

Children with ASD often demonstrate undesirable behaviors such as stereotypic motor movements, aimless running, aggression, and self-injurious behaviors (AOTA, 2002). Sometimes it is hard to engage or teach them therapeutic activities. Individual's interaction with the social and nonsocial environments. Engagement is a central

component of participation, an important aspect of occupation that is emphasized by the World Health Organization (WHO) and the American Occupational Therapy Association (AOTA, 2002).

It is very difficult to engage the autistic child in the activities of daily living. Parents become worried about their child. During this time after consulting with a doctor or specialist, parents are informed that their child has symptoms of Autism spectrum disorders, and day by day the disorder can increase.

The researcher finds out that most of the autism children do not diagnosed in childhood then this disorder increased day by day and its present life-long. That's why they face difficulty in education, social development, and community adjustment. An Occupational Therapist working these types of child and help children achieve positive outcomes.

Children with autism can get help from Occupational Therapists. In Bangladesh, autistic children only recently received treatment. Even after the introduction of a medical based diagnosis system in Bangladesh still many parents do not take their children for screening. Trained professionals are now operating the special schools.

Occupational Therapist tries to improving in this area and participating in this school activity. If the children perform in this activity that reason the children may less impact on autism child. They can achieve an academic success, peer support his overall success within the educational environment and maintains school routines (School AMPS Manual, 2007).

In Bangladesh, there are many special needs school. Occupational Therapists work in these schools and provide services. These Services have become an integral part of most preschool environments where children with disabilities are served (Villeneuve, 2009). Many autistic children get treatment. It is difficult to identify autistic children who are likely to benefit from various forms of intervention. This is a matter of much concern, but it is also important to elucidate the possible effects of different interventions. An Occupational Therapist in school based services work with autistic children to help with their fine motor skills, social skills, academic skills, sensory stimulation, and behavior skills and performing ADLs etc. (Villeneuve, 2009).

The impact of having autism for an individual means that they have often experience failure in school, social and work situations. This leads to lack of confidence and low self-esteem (School AMPS Manual, 2007). For many of them it leads to high anxiety, depression and mental health difficulties. Also it is very vulnerable to abuse because of their social deficit. Child with ASD is unable to socialize because of the difficulties at home, and unable to go out from family (School AMPS Manual, 2007).

Therefore school authorities welcome different health professionals to provide all the needed services for CWA. Moreover children with autism are of great focus of the government of Bangladesh. There are many special schools for Children with autism. But most of the schools run their program in Dhaka. Special education can help children to grow up and learn new skills. The goal of this intensive education is to improve the child's skills that help him or her to talk, interacts, play, learn, and care for themselves. So, in Bangladeshi situation it is important to know about the impact of school based Occupational Therapy intervention for autism child. This study will help to the Occupational Therapist and students to know the impact of Occupational Therapy services for autistic child and the changes that may come through school based Occupational Therapy. So, it is an important issue to conduct this study. This study is on the experience of mother about impact of school based Occupational Therapy intervention in school settings.

1.2. Significance

After completing this study Occupational Therapists and students know about the impact of OT service in special school settings for children with autism. Also know about the positive and negative impact of the receiving school based O.T service in the school settings. On the other hand, the patients and other professionals and School authority will be benefited by knowing about the improvements of Occupational Therapy service for children with autism. This study is very important for Occupational Therapist because this study mainly focuses changes about the School based Occupational Therapy service for children with autism. In this study, we can know about the changes of autistic Child's socialization, play and educational performance in school. The Occupational Therapist will learn about this impact and later they aware to provide better Occupational Therapy intervention for those special children. Through this study the other professionals will be benefited to have a proper guideline. Occupational Therapist knows how their intervention is effective for autism child and where area needs to improve. This study the experiences of mothers will be helpful for improving the quality of O.T service delivery in special school. So that is the reason the investigator want to conduct this study.

1.3. Aim

Explore the experience of the mother about the impact of school based Occupational Therapy service for children with autism.

1.4. Objectives

- To identify the changes on socialization for children with autism.
- To identify the changes on play for children with autism.
- To identify the changes on education for children with autism.

CHAPTER 2 LITERATURE REVIEW

2.1. Autism

Autism is a lifelong developmental disorder that affects a communication and relates to familiar and unfamiliar people in the world around them (Autism New Zealand, 2014). An Autism spectrum disorder (ASD) affecting social and communication skills that most of the children have difficulty in learning disabilities and reduce also sense of humor (Autism New Zealand, 2014).

2.2. Characteristics of autism

The autism child does not use a proper body language and gesture. They also avoid facial expression such as: avoiding eye contact or using facial expressions (Segal, 2014). They also showing lack of interest to communicate other people or do not interests to sharing. They also face difficulty to understanding the unfamiliar and familiar people's feelings, reactions, and nonverbal cues (Segal, 2014). They have difficulty to make a friend in same age. Also preset in repetitive movements such as: hand flapping, rocking, spinning, moving constantly (Segal, 2014).

2.3. Causes of autism

The causes of autism are not known but the researchers are currently studying such areas as neurological damage and chemical imbalances within the brain (NICHCY, 2010). Autism is likely to have multiple etiologies including genetic factors. Autism spectrum disorder may also be associated with various conditions affecting the brain such as; maternal rubella, tuberous sclerosis and encephalitis (NICHCY, 2010).

2.4 School based Occupational Therapy service

Occupational Therapy is the art and science of enabling engagement in everyday living, through occupation, of enabling people to perform the occupations that foster health and well-being and of enabling a just and participate to their potential in the daily occupations of life (Townsend and Polatajko, 2007). Occupational Therapists are trained to assess and treat occupational performance problems in the environments where these occupations are being done. Occupational performance is a determinant of health, well-being and helps give meaning to life (CAOT, 2002).

In school settings, Occupational Therapists work with children with autism. At first, they assess the child and make an appropriate plan and give intervention. Occupational Therapists also work with teachers and school staff in specialized schools. Occupational Therapists modify the classroom environment and use materials or adaptive equipment that facilitate school-related tasks for children with autism (Villeneuve, 2009).

Occupational Therapists work with specialized children to help their occupational performance. As a result, they achieve to perform in school work and school-related tasks. An Occupational Therapist not only works with school-related tasks but also ensures that specialized children participate in all school activities (School AMPS Manual, 2007).

An autistic child faces many difficulties such as physical, developmental, sensory, attention, and learning challenges and decreased participation in school activities. The goal of an Occupational Therapist in school settings is to ensure specialized child performance and increase participation in school activities (School AMPS Manual, 2007). An Occupational Therapist easily understands an autistic child's skills and abilities and expectations (Ruble, 2004).

Occupational Therapists work in school settings on a variety of tasks such as acquiring knowledge, expressing learning, performing activities of daily living (ADL) and mobility, and engaging in classroom and student routines and other activities related to the school setting. So, special education, early and appropriate intervention and care help the child to lead as normal a life as much as possible (Case-Smith and Arbesman 2008).

Research shows that children with ASD have high levels of active engagement in instructional and therapeutic activities, which is a very effective intervention for children with autism (Watling & Dietz, 2007).

Occupational Therapists engage the autistic child in meaningful activities and find an outcome of Occupational Therapy services for autistic children. Occupational Therapists work with the teacher and the autistic child can independently follow the routines and complete classroom assignments and school-related activities. Occupational Therapists follow some strategies to demonstrate positive student outcomes (Swinth, Karen and Leslie, 2007).

2.5. Effects of socialization for children with autism

Socialization or social skill training help to the child that how they communicate and behave in other people in a variety of different situations. This training goal is to improve social skills and change undesirable behavior (Encyclopedia, 2014). Another goal of social skill training to enhance child's ability to function in everyday in all social situations (Encyclopedia, 2014).

Children with autism face many difficulties to socialize to another people. They also face many challenge familiar and unfamiliar people and they does not involve in social activities (Bryson, Rogers and Fombonne, 2003). Occupational Therapist try to change this social skills and increase social movement toward the institutionalization of children with autism (Bryson, Rogers and Fombonne, 2003).

Ten (10) mothers were interviewed using a qualitative research design within a phenomenological framework. A content analysis identified three main themes: school experience, coming home and mother's experience as educator. Mothers commented that educating their child at home lead to improve in their child's behavioral and psychological wellbeing. The experience of home educating was influenced by the children's school experiences, parents' perceived choice to home educate and level of educative and social support available. This study implicates for parents, educators and health care professionals and educational needs of children with ASD (Kidd and Kaczmarek, 2010).

Children with autism face cognitive and social difficulties when they are involved in the class. But when they join in the class and meet with peers their have little social change for some period of time. This is change is not enough for his/her teachers, students and parents. As a result, children with autism face bad impact in learning style and also create challenges in the learning environment (Kidd and Kaczmarek, 2010).

In early childhood, children with autism face more emotional, cognitive and psychosocial problem. After, day by day it is increasing rapidly (Rhine, 2000). As a result, children with autism decrease in self-esteem, own capabilities, appearance and decrease behavior of their classmates, when they enter in the school (Rhine, 2000).

Occupational Therapist's contribution children with autism can achieve in school engagement, participation, and school activity. Occupational Therapists follow some

treatment strategies for children with autism demonstrate positive student outcomes (Swinth, Karen and Leslie, 2007).

In 2000, the researcher found the effects of social communicative skills of children with autism and the result showed that increase early social communicative skills of young children with autism by increasing their role as initiator of social interactions(Hwang and Hughes, 2000).They also analyze the effects persons, settings, stimuli, and time. The researcher marked that these child not only increases social and affective behaviors but also improve nonverbal and verbal communication, eye contact (Hwang and Hughes, 2000).

A study investigated about the effects of the social communication of 5 students. These students have Autism spectrum disorder (ASD).This study was completed in USA and appears that children with autism increase social communication skills when the treatment was implemented and also improvements within the classroom. At last the researcher showed that Occupational Therapist improved in social language as they easily interacts not only disable child also they interact with peers without disabilities (Thimann and Goldstein, 2001).

The children with autism have faced many problems in social interaction and so the autistic child does not fully engage in school system. Then they need to more caring and attention. In the school settings, Occupational Therapist follow effective treatment plan and later this child increase social communication, recreational activities and school-based activities (Bryson, Rogers and Fombonne, 2003).

2.6. Effects of play for children with autism

Play is a fundamental part of every child in childhood and it was very necessary for child's development. So, children with autism play are important in early age. In our country, most of the parents are naturally motivated to play and interact with children (Naber et al., 2008).But specialized children or children with autism, play must be different. Children with autism face difficulties to engage in play and continue. If the child do not response for play then it was not effective for child (Naber et al., 2008).

Scottish Autism's Autism Support Team (SAAST) showed that is very important for developing for many children with autism. This team also advised that play to not only therapists also parents for their child (Beyer &Gammeltoft, 1999).They also discuss some key strategies for play that improve child's play. As a starting point of

play, it's helpful to have an understanding of the different stages play goes through in typical development (Beyer & Gammeltoft, 1999).

Play is very important for any child and it facilitates the children's cognitive abilities, communication skills, decision making skills, emotional understanding. It also improves the children's interpersonal relationships, development of sexual identity experimentation with adult roles, and understanding of personal thoughts and feelings (Naber et al., 2008).

Play or playing in children with ASD has a good relation to attachment quality. For Children with autism, if the play do not disorganized and playfully engaged that it was an insecure child with the same disorder and increase social interaction (Mancil, 2007). Another, disorganized play do not secure to child with the same disorder and more delay in social play (Mancil, 2007).

Another study showed that they get a significant progress in play skills after 1 year intervention. The developmental areas are social interaction, receptive language, and expressive language and play skills. Better progress in expressive language was associated with the child's social abilities, while more significant progress in play skills was related to pre-intervention (Itzchak and Zachor, 2007).

Another study showed that many researchers have provided that effective intervention of play therapy gives positive changes for children with autism (Rhine, 2000). Several researchers have identified that if the children areas of imitation, communication, play, and socialization intervention encourage families involvement and teach some general skills while teaching appropriate replacement behaviors that help to the child's development and get some positive changes for children with autism (Ruble, Dalrymple and McGrew, 2010).

There are some study showed that autism child present high levels of aberrant behaviors such as self-injury and aggression such as screaming, hitting, and biting (Mancil, 2007). Furthermore recent study that impaired communication development in children with ASD and other developmental disabilities may actually cause aberrant behaviors. Some children will repeatedly pinch themselves or they may aggress toward other children or adults (e.g., hit others). These aberrant behaviors create substantial obstacles for individuals responsible for their education and care (Mancil, 2007).

Play therapy improves the child self-confidence, self-reliance, creativity, self-direction and trust in his own inner resources. Autistic child gather crucial knowledge from play therapy and it's also teach problem solving for children with autism (Hughes et al., 2000). Play therapy helps to the autistic child's to facilitate social and emotional development. Play therapy removes the adjustment difficulties from his/her peer group or another people. It's also help to the autistic child's learning strategy and to increase academic success. This therapy assists to the autistic child's to perform their maximum ability (Hughes et al., 2000).

2.7. Effects of education for children with autism

In the school setting, Occupational Therapists performed in this settings that children have difficulty in sensory, developmental, attention and/or learning difficulties (Grindle et.al., 2012). So Occupational Therapists also makes a design for classroom settings and adapts this room for children with autism and makes a school environment to promote a child's participation. Occupational Therapists also make and give teaching assistants for autism child (Swinth, Karen and Leslie, 2007).

According to IDEA 2004, children with disabilities effective education is depend on child's participation in special education and improve or progress in the general education. Children with ASD have a difficulty is an inability to understand the human action, communication, and social relationships. Then it was impacts on learning style and interests (Watling et al., 2005).

Fine motor skills are an important component of childhood development and become critical skills when a child reaches school age because fine motor ability in tasks such as cutting and writing is expected in daily school activities (Case-Smith, 2002). Occupational therapy intervention has been shown to have a positive effect on students with fine motor difficulties (Case-Smith, 2002; King *et al.*, 1999; Palisano as cited in Whalen, 2002).

In an investigation by Case- Smith; it was found that students who received Occupational Therapy services for handwriting difficulties showed improvement in their handwriting. In a study by Lockhart & Law (as cited in Whalen), teachers reported that occupational therapy intervention had a positive effect on students' confidence in their written work(Jackman and Stagnitti,2006).

In another study, the researcher finds out effect on socialization and educational skill for autistic children. This study was a cross sectional and this study find out the effects on adaptive behaviors and academic skills by using ratings from teachers. The results of this research were autistic child improved with age. This studies also some positive changes in children with autism behavior style and communication (Ando, Yoshimura and Wakabayashi, 1980).

Occupational Therapists also help in teaching assistants and modify activities that maximize the child's participation and reduce behavioral difficulties. Children with autism have sensory difficulties that they have a negative impact on child's daily functioning. Environmental modification also improves quality of life for children with autism (Bryson, Rogers and Fombonne, 2003).

Another study completed in America and found that the autistic child gets Occupational Therapy intervention in a mainstream school setting. This one year the child learns new skills and after 1 year the researcher showed that moderate to large effect size changes over 1 year. Also showed that increases in language and learning skills in class and get positive change (Grindle et.al. 2012).

In inclusive school, children with autism feel stress and anxiety when they participate in the class. They face many difficulties in learning to the inclusive school because of poor cognition. So there need an extra care in educational side. Almost all autism children have a behavioral problem; they do not know proper social skill. They also feel loneliness at school when they attend in the class. Furthermore parents of children with ASD reported that their child give limited attention in the class (Kidd and Kaczmarek, 2010).

Children with autism are a disability category which children need special education and related services. Under IDEA, Occupational Therapy is a related service, and must be provided to students with autism if those services will help the student to benefit from special education (Watling et al. 2005).

Autism spectrum disorders (ASD) affect not only children's social adjustment but also their academic performance. Children with autism have a great risk for school and social maladjustment, and that age, gender, and the interaction of both may moderate the effects of autistic symptoms on school and social adjustment (Kidd and Kaczmarek, 2010).

In 2013, another study reported that Children with autism would be associated with poor academic performance, negative attitudes toward schools, more behavioral problems at schools, negative peer relationships, and more problems with peers in school settings (Hsiao, Tseng, Huang and Gau, 2013).

Theresa Kidd and Elizabeth Kaczmarek, 2010 also showed that mother's experience about education environments are challenging for ASD children as they have an inability to shift between activities or mental states and planning, and have problems with storing information and performing mental operations. These cognitive skills, as highlighted in different cognitive models of ASD, are paramount for learning and disruptions to these basic cognitive operations can make the classroom a challenging place for the child.

Occupational Therapist work collaboratively with teacher's so that the specialized children get benefited. Autistic child do not follow the classroom routines. As a result it has a bad impact in his/her school life and they are often absent in class. Occupational Therapist modifies the routines so that the autistic child can easily follow them (Swinth, Karen and Leslie, 2007).

CHAPTER 3 METHODOLOGY

Methodology:

In qualitative research study, these study methods need a study for individuals or small group of participants and this study the investigator use a similar principles, techniques and approaches for every participant. The investigator will go to the relevant people, observe the situation in this study and also make decisions about information that the investigator gather from participants. We all the things that we describe in above are used when using a qualitative approach ((Baily, 1992).

Qualitative data analysis was a complex process. Content analysis was used to discover themes as it was a common data analysis procedure most often used in qualitative data and based on searching for repeated words, phrases or concepts. By qualitative approach, it is appropriate to gain insights to a Person inspection, judgment, manner and values of their own situation ((Bailey 1997).

This part outlines the method of the study design chosen by the investigator to meet the study aim and objectives. The aim is to explore mothers' perception about the impact of school-based OT service for CWA. This method was approved from Bangladesh Health Professions Institute.

3.1. Study design

According to Devers & Frankel (2000) – “Qualitative research most often uses purposive sampling rather than random sampling strategies. Convenient sampling strategies are designed to enhance understandings of selected individuals or groups experiences or for developing theories and concepts”.

According to depoy and gitlin (1994), qualitative research design involves the personal experience and insights of the investigator, of the extent to which individual. Patterns of human experience is sought and the extent to which the investigator imposes structure in the data collection and analytic processes. Qualitative research finds a put outcome of positive attitude.

Literature states that when an investigator wants to find out the research question by seeking the experiences, feelings and performance of the individual, a qualitative research design is appropriate for the study. By qualitative approach, it is appropriate

to gain insights to a Person's inspection, judgment, manner and values of their own situation (Hicks 2000).

According to Glesne and peshkin (1992), qualitative researchers deal with multiple, socially constructed realities or 'qualities' that are complex and indivisible into discrete variables, they regard their research tasks as coming to understand and interpreted how the various participants in a social construct the world around them.

In this study investigator used phenomenological qualitative research design that is descriptive, exploratory. Phenomenological perspective can be implemented to any study where the investigator is concerned with participant's views on their own life or situations, or their own views regarding existing circumstances such as their ill health and how they deal with this problem (Bailey1997).

Qualitative methods are appropriate to conducting this study. The phenomenological qualitative study design is selected because this method helps to explore the in depth information on the experience of the mother. A qualitative study is suitable to explore the new area. Qualitative approach is used to describe experiences of the participant. For this reason qualitative method is chosen. Investigator uses a qualitative design and semi-structured question and face to face interviews will be conducted to identify the impacts of School based Occupational Therapy intervention for autistic child. By semi-structured interview, participants can explain their opinion, share knowledge from their point of view. In a study investigator wants to gather answers of research question by seeking experiences, feelings, thoughts, a qualitative research is appropriate for the study.

3.2. Study setting

The investigator observes and gathers information from the participant's own context. The investigator went to collect the data from special needs school such as Beautiful mind school and SavarProyash.

3.3. Participant selection

The study participants were selected from specialized school in DHAKA. The participants in study the mothers whose child suffering from autism and take Occupational Therapy at least 10 months or more. Investigator collected the data from the specialized school where work Occupational Therapy. A face-to-face interview by semi-structured questionnaire used to collect the data from participant. Interviewing is

one of the techniques used to gather data in qualitative research. It is said that, in qualitative research, interviews are always conducted in face-to-face manner. It is easy for both of the interviewer and the participant to interact easily and comfortably during interview time.

3.3.1. Sampling procedure

For this research, investigators choose a convenient sampling because when collect the data, the researcher set a date and time. In this research, also give permission in school authority and they also help me to fix the date and appropriate time. So this reason my research sampling procedure is a convenient sampling.

Then investigator asked the participants when they free. Then the investigator fixed a date and time with the participant, according to participants time.

3.3.2. Inclusion criteria

- Mothers' of children whose age range is (6-13)
- Mothers of CWA, who received OT service for their children at least 10 months.

3.3.3. Exclusion criteria

-The children who were unable to talk.

3.4 Data collection instrument/tools

- Semi-structure questionnaire
- Paper
- Pen
- Consent form
- Recorder

A semi structure self-developed questionnaire used to collect the data. All other materials are: audio tape recorder, pen, paper, pencil, information sheet and consent form. Audio tape recorder will be used to record the interview. It is a fundamental data-recording strategy in naturalistic inquiry that is primarily used when conducting face-to-face interviews. It is especially important to conduct the open ended interview.

- **Information sheet and Consent form**

For conducting this study, it was important to inform the participant about this study and making sure if they were interested to give information or not. An Information sheet was included to make sense about study. A details information study such as identity of investigator, institute affiliation, study aim and objectives, study design, study duration, participants rights and responsibilities, potential risk, benefit and participant's confidentiality were included in this information sheet which was provided to participants to take informed consent.

A written consent form was also prepared for participants to verify the level of understanding of the information sheet, awareness about the potential benefits and risks as participant of the study. Participants were given permission by signing as volunteer participation. The investigator used an information sheet and consent form to take the participant's consent for participating in the study. Investigator let the participant know details of the study by the information sheet which included the aim, objectives, way of collecting data from the participant and the ethical considerations of the study. There included also a witness on the every session of data collection with each of the participant. The participant or the witness asked to read the information sheet, but in case of the participant/witness, who is not educated, researcher will read that out to them. There also used the consent form containing the consent of the participant that she is participating in the study.

3.5.Data collection procedure

At first collected the data collection letter from B.H.P.I office. Then filled up this and sign this letter our course co-coordinator. Then B.H.P.I office gives me another letter and takes permission and it was a granted from the principals of Beautiful mind School and Savarproyash. The participants were selected according to inclusion criteria and exclusion criteria. There also given a date and time for the interview. Before collecting data an introductory period was kept with the participants to build up rapport. If any participants is not agree to participate this study I also exclude her form my study. The interview sessions were conducted at quiet and calm environment. For that the participants were felt comfort during interview. Bengali information sheet and consent forms were provided to the participants and took sign from the participants. Data collected through face to face interview by using semi-structured questionnaire. Semi-structured formats were chosen to encourage parents to reflect freely on their experiences while providing specific prompts regarding the

topic. Approximately 3 weeks was needed for collecting data from 7 participants and one participant for field test. A face-to-face interview gave better opportunity to build good rapport with the participants and easily collect in-depth information from the participants. During interview Researcher asked different types of questions related to participant's point of view (Bailey 1997). After collecting descriptive data from participant's view, analyze that systematically.

Interviewing is one of the techniques used to gather data in survey and interviews conducted face to face are more intimate, allowing the interviewer to interact directly and develop rapport with the interviews (Bailey 1997).

3.6. Ethical consideration

Investigator gets the consent form to the participants and school authority to take their permission. Participants informed their information published but their name and address will not be published anywhere in the research. Participant would have the right to discontinue themselves from the study if they want.

3.7. Data analysis process

Qualitative Content Analysis were used to analyze the data of the mothers experience regarding school-based Occupational Therapy service for Children with Autism that was obtain during interview. The data analysis of this study started with the transcription of interviews. In the first steps transcription was formulated then it was given to 2 individuals who are competent in English to translate the data from Bangle to English. After that the data was verified and also read it several times to recognize what the participant wanted to say in the interview. At this time MP3 recorder was listened to ensure the validity of data. After familiar with the data, then the data analysis was preceded.

The purpose of the data analysis was to found out the actual meaning of the information that is collected. By using a data analysis process it was easy to arrange and present information in order to search for ideas. According to Fraenkel & Wallen (2000) in qualitative study the data analysis is usually used to synthesize information that the researcher collected from various sources (e.g. interviews, observations, content analysis) into a logical description of what has observed.

After finishing the data transcription and translation, the data was confirmed. Data analysis starts with reading all data repeatedly and data was read word by word to derive the code. Then each participant's answer was analyzed to find out some

major categories. Under those major categories some coding has established. Finally analysis of interview data began by analyzing text from the categorized data and coded themes. Investigator also analyzed the key themes based on the literature. Each coding was separated from other coding. The themes then came from categories and coding.

3.8. Field test

A field test was completed with one participant before starting final data collection. The data collection was completed in Beautiful Mind School. This field test helped to find out the difficulties in the questionnaires, which were then modified so the participants could understand the questions properly and appropriate data was collected. After completing field test the investigator changed some of the questionnaires. The investigators excluded the age of child's mother. Because they felt shy about telling their age and it was not needed for my study. After field test, the investigator also asked some additional questions that fulfill the aim and objectives of the study. During the interview; participants were informed about the aim and objectives of the study. Interviews took 10-15 minutes on average.

CHAPTER 4 RESULT

Summary of data analysis and result

Objectives	Question	Category	Themes
1. To identify the changes on socialization for children with autism.	5	Mothers perceptions about the improvement area in socialization after receiving Occupational Therapy intervention.	Most of the mothers feel that their children communicate not only with familiar person,also others person and know about social behavior.
		Perceptions about non-improvement area in socialization	Two mothersfeel that her children do not improve in communication.
2. To identify the changes on play for children with autism.	6	Mothers perceptions about the improvement area in play after receiving Occupational Therapy intervention.	Most of the mothers feel that their children's increasing interest in playing and understand the game and importance of playing with others.
		Perceptions about the non-improvement area in play.	Two mothers are telling that the interest of children towards play did not increase and they quarrel with each other while playing.
3. To identify the changes on education for children with autism.	7	Mothers perceptions about the improvement area in education after receiving Occupational Therapy intervention.	Few mothers feel that improve in education side and understand their child writing and study own self
		Perceptions about the non-improvement area in education.	Most of the mothers feel that do not improve in education side.

In this research the participants are selected mothers of children with autism. The participant's child age range is 6-10 years old. 7 participants were selected for this research and they are four (4) from SavarProyash School and three (3) from Beautiful mind school. Most of the participant's occupation is housewife and one participant's occupation is business and one student. Their children take Occupational Therapy service from this school 1-2 or more years. Most of the mothers take Occupational Therapy service in appropriate time and regularly. Most of the mothers know about Occupational Therapy service before when they do not admit their child in specialized school.

Themes of the study

- 1.** Most of the mothers feel that their children communicate not only with familiar person but also other persons and know about social behavior.
- 2.** Most of the mothers feel that their children's increasing interest in playing and understand the game and playing with others.
- 3.** Most of the mothers feel that they do not improve in education side.

CHAPTER 5

DISCUSSION

The discussion and findings have been made with literature support. Every participant read the transcripts several times while translating this. In the result and discussion part it was possible to recognize the mother's opinion by content analysis with some categories. Under the different categories the codes are indicate different opinions of the mothers'. Here 'P' was used for indicate the participant. The tick was given only for those columns where the mothers spoke about those issues.

Category1:Mothers perceptions about the changes in socialization after receiving Occupational Therapy intervention for children with autism.

Coding	P1	P2	P3	P4	P5	P6	P7
Improve in social communication	✓	✓			✓	✓	✓
Do not improve in social communication			✓	✓			
Know about social behavior	✓		✓				
Communicate with others						✓	✓

Every participant shared their experience about their children changes after receiving Occupational Therapy service. The researcher asked the entire member that before taking Occupational Therapy service how their children used to communicate with others especially family member, relatives and friends of school. Most of the mothers said that before taking Occupational Therapy service they did not used to communicate with family members and relatives. They used to live in the room alone.

The researcher found out the changes after taking Occupational Therapy service for children with autism. Every participant shared their experience for 1 year or more of this service. Most of the mother shared that they get a positive feedback of this service. After taking Occupational Therapy service their child improve in communication and know the social behavior. After receiving Occupational Therapy service their children know about social behavior.

One participant's told that-

“Yes, now he is improved. Previously he did not meet with his friend. Now he does not annoy anyone after coming schools like he used to. Now I understand something that previously he disturbed and now he does not disturb. That now it is reduced. Now I wouldn't say that he is not very good but good.”

Another participant told that-

“Now he improved rather than before. Suppose he communicate with his peer group, playing together. If anyone came to home, then if we say give salaam to the guests then he say salaam and he understand that they are own. Then he understand that how to any things and give anything to anyone that now he better understand that how to take and give anything's?”

A study investigated about the effects of the social communication of 5 students. These students have Autism spectrum disorder (ASD). This study was completed in USA and appears that children with autism increase social communication skills when the treatment was implemented and also improvements within the classroom. At last the researcher showed that Occupational Therapist improved in social language as they easily interacts not only disable child also they interact with peers without disabilities (Thimann and Goldstein, 2001).

In 2000, the researcher found the effects of social communicative skills of children with autism and the result showed that increase early social communicative skills of young children with autism by increasing their role as initiator of social interactions (Hwang and Hughes, 2000). They also analyze the effects persons, settings, stimuli, and time. The researcher marked that these child not only increases social and affective behaviors but also improve nonverbal and verbal communication, eye contact (Hwang and Hughes, 2000).

Only twoparticipants told that she does not good change after Occupational Therapy service for children with autism in socialization skill. She told that her child does not understand the socialization and also do not improve some social skills. But he likes to communicate with family member but he does not feel comfortable with others or peer group.

She told that-

“Aaa...Normally...o means he still laughs when someone kisses him. He would always like kiss and hug now he can also give salaam if anyone says to him. If I ask him to shake hands he will shake hands. He has those social behaviors; his daily living skill is increased. Before he wouldn't want to meet with people and when he did not want anybody, we could make him understand. Before he would very easily cry. Now he does not do that anymore when therapist comes. He is trying to adjusting to his environment.”

Most of the mothers feel that their children communicate not only with familiar person but also with unfamiliar person and know social behavior. Two mothers' feels that her children do not improve in communication.

General theme:Most of the mothers feel that their children communicate not only with familiar person also others person and know about social behavior.

Category 2:Mothers perceptions about the changes in play after receiving Occupational Therapy intervention for children with autism.

Coding	P1	P2	P3	P4	P5	P6	P7
Increase interest in playing	✓	✓	✓			✓	✓
Do not increase interest in playing				✓	✓		
understand the game	✓					✓	✓
Quarrel with others when playing					✓		✓
Playing with others	✓		✓			✓	✓

Play is very important for every child not only autism child. If the child do not play with others or their peer group then his/her communication skill does not improve. So if the child maintains or good approach of social skills then he play and follow the instruction of the game. So here the researcher finds out what changes to play after Occupational Therapy service for child with autism. Here most of the participants

said that they see good changes about play skills and achieve some outcome that their increase interest and follow the instruction of the game. Before taking Occupational Therapy service the participants said that their children play in the home and do not know how to play with others. After taking Occupational Therapy service most of the mothers saw a good changes. Day by day increase interest about playing and share another person that he joins their peer group. One participant told that-

“Yes, now this time, he understands what game is and he also understands that he has to play with his friends. Now does not quarrel with others it means his quarrel his has minimized”

Another participant told that-

“Whom...increase interest (playing) rather than before. I told you before that I have my own daughter, he always plays with her. He plays ball with her sister and he plays with my driver. Increase interest (playing) rather than before, then if I say him go to the corridor and visiting outside then he agrees with me. Then he goes to the outside and shows interest.”

Another study was completed in Israel and showed that significant progress in play skills after 1 year intervention. The developmental areas are social interaction, receptive language, and expressive language and play skills. Better progress in expressive language was associated with the child's social abilities, while more significant progress in play skills was related to pre-intervention (Itzhak and Zachor, 2007).

Most of the participants said that they saw good changes in playing skills. They said that their child show interest to playing not only family also peer group. So it is a good change. Day by day it is developing. Two participants told that sometimes their children quarrel with others when they playing or do not improve in play sides. One participant told that-

“Now he does not play long time but before he used to play long time. He quarrels with others then we noticed, most of the time he plays in the house.”

Another mother told that-

“When he goes to therapy room then he looks very happy. Very happily he wants to play and he likes hugs. He likes to play this in the home but in house there are no

sufficient toys for playing. In the house he has a few toys such as car, ball, bat, dolna.”

Most of the mothers feel that their children’s increasing interest in playing and understand the game and playing with others. Two mothers’ feels that do not increase interests in plying and quarrel when playing.

General theme:Most of the mothers feel that their children’s increasing interest in playing and understand the game and playing with others.

Category 3: Mothers perceptions about the changes in education after receiving Occupational Therapy intervention for children with autism.

Coding	P1	P2	P3	P4	P5	P6	P7
Improve in education	✓		✓				✓
Do not improve in education		✓		✓	✓	✓	
Understand writing	✓		✓			✓	✓
Reading own self	✓		✓		✓		

Education or academic skill is essential for every child. But the specialized children face many difficulties in education rather than normal children. So every mother wants to engage his/her child study in specialized schools. One mother told that if the Occupational Therapy runs then she may get a good result for her child. But they think that day by day it is improved. Another three (3) participants share are saying that their children have improved are lot. After taking Occupational Therapy service. They follow the rules of the school and pay attention to the classes. Some mothers are saying that after taking Occupational Therapy hand writing of their children has increased.

One participant told that-

“Now his interest towards (education) hasincreasedmore rather than before. The game that he plays with the therapist,the game that he plays therapist, he continues that after going at home. He understands that before he did not use to play with the therapist and now he place with them therapyroom. He obeys them. When he goes to

opens his shoes to off the classroom. Keep the bag right place and pays attentions to the class.’’

Another study completed in America and found that the autistic child gets Occupational Therapy intervention in a mainstream school setting. This one year the child learns new skills and after 1 year the researcher showed that moderate to large effect size changes over 1 year. Also showed that increases in language and learning skills in class and get positive change (Grindle et.al. 2012).

Others participants told that-

‘‘Increase attention in study rather than before. Before he does not write because he has a limited attention now I see increasing of his attentions. He always hears my conversation because most of the time I take care of him. But I see that the teacher needs more time to convince him. But he understands that if teacher tells him to write something, he has to write.’’

Occupational therapy intervention has been shown to have a positive effect on students with fine motor difficulties (Case-Smith, 2002; King *et al.*, 1999; Palisano as cited in Whalen, 2002). In an investigation by Case- Smith; it was found that students who received Occupational Therapy services for handwriting difficulties showed improvement in their handwriting. In a study by Lockhart & Law (as cited in Whalen), teachers reported that occupational therapy intervention had a positive effect on students’ confidence in their written work (Jackman and Stagnitti, 2006)

Another four participants’ told that after receiving Occupational Therapy service does not improve in study.

One participant told that-

‘‘No, he does not do activity by using any equipment. He continues to study and try to as a normal child. He does not study well. It is seen when he sits to study, he studies if he wants or he does not study if he does not want then he leave this study. He studies particularly.’’

One participant told that-

‘‘I do not understand his improvement. After taking therapy he is improved or what are the reasons i do not understand but he wants to study. Sit upon own. He also writes own. He also sits with book. A few days ago he sits own. Now I bring him in school. Some days it is off (school). Then I see before he studies now he done this and

he also do not remind this. I do not understand he have a one problem that running. I think if reduce his running then i get some advantages.”

Theresa Kidd and Elizabeth Kaczmarek,2010 also showed that mother’s experience about education environments are challenging for ASD children as they have an inability to shift between activities or mental states and planning, and have problems with storing information and performing mental operations. These cognitive skills, as highlighted in different cognitive models of ASD, are paramount for learning and disruptions to these basic cognitive operations can make the classroom a challenging place for the child.

Autism spectrum disorders (ASD) affect not only children’s social adjustment but also their academic performance. Children with autism have a great risk for school and social maladjustment, and that age, gender, and the interaction of both may moderate the effects of autistic symptoms on school and social adjustment (Kidd and Kaczmarek, 2010).In 2013, another study reported that Children with autism would be associated with poor academic performance, negative attitudes toward schools, more behavioral problems at schools, negative peer relationships, and more problems with peers in school settings (Hsiao, Tseng, Huang and Gau, 2013).

In inclusive school, Children with autism feel stress and anxiety when they involve or participate in the class. They face many difficulties in learning to the inclusive school because of poor cognition. So there need an extra care in educational side. Almost all autism children have a behavioral problem; they do not know proper social skill. They also feel loneliness at school when they attend in the class. Furthermore parents of children with ASD reported that their child give limited attention in the class (Kidd and Kaczmarek, 2010).

Few mothers feel that improve in education side and understand their child writing and study own self. Most of the mothers feel that do not improve in education side.

General theme:Most of the mothers feel that do not improve in education side.

CHAPTER 6

LIMITATION & RECOMMENDATION

Limitations

Every study has some limitations. In that case my study has also faced some difficulties. But the researcher always tried to overcome these limitations. These limitations are given in the below:

- Interview was conducted in Bangla. However the study was presented in English. That is why it had to translate from Bengali to English. Sometimes it may difficult to discover actual meaning of some information from the data translation. But investigator tried heart and soul to give the actual information of the data in the study.
- The study result would be more generalizable if the participant group had been larger. But it was not possible to involve more participants due to short period of time.
- It was the first study of investigator so the investigator is in-experience about the interview. If the investigator is a skilled person in conducting interview then she may be obtain more in-depth information. For that reason investigator completed a field test before final data collection.

Recommendation of this study are-

- It is very difficult to find out the ASD child to take continuous Occupational therapy for 12 months. So the investigator selected this type of autism child that they take continuous Occupational Therapy for 10 months. Because some of the children take 2 months therapy and they do not take Occupational Therapy for 1 or 2 months. So it is also one of the reasons for verifying the result.
- Occupational Therapist should briefly describe about Occupational Therapy service so that the mothers do not mix them with other professionals.
- Further research should be conducted with a large number of participants on this study design. If investigator conducts the study with large samples then it will be easy to generalize the result.
- In future, if possible there is a scope for further studies to be done that is-
The investigator finds out the psychological impact of educating children with ASD.

CHAPTER 7 CONCLUSION

The entire participants had well known about Occupational Therapy service in school settings. Most of the participants said that they saw a positive change in socialization, playing skills and academic skills. The researcher found that it was a positive journey for the majority of mothers in this socialization, playing skills and academic skills, and this was for many, related to their child's progress. Most of the mothers said that their child reduces hesitate and irritate rather than before. Majority of the mothers thought that if the Occupational Therapist reduces hesitation of their children then they engage their child in any activity. So it was very important for every Occupational Therapist and child.

Socialization is very important for children with autism. If the socialization is not developed then the other skills such as play and academic skills is not improved early. So at first Occupational Therapist should improve social skill. An Occupational Therapist knows that an autism child has no physical problem .They face to difficulty in behavioral and emotional expression. So at first an Occupational therapist should work with an ASD with social skills and sensory integration.

Children with autism (CWA) have faced a difficulty in school settings and school related task. So an Occupational Therapist works this type of children and try to best outcome to achieve participate in school activity and school related tasks. That it is very important for specialized children especially autistic child to get Occupational Therapy service in school settings. Occupational Therapists easily understand the children's ability and skills and help this childto find out the problem and solve this problem. That is why showed less or positive impact on autism children's school life.

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Appendix- 1

Approval Letter

September, 2014
The Head of the Department
Department of Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
CRP, Chapain, Savar, Dhaka-1343

Subject: Application for seeking approval to conduct the study for fulfillment of 4th year of B.Sc. in Occupational Therapy course.

Madam,

With due respect, I want to state that, I am sincerely seeking permission to conduct my research project as the part of my 4th year course curriculum. The title of my research is "Impact of school based Occupational Therapy for children with autism: Mothers perspective". The aim of the study is "To explore the perception of the mothers about the impact of school based Occupational Therapy service for children with autism." I would like to assure that anything of my project will not harmful for the participants.

So, I therefore hope that you would be kind enough to grant me the permission of conducting the research and help me to complete a successful study as a part of my course.

Sincerely yours,

.....
Md. Towfiqur Rahman
4th year, B.Sc. in Occupational Therapy
BHPI, CRP, Savar, Dhaka-1343

Approved by	Signature
Research supervisor Md. Julkar Nayan Assistant professor Department of Occupational Therapy, BHPI	He may allow to conduct The study. <i>[Signature]</i> 15.09.14
Head of the Department Nazmun Nahar Assistant Professor & Head of the Department Department of Occupational Therapy, BHPI	As Res Supervisor's recommendation, he may conduct this study. <i>[Signature]</i> 15.09.14

Appendix- 2



বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)
BANGLADESH HEALTH PROFESSIONS INSTITUTE (BHPI)
(The Academic Institute of CRP)

CRP-Chapain, Savar, Dhaka, Tel: 7745464-5, 7741404, Fax: 7745069
BHPI-Mirpur Campus, Plot-A/5, Block-A, Section-14, Mirpur, Dhaka-1206. Tel: 8020178, 8053662-3, Fax: 8053661

তারিখ : ১০.১১.২০১৪

প্রতি
অধ্যক্ষ
বিউটিফুল মাইন্ড
উত্তরা ঢাকা।

বিষয় : রিসার্চ প্রজেক্ট (dissertation) এর জন্য আপনার প্রতিষ্ঠান সফর প্রসঙ্গে।

জনাব,

আপনার সদয় অবগতির জন্য জানাচ্ছি যে, পক্ষাঘাতগ্রস্তদের পুনর্বাসন কেন্দ্রে-সিআরপি'র শিক্ষা প্রতিষ্ঠান বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই) ঢাকা বিশ্ববিদ্যালয় অনুমোদিত বিএসসি ইন অকুপেশনাল থেরাপি কোর্স পরিচালনা করে আসছে।

উক্ত কোর্সের ছাত্রছাত্রীদের কোর্স কারিকুলামের অংশ হিসাবে বিভিন্ন বিষয়ের উপর রিসার্চ ও কোর্সওয়ার্ক করা বাধ্যতামূলক।

বিএইচপিআই'র ৪র্থ বর্ষ বিএসসি ইন অকুপেশনাল থেরাপি কোর্সের ছাত্র তৌফিকুর রহমান তার রিসার্চ সংক্রান্ত কাজের জন্য আগামী ১১.১১.২০১৪ তারিখ থেকে ১৫.১২.২০১৪ তারিখ পর্যন্ত সময়ে আপনার প্রতিষ্ঠানে সফর করতে আগ্রহী।

তাই তাকে আপনার প্রতিষ্ঠান সফরে সার্বিক সহযোগীতা প্রদানের জন্য অনুরোধ করছি।

ধন্যবাদান্তে

Approved

অধ্যাপক ডাঃ এম এ কাদের

অধ্যক্ষ

বিএইচপিআই।

Approved
10.11.14
Vice-Principal
Beautiful Mind





বাংলাদেশ হেল্থ প্রফেশনস ইনস্টিটিউট (বিএইচপিআই)
BANGLADESH HEALTH PROFESSIONS INSTITUTE (BHPI)
(The Academic Institute of CRP)

CRP-Chapain, Savar, Dhaka, Tel: 7745464-5, 7741404, Fax: 7745069
BHPI-Mirpur Campus, Plot-A/5, Block-A, Section-14, Mirpur, Dhaka-1206. Tel: 8020178, 8053662-3, Fax: 8053661

তারিখ : ১০.১১.২০১৪

প্রতি
অধ্যক্ষ
প্রয়াস
সাভার সেনানিবাস, সাভার, ঢাকা।

বিষয় : রিসার্চ প্রজেক্ট (dissertation) এর জন্য আপনার প্রতিষ্ঠান সফর প্রসঙ্গে।

জনাব,

আপনার সদয় অবগতির জন্য জানাচ্ছি যে, পক্ষাঘাতগ্রস্তদের পুনর্বাসন কেন্দ্রে-সিআরপি'র শিক্ষা প্রতিষ্ঠান বাংলাদেশ হেল্থ প্রফেশনস ইনস্টিটিউট (বিএইচপিআই) ঢাকা বিশ্ববিদ্যালয় অনুমোদিত বিএসসি ইন অকুপেশনাল থেরাপি কোর্স পরিচালনা করে আসছে।

উক্ত কোর্সের ছাত্রছাত্রীদের কোর্স কারিকুলামের অংশ হিসাবে বিভিন্ন বিষয়ের উপর রিসার্চ ও কোর্সওয়ার্ক করা বাধ্যতামূলক।

বিএইচপিআই'র ৪র্থ বর্ষ বিএসসি ইন অকুপেশনাল থেরাপি কোর্সের ছাত্র তৌফিকুর রহমান তার রিসার্চ সংক্রান্ত কাজের জন্য আগামী ১১.১১.২০১৪ তারিখ থেকে ১৫.১২.২০১৪ তারিখ পর্যন্ত সময়ে আপনার প্রতিষ্ঠানে সফর করতে আশ্রয়ী।

তাই তাকে আপনার প্রতিষ্ঠান সফরে সার্বিক সহযোগীতা প্রদানের জন্য অনুরোধ করছি।

ধন্যবাদান্তে

অধ্যাপক ডাঃ এম এ কাদের
অধ্যক্ষ
বিএইচপিআই।



স্বাক্ষরিত প্রয়াস
২০/১১/১৪
অধ্যক্ষ
প্রয়াস
সাভার এরিয়া

Received on

Sl.No: ২৫৫
Date: ১১/১১/২০১৪
Sign: [Signature]



Appendix-3

Information sheet

The name of the researcher is Md. Towfiqur Rahman. He is a student of 4th year, Department of Occupational Therapy, Bangladesh Health Professions Institute (BHPI). As a part of his academic issues he has to conduct a dissertation in this academic year. So researcher would like to invite you to participate in this study. The title of the study is “Impact of school based Occupational Therapy intervention for children with Autism: Mothers experience”.

Your participation is voluntary in the study. You can withdraw your participation in anytime. There is not the facility to get any pay by this participation. The study will never be any harm to you but it will help the service user to know your experience, which is very important for the service provider to plan for the future activities.

Confidentiality of all records will be highly maintained. The gathered information from you will not be disclose anywhere except this study and supervisor. The study will certainly never reveal the name of participant.

If you have any query regarding the study, please feel free to ask to the contact information stated below:

Md. Towfiqur Rahman

Student of 4th year

B. Sc. in Occupational Therapy

Department of Occupational Therapy

Bangladesh Health Professions Institute

Centre for the Rehabilitation of the Paralysed (CRP)

Chaplain, Savar, Dhaka-1343.

Consent form

This research is the part of Occupational Therapy course and name of the researcher is Md. Towfiqur Rahman. He is a student of Bangladesh Health Professions Institute in B. Sc. in occupational therapy in 4th year. The study was entitled as “Impact of school based Occupational Therapy intervention for children with Autism: Mothers experience”.

In this study I am a participant and I have been clearly informed about the purpose of the study. I have the right to refuse participation any time and any stage of the study. I will not be bound to answer to anybody. I understand that at present or future there will be no impact of treatment receiving for participate the study.

I am also informed that all the information collects from me that is used in this study would be kept safe and maintain confidentiality. The researcher and the supervisor will be eligible to access in the information for his publication of the research result. My name and address will not published anywhere in this study.

I can consult with the researcher and the research supervisor about the research process or get answer to any question related to research project. I have been informed about above-mentioned information and I am willing to participate in the study with consent.

Signature/Finger print of the Participant:	Date:
Signature of the Researcher:	Date:
Signature/Finger print of the witness:	Date:

Question (Translated)

Participants Name:

Address:

Occupation:

Name of child:

Age:

Date of admission-

1. Do you know about Occupational therapy please say in details?
2. How long time your child take occupational therapy and what type of treatment in here?
3. What type of in your child? Please say in details?
4. Any changes in your child to take after Occupational therapy? Yes or no please say in details.
5. Does your child mix with others after taking Occupational therapy? Such as- with his/her friends, family members and relatives. Yes or no please describe.
6. Does your child express interest to play after taking Occupational therapy intervention? Yes or no please describe.
7. Do you find any changes in study of your child after Occupational therapy intervention and get any benefit from Occupational therapy? Yes or no please describe.

Appendix- 4

তথ্য পত্র

গবেষকেরনাম মোঃতৌফিকুররহমান।তিনিবাংলাদেশ হেল্থপ্রফেশনসইনস্টিটিউটের বি. এস.সি. ইন অকুপেশনাল থেরাপিচতুর্থ বর্ষেরছাত্রপ্রাতিষ্ঠানিককার্যের অংশ হিসেবেচলতিশিক্ষাবর্ষে তাকেএকটিগবেষনামূলককাজকরতেহবে।তাইগবেষকআপনাকে এই গবেষণায়অংশগ্রহণকরারজন্য আমন্ত্রণজানাচ্ছে।গবেষণারবিষয়টিজম বাচ্চাদের জন্য স্কুলভিত্তিকঅকুপেশনাল থেরাপিচিকিৎসারপ্রভাবসম্পর্কে মায়েদের অভিজ্ঞতাএই গবেষণায়আপনারঅংশগ্রহনসম্পূর্ণরূপে স্বেচ্ছায়। আপনি এই গবেষণা থেকে যেকোনোসময়আপনারঅংশগ্রহণপ্রত্যাহারকরতেপারবেন। এই গবেষণায়অংশগ্রহণেরমাধ্যমে আপনিআর্থিক ভাবেলাভবানহবেননা।এই অংশগ্রহণকখনোইআপনারজন্য ক্ষতিরকারণহয়ে দাঁড়বেনাকিএই গবেষণারমাধ্যমে সেবাপ্রদানকারীসদস্যগণ, আপনারঅভিজ্ঞতারকথাজানতেপারবেনএবংপ্রাপ্ত তথ্য সমূহ সেবারমানোন্নয়নেসাহায্য করবে।

আপনারকাছ থেকে প্রাপ্ততথ্যসমূহেরসর্বোচ্চ গোপনীয়তারক্ষাকরাহবে। গবেষণা ও গবেষণারতত্ত্বাবধায়কব্যতীত এই তথ্যগুলোঅন্য কোথাওপ্রকাশিতহবেনাএবংগবেষণার কোথাওঅংশগ্রহণকারীরনামপ্রকাশকরাহবেনা।

গবেষণাসম্পর্কিত যেকোনোধরনেরপ্রশ্নেরজন্য নিম্নলিখিত ব্যক্তির সাথে যোগাযোগকরারজন্য অনুরোধকরাযাচ্ছেঃ

মোঃ তৌফিকুররহমান

বি. এস.সি. ইন অকুপেশনাল থেরাপি

অকুপেশনাল থেরাপিবিভাগ,৪র্থ বর্ষ

বাংলাদেশ হেল্থপ্রফেশনসইনস্টিটিউট

পক্ষাঘাতগ্রস্তদের পুনর্বাসন কেন্দ্র

চাপাইন, সাভার, ঢাকা -১৩৪৩

সম্মতিপত্র

এই গবেষণাঅকুপেশনাল থেরাপিবিভাগেঅধ্যয়নেরএকটি অংশ এবংগবেষকেরনাম মোঃতৌফিকুররহমান।তিনিবাংলাদেশ হেল্থ প্রফেশনসইনস্টিটিউটের বি. এস.সি. ইন অকুপেশনাল থেরাপিচতুর্থ বর্ষেরছাত্রএবংতারগবেষণারবিষয় “অটিজমবাচ্চাদের জন্য স্কুলভিত্তিকঅকুপেশনাল থেরাপিচিকিৎসারপ্রভাবসম্পর্কে মায়েদের অভিজ্ঞতা ”।

এই গবেষণার আমি.....
একজনঅংশগ্রহণকারীএবংআমি এই গবেষণারউদ্দেশ্য পরিষ্কারভাবেজানতে পেরেছি। আমি যেকোনোসময়এবংগবেষণার যেকোনোপর্যায়েআমারঅংশগ্রহণপ্রত্যাহারকরতেপারব। এ জন্য আমিকারোকাজেজবাবদিতেবাধ্য থাকবনা। আমিঅবগতহয়েছি যে, এই গবেষণায়অংশগ্রহণকরারফলেবর্তমানেকিংবাভবিষ্যতে আমারচিকিৎসাগ্রহণেরউপর কোনপ্রভাবপড়বেনা।

এই গবেষণারজন্য আমার দেয়া তথ্যসমূহসম্পূর্ণভাবে গোপন ও নিরাপদ থাকবে। শুধুমাত্রগবেষক এই তথ্যগুলোগবেষণারফলাফলপ্রকাশেরকাজেব্যবহারকরতেপারবে। এই গবেষণায়আমারনাম ও ঠিকানাপ্রকাশকরাহবেনা।

আমি এই গবেষণারপদ্ধতিকিংবাগবেষণাসম্পর্কিত যেকোনোপ্রশ্নেরউত্তরগবেষক ও গবেষণাতত্ত্বাবধায়কেরকাছ থেকে জানতেপারব। আমি উপরোক্ত সকল তথ্য সম্পর্কে জানিএবংআমি এই গবেষণায়অংশগ্রহণে সম্মতিজ্ঞাপনকরছি।

অংশগ্রহণকারীর স্বাক্ষর/টিপসইঃ	তারিখঃ
গবেষকের স্বাক্ষরঃ	তারিখঃ
স্বাক্ষীর স্বাক্ষর/টিপসইঃ	তারিখঃ

প্রশ্নাবলী

অংশগ্রহনকারীর নাম-

ঠিকানা-

পেশা-

বাস্কার নাম-

বয়স-

ভর্তির তারিখ-

১। আপনি অকুপেশনাল থেরাপী সম্পর্কে কি জানেন একটু বিস্তারিত বলুন?

২। আপনার বাচ্চা এখানে কত দিন যাবৎ অকুপেশনাল থেরাপী চিকিৎসানিচ্ছে এবং কি ধরনের চিকিৎসানিচ্ছে? দয়াকরে একটু বিস্তারিত বলুন।

৩। আপনার বাচ্চার সমস্যার ধরন গুলো কি কি? দয়াকরে একটু বিস্তারিত বলুন।

৪। আপনার বাচ্চাকে অকুপেশনাল থেরাপী চিকিৎসাদেয়ার পর কি ধরনের পরিবর্তন দেখতে পাচ্ছেন? হ্যাঁ বা না, দয়াকরে একটু ব্যাখ্যা করুন।

৫। অকুপেশনাল থেরাপী চিকিৎসানেয়ার পর আপনার বাচ্চা কি সবার সাথে মেলামেশা করে বা মেলামেশার ক্ষেত্রে একে কোন উল্লেখযোগ্য পরিবর্তন দেখতে পাচ্ছেন। যেমন- তার সুলেববুদের সাথে, পরিবারের সবার সাথে এবং আত্মীয়-স্বজনদের সাথে? হ্যাঁ বা না, দয়াকরে একটু ব্যাখ্যা করুন।

৬। অকুপেশনাল থেরাপী চিকিৎসানেয়ার পর আপনার বাচ্চা কি সবার সাথে খেলাধূলার তে আগ্রহ করে বা এখন তার খেলাধূলার কোন উল্লেখযোগ্য পরিবর্তন দেখতে পাচ্ছেন? হ্যাঁ বা না, দয়াকরে একটু ব্যাখ্যা করুন।

৭। অকুপেশনাল থেরাপী চিকিৎসানেয়ার পর আপনার বাচ্চার পড়াশোনার ক্ষেত্রে উল্লেখযোগ্য কোন পরিবর্তন দেখতে পাচ্ছেন বা অকুপেশনাল থেরাপী পড়াশোনার ক্ষেত্রে কোন উপকারক রেছে? হ্যাঁ বা না, দয়াকরে একটু ব্যাখ্যা করুন।

Appendix-5

Checklist of participants

Information about participants at a glance:

Number of participants	Pseudo name of participants	Name of participants	Occupation of participants	Name of the schools	Child's age range	Duration of service taking in schools
1	P1	Nazmunna har	Housewife	Savarproyash	06	1 year
2	P2	Momitarah man	Business	Beautiful mind school	09	Almost 1 year
3	P3	Eva khan	Housewife	Beautiful mind school	10	2 year
4	P4	Nurjahan begum	Housewife	Savarproyash	07	1 year
5	P5	Taslinaak ter	Housewife	Savarproyash	08	2 year
6	P6	Shamima afroz	Housewife	Beautiful mind school	07	1 year
7	P7	Sirinakter	Student	Savarproyash	08	1 year more