Impact of Token Economy on Occupational Performance of Children with Psychosocial Difficulties

By

Md. Shishir Ahamed

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Bangladesh Health Professions Institute (BHPI)
Faculty of Medicine
University of Dhaka

Thesis completed by:

Md. Shishir Ahamed

4th year, B.Sc. in Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
Centre for the Rehabilitation of the Paralysed (CRP)
Chapain, Savar, Dhaka: 1343

……
Signature

Supervisor's Name, Designation, and Signature

Kaniz Fatema

Lecturer in Occupational Therapy
Department of Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
Centre for the Rehabilitation of the Paralysed (CRP)
Chapain, Savar, Dhaka: 1343

……
Signature

Head of the Department's Name, Designation, and Signature

Sk. Moniruzzaman

Associate Professor & Head
Department of Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
Centre for the Rehabilitation of the Paralysed (CRP)
Chapain, Savar, Dhaka: 1343

……
Signature

Board of Examiners

Statement of Authorship

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Md. Shishir Ahamed

4th year, B.Sc. in Occupational Therapy

Bangladesh Health Professions Institute (BHPI)

Centre for the Rehabilitation of the Peralysed (CRP)

Chapain, Savar, Dhaka: 1343

……

Signature

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Dedication

Dedicated to my honorable and beloved Parent.

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List of Abbreviations

Ax	Assessment
BHPI	Bangladesh Health Professions Institute
CRP	Centre for the Rehabilitation of the Paralysed
CMC	Child and Mother Corner
Max	Maximum
Min	Minimum
SPP	Shishu Polli Plus
SPSS	Statistical Package for the Social Science
SD	Standard Deviation

Abstract

Background: Token Economy is a behavioral modification system of a child which aims to achieve target behaviors by providing positive reinforcements. An intricate system of reinforcement known as a token economy involves the use of tokens as a means of exchange for a variety of commodities, services, and benefits. The token economy was first applied by Ayllon and Azrin as an operant technology. Ayllon and Azrin investigated the impact of token reinforcement on a range of target behaviors in a series of ground-breaking experiments carried out with patients at a state mental hospital (Ivy et al., 2017). Token reinforcement system helps to achieve maximum outcome from a psychosocial child to perform an activity.

Methods: A quantitative study, specifically cross-sectional study design was used to conduct the study. The aim of the study was to find out the impact of token economy on occupational performance of children with psychosocial difficulties. In a study, 47 psychosocial difficulties children are selected as a sample size of the study collected from a non-government organization named, Shishu Polli Plus (SPP), Gazipur, Bangladesh. In this study, Researcher used a survey checklist which develop by SPP which was child school & house behaviors daily token incident and earning report. Data was analyzed by the Statistical Package for the Social Science (SPSS) software manually.

Results: This thesis reported that there is an impact of token economy on psychosocial child Occupational Performance. The results showed the impact of token economy on Occupational performance (school behaviors, house behaviors, evening study, morning study, gate move with tiffin). Impact measured by calculating the earning of token according to the activities of occupational performance. Mean value of first day token

earning 5.8±0.556.And the last day token earning average mean 5.89±0.312.The result was statistical significance where the P value was 0.025 (P>0.05). Token earning rate among children with psychosocial difficulties on Occupational areas was increased after applying token economy program. The study also funds the association between the mother's age and the token earning rate of the children with psychosocial difficulties. The study also investigates the association between the socio-demographic factors and the individual child's token earning rate.

Conclusion: This thesis identified the possible demographic factor which influenced a psychosocial child token deduction and identified the impact of token economy. The study is helpful for those professionals who are working to shape a person's behaviors. The study is evidence of treatment guidelines that professionals used un their clinical practice.

Keywords: Token Economy, Psychosocial Difficulties, Occupational Performance.

CHAPTER I: INTRODUCTION

1.1: Background

The formative years of a person's life are their childhood. It is crucial that the child grows up in a healthy setting that provides food, shelter, safety, care, education, and protection—that is, in an environment that fosters growth and development. The absence of such a supportive environment poses a risk to children's development and growth. In conditions that are not supportive of learning, a kid may experience feelings of being threatened and insecure, which could lead to a psychosocial issue where the child responds inappropriately to these circumstances. A depressed appearance and social disengagement from peers are possible. Alternatively, the youngster may become easily upset or angered, picking conflicts with friends or arguing about unimportant matters. Such children tend to grow nervous about anything and appear afraid. Children who are unable to accept and manage these challenges may flee, finding themselves in dangerous settings like antisocial groups or on the streets. Early exposure to unfavorable circumstances can have a negative impact on a child's emotional development, academic achievement, and health. Numerous circumstances, including poverty, class discrimination, corruption, diseases, disasters, etc., might contribute to such challenges among youngsters. The social, political, and geographic circumstances of a nation, as well as the cultural norms and beliefs of the community, all have an adverse effect on each child's situation. Numerous cultural and socioeconomic norms impede their daily activities and threaten their healthy psychosocial development (Sekar & Kavitha, 2015).

An intricate system of reinforcement known as a token economy involves the use of tokens as a means of exchange for a variety of commodities, services, and benefits. The token economy was first applied by Ayllon and Azrin as an operant

technology. Ayllon and Azrin investigated the impact of token reinforcement on a range of target behaviors in a series of ground-breaking experiments carried out with patients at a state mental hospital. In one such experiment, after finishing a job assignment, eight participants received tokens. The effects of token reinforcement on job selection were evaluated using an ABA reversal design. During the first and third condition, participants earned tokens for selecting the high-preferred job. In the second scenario, choosing the least desirable profession gained tokens for the participants. The findings demonstrated that individuals, irrespective of their initial inclination towards the work, chose the token delivery role. The findings demonstrated that individuals, irrespective of their initial inclination towards the work, chose the token delivery role. Even though the experiment's consequences might be viewed as small by today's standards, Ayllon and Azrin's groundbreaking applied research from 1968 provides compelling evidence of the ability of token systems of reinforcement to modify behavior. Empirical evidence in favor of the token economy has been accumulating since Ayllon and Azrin. As of right now, the token economy's efficacy is widely established. Simonsen, Fairbanks, Briesch, Myers, and Sugai (2018) have recognized the token economy as an evidence-based practice, and the American Psychological Association's Task Force on Promotion and Dissemination of Psychological Procedures (2017) has rated it as a well-established psychological procedure (the highest rating possible). Six main elements make up a token economy: (1) The target behavior (or behaviors), (2) a token that functions as a conditioned reinforcer, (3) backup reinforcers, (4) the token production schedule, (5) the exchange-production schedule, and (6) the token-exchange schedule. A token economy derives its complexity from the three interconnected schedules of reinforcement that govern when tokens will be delivered (token production), when tokens will be exchanged (exchange production), and the cost in tokens of the various

goods or services available for exchange. All token economy reinforcement is based on the six main components. Target behavior is the description of the response class that produced a token. A replicable target behavior was written in objective and measurable terms. Clearly define the response class's presence and nonoccurrence.

The process of conditioning the token as a reinforcer is known as token conditioning backup. If the explanation provided the actions or conditions that the authors utilized to establish the token's function as a reinforcer, the token conditioning techniques were graded as reproducible. The process that was used to determine which goods and activities may be acquired through token exchange was known as backup reinforcer selection. A reproducible account of the backup reinforcer selection process explained the steps the writers used to determine backup reinforcers.

Token production schedule is the schedule of reinforcement that determines the delivery of tokens. If the description was expressed as a schedule of reinforcement or could be expressed as such, the token production schedule received a reproducible score. Exchange-production schedule is the schedule that determines when tokens can be exchanged for backup reinforcers. The exchange-production schedule received a repeatable score if the description was expressed in terms of a reinforcement schedule or could be expressed in terms of one.Token-exchange schedule is the schedule describes the cost of backup reinforcers in terms of tokens. The exchange-production schedule was scored as replicable if the description included the cost of the backup reinforcer (Ivy et al., 2017).

A carry out summary of an occupation is "groups of everyday activities and tasks, named, organized, and given value and meaning by individuals and a culture." Occupation is everything people do to occupy themselves, including looking after

themselves (self- care), enjoying life (leisure) and contributing to the social and economic fabric of their communities (productivity) (Cordier et al., 2016).

Usually, Child's occupational performance include the child's schooling, completing homework, take meals timely and appropriately, playing and some other activities. It's important for a child to perform their age-appropriate performance that may lead a healthy life in future. If a child Occupational performance is well, it indicates that the child's development is good and physically and mentally fit on his environment of the child. Occupational performance is measured by different types of assessment tools such as COPM. The Wall Model is designed as a framework for clinical reasoning to establish the underlying causes of a child who is presenting difficulties(The Wall Model® for Paediatric Occupational Therapists, n.d.).

Psychosocial/psychopathological or mental disorders have increased globally in recent decades, especially among the children and adolescents (Sciences et al., 2019). Psychosocial or mental illness refers to disorders that affect personal and social functioning or cause acute distress. Children with psychosocial difficulties means children may lose interest in play and school activities, and relationships with family and friends are usually impaired. Disturbances in behavior, mood, emotion, or thought processes are known as psychosocial disorders. For these disturbances to be classified as disorders, they must be severe enough and persistent enough to interfere with or affect one's capacity to perform tasks related to developmental life stages as well as social and emotional functioning.Psychosocial problems interfere with a child's and family's ability to operate normally. Play and school activities may become boring to children, and their connections with friends and family are typically strained. Children may display learning disabilities linked to their conduct in school or their incapacity to focus on learning. Certain illnesses are present as somatic symptoms, such as frequent

headaches without a physical reason or recurring abdominal pain. There have occasionally been reports of recurring suicidal or death thoughts. It can be necessary to stay in a hospital. Each of these incidents has a significant impact on the child's educational environment as well as parents, siblings, and friends.

1.2: Justification of the study

The study is conducted with an aim to explore the mother's and staffs 'perception in about token economy to guide specific school engagement & play performance among children with psychosocial difficulties and identify the limitation that will need to be corrected for establishing an effective token economy program. Occupational therapists work with children with disabilities such as children with psychosocial difficulties, children with behavioral problems, ASD, ADHD, Intellectual disability, and some others. This research can contribute valuable evidence on effectiveness of token economy systems, which may be integrated into occupational therapy interventions. It provides an evidence base for therapists to draw upon when developing treatment among children with psychosocial difficulties to increase their school engagement and play performance. The study will be helpful for occupational therapy professions to design an effective token economy protocol to achieve specific child's target behaviors. Moreover, this study will provide clinical reasoning for our profession to use token economy approaches in different psychosocial settings. An occupational therapist can identify the potential barriers to implement token economy in modifying child's behaviors.

On the other hand, the organization that uses token economy program can benefit to achieve their goal by providing interventions under token economy. An organization can easily determine how a reinforcement will be used in desired target behaviors. The researcher will also benefit from this study as he will use the treatment

protocol in his professional life to minimize behavioral and functional difficulties among children with psychosocial disturbance.

1.3: Operational Definition

Token Economy

Token economies have been extensively researched throughout the last several decades and applied in a variety of settings. Teachers and caretakers have used these systems in general education, special education, and community-based settings. Because of the variety of token-based systems and the ease at which teachers can implement them, token economies are widely used across the nation (Doll et al., 2013). A token economy is a sophisticated reinforcement system where different commodities, services, or privileges are acquired through the usage of a token as a means of exchange. Token economies have been used in education and treatment since the early 19th century. The token economy is a well-established and widely used behavioral intervention. Kazdin and Pulaski, for example, described a system used in England during the Industrial Revolution where students earned points that could be exchanged for small prizes, such as books or toys. In this sense, the token economy emerged more than a century before operant behavior research in science (Ivy et al., 2017).

Occupational performance

In the most general terms, occupations are "groups of everyday activities and tasks, named, organized, and given value and meaning by individuals and a culture." Their self-care, rest, and productivity—all of which serve the social and economic fabric of their communities—are all considered forms of occupation. Occupational performance, the act of *doing* an occupation in order to satisfy life's needs, is an important construct across the lifespan. Conceptually, occupational performance is the point at which the person, the environment and the occupation–in a dynamic interplay—support the tasks,

activities and roles that define that person as an *individual*. Occupational therapists can help people who struggle with occupations by helping them maintain upper limb strength so they can use a wheelchair; they can also modify the tools they use to perform the occupations (e.g., prescribing a wheelchair for an individual with SCI); and they can suggest environment modifications (e.g., installing wheelchair ramps around the house for an individual with SCI). Because occupational performance is essential to daily living, occupational performance evaluations are a crucial aspect of the health treatments that occupational therapists, in particular, provide to their clients. Occupational therapists need to have access to assessments that allow them to take into account the following in order to assist clients in moving toward optimal performance.

Psychosocial difficulties child

Childhood is the most important phase in a person's life. The conducive environment available during this stage of life determines positive psychosocial development of an individual. Difficult circumstances is a very wide term encompassing various problems experienced by children and many categories of children are described differently by different organizations (Mock & de Buhr, 2009). According to a study by NIMHANS, children in the southern states of India face 24 different types of challenging situations. There are several factors that can be the source of challenging conditions. Children typically face challenging situations as a result of dysfunctional families, social issues, interpersonal disputes, or sociocultural influences. The challenges that kids face will affect their social, mental, and physical well-being. The type of problem a child is facing determines how it affects them as well (Sekar & Kavitha, 2015).

1.4: Aim of the study

To find out the impact of token economy on occupational performance of children with psychosocial difficulties.

CHAPTER II: LITERATURE REVIEW

A token economy is a type of positive behavioural intervention assistance. A token economy can be used with an entire school, classroom, or household, just like all other PBIS implementations. It is taught to students' which behaviours are good and which are bad. The token economy is a highly interactive framework. Pupils can select prizes that they find enjoyable and wish to achieve. The token economy emphasizes rewarding children for their good deeds (Gruber, n.d.).

Children in difficult Circumstances

Urbanization affects millions of children globally and contributes to the rise in the number of street children, particularly in African nations. As of 2004, 317 million children worldwide, aged five to seventeen, were employed as child laborers. It was estimated that 126 million children were engaged in hazardous work and 217 million in other types of child labor (Hagemann et al., 2006). According to a 2005 UNICEF report, 8 million children were compelled into the sex trade, 1.2 million children have trafficked annually, and 5.7 million children were forced into bonded labour (Abdolahzadeh et al., 2018).

The estimated overall prevalence of emotional and behavioural issues in Bangladesh was 8.4%. Peer difficulties accounted for 19.7% of the attribute frequency. 5.2% of the participants had conduct issues, 5.6% had hyperactivity issues, 13.5% had prosocial behaviours, and 6.8% had emotional issues. Children in South Asia still face many difficulties due to political unrest, environmental degradation, repeated natural catastrophes, poverty and inequality, rising food prices, and economic hardship. This region has high rates of undernourishment, stunted growth, deprivation of schooling and education, mortality, and illness from diarrhoea, acute respiratory infections, vaccine-preventable diseases, and malnutrition. (UNICEF & SAARC, 2001–2010).

There are 21.6 million child laborers in South Asia alone. They cross borders in smuggling and trafficking(Sekar & Kavitha, 2015).

With 38% of its population under 14, India has the largest child population in the world. Less than 50% of children between the ages of 6 and 14 attend school, while 53% of girls between the ages of 5 and 9 are illiterate. Rural children reported more problems with their physical and mental health (20 out of 1000 children) than did urban children (16 out of 1000 children). Every sixth child dies as a result of gender discrimination; every fourth child experiences sexual assault if they are younger than four years old; every second child becomes a child bride; and 17 million youngsters are employed in India. According to an analysis of numerous studies on kids facing challenging situations, "the difficult circumstances vary according to the social, cultural, political, and economic condition of a country."

Psychosocial problems among children in difficult circumstances

The word "difficult circumstances" is fairly broad, embracing a wide range of issues that children face, and different organizations have varied definitions for many of the same child categories. According to a study by Sekar et al. (2012), children in the southern regions of India face 24 different types of challenging situations. Several factors can be the source of challenging conditions. Children typically face challenging situations as a result of dysfunctional families, social issues, interpersonal disputes, or sociocultural influences. The challenges that kid face will affect their social, mental, and physical well-being. The type of hardship a child is facing will also determine how it affects them (Sekar & Kavitha, 2015).

Children who live in challenging situations often report major issues with violence, psychosocial trauma, and social behavioral disorders. For younger children, these can include nightmares, not playing or interacting with friends, feelings of

sadness, poor or absent appetite, and withdrawal. For older children and teenagers, these might include issues like poor concentration, anxiety and depression, hopelessness, and aggressive behaviour.

A study was carried out in the northwest of the Netherlands to ascertain the frequency of psychological issues and investigate the relationships between them in Dutch children ages 8 to 12. This study was carried out using a cross-sectional study sample of 2703 youngsters (1392 boys and 1311 girls) as part of a community-based health study. In the entire sample, the prevalence of psychological issues was 10.4%. When compared to girls, guys had a higher prevalence. Compared to girls, boys exhibited much greater issues with conduct, prosocial behavior, peer relationships, and hyperactivity/inattention. One or more chronic diseases, life events, low parental educational attainment (for males only), and income below a median level were risk variables linked to psychological issues. In the entire group, there was a substantial inverse relationship between psychosocial disorders and quality of life (Bot et al., 2011).

An additional investigation was carried out in Iran to ascertain the frequency of behavioural issues among youngsters residing in the periphery of Mashhad, Iran. In the outskirts of Mashhad, 36.44% of male elementary school students reported having behavioural issues. Defiant behavioural difficulties were the most prevalent behavioural problem, with a frequency of 23.11%, while social problems had the lowest incidence, at 7.33%. In terms of academic grades, pupils in the second grade were most likely to experience behavioural issues (prevalence: 25.6%), while students in the fifth grade were least likely to experience behavioural issues (prevalence: 13.4%) (Abdolahzadeh et al., 2018).

Over the past few decades, token economies have been thoroughly studied and

used in a range of contexts. These systems have been utilized in general education, special education, and community-based settings by educators and carers. Token economies are employed extensively across the country due to the range of token-based systems available and the ease with which educators may put them into practice. Token economies can be utilized to improve academic responses from students and reduce disruptions in the classroom. Token economies have been used for this behaviours-management system in preschool settings with a range of changes (Doll et al., 2013).

In a remote elementary school in the Pacific Northwest, K. Anna and T. F. McLaughlin conduct research in a special education classroom. For this investigation, an ABC single-subject design was employed. This study only had one participant. Tasha, who was six years old, was a student in the developmentally impaired main kindergarten–a third-grade school that specialized for children with special needs. The goal of this case study was to lessen the inappropriate behaviours that a kindergarten-aged special education student displayed in the classroom and to boost her completion of assignments.

Further information was collected on generalization (Stokes & Baer, 1977) when she was subsequently placed in a general education classroom. Among the unacceptable behaviours displayed by his pupil were rushing around the classroom, screaming, not wanting to work, not participating in class or answering questions, striking, kicking, and climbing over and under furniture. The overall results showed that the amount of time needed to finish an assignment was decreasing, that assignment completion was increasing, as well as the frequency of inappropriate classroom behaviours was decreasing.

The average time spent on an assignment across the course of three baseline sessions was 10.0 minutes, with a range of 9 to 12 minutes. The average time to finish

an assignment under the first token economy (3 Token System) was 4 minutes, with a range of 3 to 5 minutes. The average time taken to finish an assignment increased slightly (M = 4.571 minutes; range 3 to 6 minutes) as a result of the five-token strategy. The average number of assignments finished during the three baseline sessions was 2.0, with a range of 2 to 3 each 30 minutes. Following the introduction of the third token program (3 Token System), the number of completed assignments per 30-minute period rose to 7.67 (range 6 to 9). A minor decrease in assignment completion for the five-token method was seen, with a range of 6.75 to 10. Figure 3 shows the number of inappropriate behaviours. An average of 3.33 behaviours (range 3 to 5) per 30-minute session was observed during baseline. In the case of the third token system (the second one), no incorrect actions were recorded. There was only one infraction recorded during the third token program (Klimas, 2007).

Another study by S. Samantha and P. Vincent M. S. was carried out in the Manchester parish in Jamaica. The study's objective was to investigate and ascertain the effect of a token economy system as a behavior modifier on disruptive behavior in elementary school classes. In an attempt to completely understand the phenomenon, this study used hybrid approaches, i.e., objectivism (survey research) and subjectivism (phenomenology). There are forty kids in the sample: the classroom instructor, 19 boys and 21 girls. These pupils displayed actions that interfered with the process of instruction and learning. The outcomes demonstrated that the use of tokens to reduce disruptive behaviours was highly successful, as evidenced by the students' behavioural levels following the intervention. Students received fewer warnings and more instruction on how to engage in relevant class activities. The reason for this was those disruptive behaviours, such as asking to use the washroom frequently, dropped to 23%, disorderly conduct to 40%, fighting to 5%, talking to 40% of the class, laughing to 10%,

arguing to 13%, and eating away from the board altogether all decreased. In addition to improving the kids' academic achievement, the token program fostered better relationships between students and teachers as well as among students themselves (Bourne, 2018).

Another trial at Cincinnati Children's Hospital Medical Center's bone marrow transplant unit in Cincinnati, Ohio. To investigate the impact of the token economy ADL1-2-3 intervention on patient ADL adherence and eligibility, the author employed a controlled before-after trial study design. Every patient is prescribed three activities of daily living (ADLs) or ("ADL 1-2-3"), which include taking a daily bath with chlorhexidine gluconate (CHG), exercising twice a day, and following the previously mentioned oral hygiene regimen three times a day. The study's goal is to increase adherence to daily living routines through token economies (bathing, physical exercise, and cleanliness). The HSCT patients with low ADL adherence (<20%) comprised the study's sample, and they were eligible to undergo the intervention, which involved rewarding patients for their ADLs through a token economy. After implementing the intervention, the study discovered some novel outcomes. The token economy intervention gave the clinical team a methodical and well-defined way to give patients basic positive reinforcement, which increased adherence to ADLs and encouraged patient activation, self-management, and family involvement. In conclusion, studies on the token economy have demonstrated effectiveness in enhancing memory and reaction inhibition in young patients suffering from acquired brain injuries(Hickey et al., 2018). W. Robert L., M. Chelsea is conducting more research in a non-urban area of British Columbia (BC), Canada's lower mainland. The study's objective is to assess how token economy techniques affect students' on-task behaviours in an inclusive classroom in Canada. Multiple elements were used in this study's design. Using a single case

alternating treatment (ABCBC) design, the effectiveness of two distinct token economy classroom management strategies was visually examined for baseline student on-task behaviours. The study's conclusion about any variations in the on-task behaviours of the full group of students among the three conditions (no intervention, physical method, and virtual method) was based on all picture-based analyses of the group's activities. There was not any noticeable distinction found between any of the phases. Planned contrasts demonstrated that, in terms of the entire group's on-task behaviours, the implementation of both the physical and virtual approaches did not significantly differ from the baseline (no TE) (one-tailed), and neither the virtual implementation nor the physical implementation (two-tailed)]. Comparably, a visual single-case examination of the entire group's data did not highlight any noteworthy phase-to-phase trends (Williamson & Mcfadzen, 2020).

Another study was also carried out at Andalas University in Padang. The study's objective was to ascertain how economic token treatment affected kindergarten students' attachment behaviours. Kindergarten students' conduct. Method: This study used a quasi-experimental approach with a control group and pre-and post-testing. employing successive sampling and multistage random sampling with a sample size of 68 individuals who exhibited attachment behaviours. Involved 34 participants in the intervention group and 34 participants in the control group. Mann-Whitney and Wilcoxon tests are used in bivariate analysis. The findings demonstrated that the intervention group's attachment behaviours differed significantly from the control group's both before and after they entered the token economy intervention(M & E, 2018)

CHAPTER III: METHODS

3.1: Study questions, Aim & Objectives

3.1.1: Study Questions

What's the impact of token economy on occupational performance of children with psychosocial difficulties?

3.1.2: Aim

To find out the impact of token economy on occupational performance of children with psychosocial difficulties.

3.1.3: Objectives

- To find out the socio-demographic information of child & mother.
- To examine the impact of token economy on occupational performance.
- The Association between socio-demographic information of child and mother & the level of token earning of Child with psychosocial difficulties.

3.2: Study Design

3.2.1: Study methods

In this study, researchers used a quantitative method. In order to generate numerical data and hard facts, quantitative research is a type of research that is based on natural science methodologies. The objective is to determine the link between two variables in terms of cause and effect by the application of statistical, mathematical, and computational techniques. Because the study can be carefully and accurately measured, it is also known as empirical research. The researcher can classify, rank, or measure the data using different units of measurement. Quantitative research can be used to create raw data graphs and tables, which facilitates the researcher's analysis of the findings (Ahmad et al., 2019). A quantitative research approach focuses on measuring and

analyzing variables to produce findings. Answering questions like who, how much, what, where, when, how many, and how necessitates utilizing specialized statistical approaches to analyze and utilize numerical data (Synopsis, 2017).

3.2.2: Study approach

Researcher used Analytical Cross sectional study approach to conduct the study due to measure outcome & provide exposure at a same time. In these types of scientific study, the investigators did not influence with the phenomenon they were studying; instead, they conducted a methodical and consistent observation, gathering and documenting information, data, or materials that materialized on their own at a specific moment. Case series studies, cross-section studies, case-control studies, and cohort studies are the four study design types typically employed in observational research. Therefore, cross-sectional studies are particularly helpful in descriptive research when employed in studies that are intended to be analytical; however, the results must be interpreted with extreme caution and common sense by researchers who have solid experience in that particular field of study (Zangirolami-Raimundo et al., 2018).Analyzing data from a population at one particular point in time is what cross-sectional studies do. In a cross-sectional study, researchers assess the study subjects' exposures and outcomes simultaneously (Wang & Cheng, 2020).

3.3: Study setting & Period

3.3.1: Study setting

The researcher was conducted of the study in an organization named," Shishu Polli Plus (a project of The Sreepur Village, Bangladesh) is an International NGO in Bangladesh, serves as a refuge and safe haven for single mothers and their children who have been displaced from their homes. Because token economy system is running only in this organization in Bangladesh for the child with psychosocial difficulties.

3.3.2: Study Period

The study period of the study was from 1st May,2023 to 20th February,2024.

3.4: Study Participants

3.4.1: Study population

Study Populations are the Child with psychosocial difficulties under token economy system in Shishu Polli Plus (SPP).

3.4.2: Sampling technique

Sampling is the process of choosing study participants (also known as the sample) from a broader pool of qualified people (also known as the population). The researcher used purposive sampling to conduct the study. Investigator selected purposive techniques to collect data following inclusion and exclusion criteria(Beckman, 2019). Purposive sampling, sometimes referred to as judgment sampling, is a useful tool for rapidly and efficiently reducing the number of possible research participants(Palinkas et al., 2015). Purposive sampling is a technique for discovering and choosing cases that will make the most use of few research resources. It is "used to select respondents that are most likely to yield appropriate and useful information(Campbell et al., 2020).The method contained some inclusion criteria to select the participant to find out the actual snaps of the situation. Moreover, purposive sampling is a non-representative subset of some huge population and is constructed to serve a very specific need or purpose(Thomas, 2022).In this study, researcher used choose study population based on their inclusion & exclusion criteria & used a self-developed questionnaire to identify the psychosocial difficulties children.

3.4.3: Inclusion and Exclusion Criteria

i. Inclusion Criteria

- Children with psychosocial difficulties.

- Child age range between 3 years to 14 years.
- Children receive token economy programs for at least 6 months.

ii. Exclusion Criteria

- Newly admitted Children.
- Child who has physical disability.

3.4.4: Sample Size

Sample size calculation, $\mathbf{n = \frac{Z^2 \times p \times q}{d^2}}$

Here

n= sample size

z= the standard normal deviate usually set at 1.96 which correspondent to 95% confidence.

p= 50%, 0.5 as the prevalence of child with psychosocial difficulties is known, so it is considered 50% of the total population of Bangladesh.

q= (1-p) = 0.5; proportion in the target population not having the characteristics

d= 0.05; degree of accuracy required (level of significance/margin of error)

$n = \frac{(1.96)^2 \times 0.5 \times 0.5}{(0.05)^2}$

$= \frac{0.9604}{0.0025}$

$= 384.16 \cong 384$

According to this equation, the sample should be more than 384 participants. But due to student research and unavailability of participants in Bangladesh based on the inclusion & exclusion criteria, researchers could collect data from 47 participants. So, the sample size of the study is 47.

3.5: Ethical Considerations

As a statement of ethical principles for medical research, the World Medical Association (WMA) created the Declaration of Helsinki (World Medical Association Declaration of Helsinki, 2022).

3.5.1: Ethical Clearance from IBR:

The ethical clearance for the study has been sought from the Institutional Review Board (IRB) of BHPI by explaining the study purpose, through the Department of Occupational Therapy, Bangladesh Health Professions Institute (BHPI). IRB clearance 20 number CRP/BHPI/IRB/10/2023/737.

3.5.2: Ethical clearance from SPP:

The investigator took approval from Shishu Polli Plus(SPP) to conduct the research.

3.5.3: Informed Consent

i. *Consent form*

After being given an explanation of the purpose of the study, the participant's mother chose to voluntarily participate in the study. The consent was taken by a written consent form.

ii. *Withdrawal form*

Participants have the right and can voluntarily withdraw to participate in the study before starting the data analysis. For this withdrawal form has been attached with an information sheet and informed the participant about this.

iii. *Information sheet*

Every participant's mother received an information sheet from the student researcher that covered all the details about the study and made it obvious to them what its purpose and goals were.

3.5.4: Unequal relationship

The researcher has not any unequal relationship or power relationship with the participants.

3.4.5: Risk and Beneficence

- The researcher ensured that the study will not cause any risk for the participants.
- Researchers also contact a psychologist when the researcher collects data from the participants because sometimes the participants will be in a more emotional state.

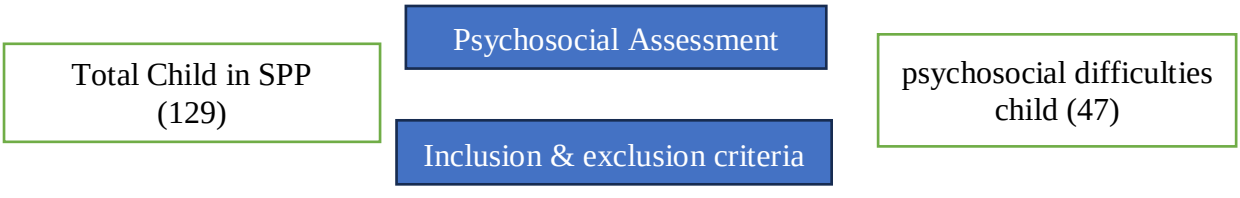
3.4.6: Confidentiality

Researchers maintain the participants confidentiality throughout the research procedure.

3.6: Data Collection Process

3.6.1: Participant Recruitment Process

Recruitment of participants in health research can be challenging. To accurately represent the population of interest, a suitable participant selection is necessary. The recruitment process involves the identifying, targeting, and enlisting the potential participants, followed by provision of information to potential participants and ensuring their interest in the proposed study (Manohar et al., 2018).). The student researcher recruited children with psychosocial difficulties from Shishu Polli Plus (SPP). A psychosocial assessment was conducted with all the children of Shishu Polli Plus (SPP). Only the children included in this study who have psychosocial difficulties are found by conducting psychosocial assessments based on the inclusion and exclusion criteria. Among the children in SPP under the token economy system, 47 children meet the inclusion criteria of the study.



3.6.2: Data Collection Method

The researcher fixed a date and time with the staff of token economy department and CMC department. according to their availability. Then the investigator went to Child-Mother Corner (CMC) to collect the child's and mother's socio-demographic information (face to face). After the investigator went to the organization's token economy department to collect the child data (medical file & document). Data was recorded in a Survey checklist sheet. The survey checklist sheet provided information about the domains of Occupational performance of a child and the daily token earning and deduction rate of a child. Data was recorded in this checklist sheet of 30 days from December 01,2023 to December 30, 2023. Finally, the researcher visited the child's school to observe child behaviors and collect information from the child's teacher (face to face).

The researcher collect data by the method of

- Data was collected by observing the child's school behaviors by visiting the child's school.
- Child's mothers' socio-demographic information was collected by face-to-face interviews.
- Child's data was collected from token economy department from December 01,2023 to December 30, 2023.

3.6.3: Data Collection Instrument

- Survey checklist (Child School and House behavior token earning & incident report sheet).

Survey Checklist Form

The Survey checklist sheet named, child school and house behaviors daily token incident & earning report. The checklist was developed by an organization named,

Shishu Polli Plus". In the organization, a token economy department maintains the token system among the beneficiaries inside the organization. The checklist records the child's daily token earnings and deduction on occupational performance areas of child (school and house behaviors). There are six domains of occupational performance areas of a child in this checklist. They are morning study, Assembly, Gate move with Tiffin, School behavior, evening study and house behaviors. After accomplishing each of the activities, children get one token per activity.

Socio demographic profile sheet

This questionnaire was developed by researcher included items related to personnel characteristic for collecting socio-demographic details child and mother such as name, age, gender, class, education, occupation etc.

3.6.4: Field test

As the researcher collected data from the organization survey sheet, there was no need to conduct field tests.

3.7: Data Management and Analysis

3.7.1: Data Management

The data were kept in a locked-file cabinet.

3.7.2: Data Analysis

Data were analyzed by Statistical Package for Social Science (SPSS) and descriptive analysis of the data. The presentation of data organized in SPSS version 22 and Microsoft Office Word. Microsoft word excels is used to present data using table. A few data also analysis manually.

3.8: Quality Control and Quality Assurance

All the data collection procedure should be accurately done with the concern of the respective study supervisor. The researcher tried to follow every instruction of the

responsible supervisor. The investigator ensured that the methods of the study were fit for the purpose of the study. Before starting the data collection, Researcher check the organization token recorded survey sheet, the researcher contacts with supervision and make a discussion about the research objectives so that the daily incident token sheet fulfill the research objectives. Then the researcher made an appointment with the responsible staff to have a discussion about the research objectives and the survey questionnaire. After reviewing the survey sheet, the researcher starts to record data. As the researcher also collected child and mothers' demographic information to show the association and correlation with the token earning and deduction rate, so the researcher also collects those data from another department of the shishu polli Plus (SPP), named Child and mother Centre in a Bangla questionnaire. The response from the participants were authentic as the investigator did not impose his thoughts and bias. The survey questionnaire was reviewed before starting the data collection from the organization's responsible staff of the token economy department. There was no manipulation of data. SPSS was used to analyses the data; therefore, the result was driven by it.

CHAPTER IV: RESULTS

The study included the children with psychosocial difficulties under token economy program & n= 47 participants were recruited from Sishu Polli Plus (SPP) based on the inclusion of exclusion criteria. This section of the study described the results after analyzing the data of the participants. This section reports the findings of the study based upon the information gathered as a result of the methodology. The following tables categorize the socio-demographic characteristics of the children with psychosocial difficulties.

Table-1: Socio-demographic characteristic of the participants:

Variable		**Frequency (n=47)**	**Percentage (%)**	**Min.**	**Max.**	**Mean**
Child's age	4 to 9 years	22	46.8%	4	14	9.38 ± 2.601
	10 to 15years	25	53.2%			
Mother age	24 to 29 years	12	25.5%	24	51	34.02 ± 5.829
	30 to 35 years	20	42.6%			
	36 to 41 years	10	21.3%			
	42 to 47 years	3	6.4%			
	48 to 53 years	2	4.3%			

In the Socio- demographic table, 22 children's age was between 4 to 9 years and 25 children's age was under 10 to 15 years. The percentage is 46.8% and 53.2%. The minimum age of child was 4 years, and the maximum age was 14 years & the mean age was 9.38 ±2.601 among the children.

Child's mother age among 47 respondents, 25.5% (n=12) mother age was between 24-to-29-year, 40.4% (n=20) mother age under 30 to 35 years, 21.3% (n=10) mother age under 36 to 41 years, 6.4% (n=3) mothers age between 42 to 47 years and 4.3% between 48 to 53 years. The maximum and minimum age of mothers was 51 years and 24 years. Mothers mean age was 34.02 ±5.829.

Table-2: Socio-demographic characteristic of the participants:

Variable			Frequency(n)	Percentage (%)
Gender	Boys		23	48.9%
	Girls		24	51.1%
Child's education	Preschool		11	23.4%
	Class-1		6	12.8%
	Class-2		9	19.1%
	Class-3		9	19.1%
	Class-4		9	19.1%
	class 5		1	2.1%
	class 8		2	4.3%
Child staying year in SPP	One year		12	25.5%
	Two years		19	40.4%
	Three years		16	34.0%
Child's mother education	Illiterate		19	40.4%
	Under class 5		14	29.8%
	Above Class 5		14	29.8%
Mother's occupation	Housewife		37	78.7%
	Worker		10	21.3%
Types of psychosocial difficulties	Communication	Poor	20	42.6%
		Good	27	57.4%
	Social	Good	8	17.0%

	interaction	Poor	39	83.0%
	Social skills	Poor	42	89.4%
		Good	5	10.6%
	Behavior	Good	8	17.0%
		Poor	39	83.0%

The ratio of boys and girls was 1:104 among 47 participants. The percentage of male and female was 48.9%and 51.1%. Education among the children with psychosocial difficulties, preschool was 23.4% (n=11), 6 children read in class one which was 12.8%. 19.1% (n=9) children were in class 2. In class-3 & 4, the participants' numbers remain the same as the number of Class two. 2.1% (n=1) children were studying in class five. In class 8, the number of children was 4.3% (n=2).

Among 47 psychosocial difficulties children, 25.5% (n=12) children were staying in SPP till one year, 40.4% (n=19) children were two year, and 34.0% (n=16) children were three years in SPP.

Among 47 mothers of psychosocial difficulties child, 29.8% (14) mothers education level under class five & 29.8% (n=14) mothers education level above class five & more portion of number 40.4% (n=19) mothers were illiterate.

In mother Occupation, among 47 mothers of psychosocial children 78.7%(n=37) mothers were housewife and 21.3%(n=10) were work outside of home.

The socio-demographic table also showed the types of psychosocial difficulties among the participants. There were 42.6%(n=20) children who had communication problems, and 57.4%(n=27) children didn't have any communication difficulties. Additionally, 83.0%(n=39) children had problems in social interaction and 17% children had good social interaction. 89.4%(n=42) children had poor social skills and 10.6% (5) children had good social skills. Moreover, there were 83.0% (n=39) children who have behavioral problems, and 17%(n=8) children didn't show any disrupted behaviors.

Table-3: First assessment & second assessment of token earnings among children with psychosocial difficulties:

Variable	Mean		Standard Deviation		Z value	P value
Token earning	First Ax	Second Ax	First Ax	Second Ax	-2.236	**0.025***
	5.8	5.89	0.556	0.312		
[Test: Wilcoxon Signed Ranks.]				**P<0.05***		

Table 3 described the comparison of token earning on occupational performance among children with psychosocial difficulties. The table compares the first assessment token earning and the Second assessment total token earnings. Mean value of first assessment token earning 5.8 ± 0.556.And the last assessment token earning average mean 5.89 ± 0.312.

The investigators compare the token earning of first assessment token and the last assessment token earning by Wilcoxon test. By examining the final test statistics portion of table by Wilcoxon signed rank test it was discovered that the token economy system is effective for improving the child occupational performance of children with psychosocial difficulties where the Z value is -2.236 & p value 1<0.025.

Table-4: Mean rank difference between age and individual token earning:

Categorical Variable	Frequency	Mean rank	Z value	P value
4 to 9 years	22	24.36	-.177	**.860**
10 to 15 years	25	23.68		
[Test: Wilcoxon Signed Ranks.]			**P<0.05***	

Table-4 describes the association between age and the level of token earning the children with psychosocial difficulties. There was mean rank 24.36 (n=22) which age between 4 to 9 years and another group of age (10 to 15 years) mean rank was 23.68 (n=25). The value of Z is -1.77 and the P value of 0.860 which is not statistically significant. It is clear that there is no association between child age and the level of token earnings.

Table-5: Mean rank difference between gender and individual token earning

Categorical Variable	Frequency	Mean rank	Z value	P value
Male	23	22.91	-.551	**.582**
Female	24	25.04		
[Test: Wilcoxon Signed Ranks.]				**P<0.05***

After analyzing following the Mann-Whitney U Test, the mean rank of token earning 22.91(n=23) and 25.04(n=24) of the male & female. There is no significant difference between the mean rank where the value of Z is -0.551 and P value is .582*. The is no association between the gender and the level of token earnings.

Table-6: Mean rank difference between mother's occupation and individual token earning

Categorical Variable	Frequency	Mean rank	Z value	P value
Housewife	37	23.39	-.606	**.545**
Worker	10	26.25		
[Test: Wilcoxon Signed Ranks.]			**P<0.05***	

It is seen from table-6 that the association between the child mother's occupation and the level of token earnings among the children with psychosocial difficulties. Mothers was housewife in their previous occupation whose mean rank is 23.39(n=37) and the mother who was worker, mean rank was 26.25(n=10). Z value is -0.606 and the P value is 0.545. The association is not statistically significant. So, there is no association between the mother's occupation and the level of token earnings.

Table-7: Mean rank difference between children education and individual token earning

Categorical Variable	Frequency	Mean rank	Z value	P value
Pre-school	11	26.95	-.606	**.545**
Class-1	6	16.17		
Class-2	9	18.06		

Class-3	8	20.44		
Class-4	8	28.44		
class-5	1	36.00		
Class-8	2	26.00		
[Kruskal Wallis H Test.]				**P<0.05***

Table-7 shows the association between the children's age and level of token deduction among children with psychosocial association. The table shows the mean rank according to the children's education level. The mean rank of Pre-schooling child is 26.95(n=11), Class-1 is 16.17(n=6), class-2(n=9) is 18.06, Class-3(n=8) is 20.44, class-4(n=8) is 28.44, Class-5(n=1) is 36.00 & the class-8(n=2) is 26.00 where the Z value & P value is -0.606 & 0.545*. The association is not statistically significant. There is no association between the education level of Children of psychosocial difficulties and the level of token earnings.

Table-8: Mean rank difference between Child staying year in SPP and individual token earning

Categorical Variable	Frequency	Mean rank	Z value	P value
One year	12	24.25	-.606	**.253**
Two years	19	27.32		
Three years	16	19.88		
[Kruskal Wallis H test.]				**P<0.05***

The table shows the association between the child staying in SPP and the level of token earnings. The one year, two years and three years describe the children number of years a child stays in SPP. The first-year child's token earning men rank is 24.25(n=12), second years is 27.32(n=19) and the third-year child's token earning mean rank is 19.88(n=16) where the Z value is -0.606 and the P value is 0. 253.The test is not statistically significant. There is no association between the child years of SPP and the level of token earnings.

Table-9: Mean rank difference between mother's education and individual token earning

Categorical Variable	Frequency	Mean rank	Z value	P value
Illiterate	14	28.29	-2.0	**.114**
Under class 5	19	19.21		
Above class 5	14	26.21		
[Kruskal Wallis H Test.]			**P<0.05***	

Table-9 shows the association between the child's mothers' education and the number of token earnings. mother who are illiterate, the mean rank of those mothers is 28.28(n=14) and mother whose level of education is under class five, the mean rank is 19.21(n=19) and mothers are educated above class five, the mean rank of those mothers' is 26.21(n=14) where the Z value & the P value is -2.0 and 0.114*. There is no association between the child's mother's education and the level of token earning among the children with psychosocial difficulties.

Table-10: Mean rank difference between mother's age and individual token earning

Categorical Variable	Frequency	Mean rank	Z value	P value
24 to 29 years	12	27.33	4.00	**.049***
30 to 35 years	20	18.75		
36 to 41 years	10	23.50		
42 to 47 years	3	38.00		
48 to 53 years	2	38.00		
[Kruskal Wallis H Test.]				**P<0.05***

The table shows the association between a child's mother's age and the child's individual token earnings among the children with psychosocial difficulties. The table shows the mean rank of child's token earning according to the child's mother's age. The mean rank is 27.33(n=12) when the mother's age range 24 to 29 years, mean rank 18.75(n=200) when the mother's age range is 30 to 35 years, mean rank 23.50(n=10)

when the mother's age range is 36 to 41 years, mean rank 38.00(n=3) when the mother's age range is 42 to 47 years & mean rank 38.00(n=2) when the age range is 48 to 53 years).And the Z value and P value of the association is 4.00 and 0.049 which is statistically significant. So, there is a strong association between the child's mother's age and the child's token earnings on occupational performance areas.

Table-11: Mean rank difference between children with communication difficulties & individual token earnings

Categorical Variable	Frequency	Mean rank	Z value	P value
Poor	39	24.71	-1	**.420**
Good	08	20.56		
[Test: Wilcoxon Signed Ranks.]			**P<0.05***	

The table showed that children who faced communication difficulties, the mean rank of token earnings -24.71(n=39) and children were able to communicate, the mean rank of those children was 20.56(n=08) where the Z value and the P value are -1 & 0.420. The association between children with communication difficulties & individual token earnings was not statistically significance. There is no association between them.

Table-12: Mean rank difference between children with social skills difficulties & individual token earnings

Categorical Variable	Frequency	Mean rank	Z value	P value
Good	5	21.10	1	**.604**
Poor	42	24.35		
[Test: Wilcoxon Signed Ranks.]			**P<0.05***	

The table shows the association between children with social skills difficulties & individual token earnings. The mean rank was 21.10(n=5) and 24.35(n=42) among the children are good and poor social skills where the Z value and P value are 1 & .604.

The test is statistically not significant. There is no association between children with social skills difficulties & individual token earnings.

Table-13: Mean rank difference between children with difficulties in social interaction & individual token earnings

Categorical Variable	Frequency	Mean rank	Z value	P value
Good	8	19.56	1	**.298**
Poor	39	24.91		
[Test: Wilcoxon Signed Ranks.]			**P<0.05***	

Table-13 described the association of children with difficulties in social interaction & individual token earnings. The social interaction among the participants good which frequency 8 and mean rank 19.566. n=39 participants have problems in social interaction which Mean rank was 24.91 where the Z value and P value are 1 and0.298.

Table-14: Mean rank difference between children with behavioral problem & individual token earnings

Categorical Variable	Frequency	Mean rank	Z value	P value
Good	27	20.72	1	**.049***
Poor	20	28.43		
[Test: Wilcoxon Signed Ranks]			**P<0.05***	

Table-14 showed the association between children with behavioral problem & individual token earnings. The mean rank of children with no behavioral problem was 20.72(n=27) and 28.43(n=20) mean rank of those children who had behavioral problem where the Z value and P value are 1 & 0.49. The test was statistically significant. There is an association between the children with behavioral problems & individual token earnings.

CHAPTER V: DISCUSSION

One purpose of the study was to investigate the impact of token economy on occupational performance among children with psychosocial difficulties. There were 47 psychosocial difficulties participants selected from an organization had applied token economy system on them. The impact measured based on the occupational performance areas of a child (Assembly, Morning study, School behavior, House behaviors, gate move with tiffin, evening study).

The significant differentiation was shown between Pre-test and post-test token earning on occupational performance areas was possibly caused by economic token therapy. The results showed a strong significant impact of token economy on occupational performance among selected psychosocial difficulties disturbing children. Impact measured by pre-test and post-test of children token earning rate within one month. The mean rate of pre-test token earning was 5.8 and the post-test was 5.8 where the P value was 0.025. So, it seems that there was a significant impact of token economy on occupational performance. A study was conducted with an aim to investigate and ascertain the effect of the token economy system as a behavior modifier on disruptive behavior in classrooms among a group of elementary school kids in the Manchester parish, Jamaica.

The results of the study to reduce disruptive behavior was shown to be highly effective, as seen by the students' behavioral levels following the intervention (Bourne, 2018). The preschool children who have been given an economic token as a reward, become more willing to change behavior to more positive behavior. Children. There were fewer warnings issued, and more time was devoted to teaching pupils how to engage in worthwhile classroom activities. This came about as a result of disruptive behavior decreasing to 23%, disorderly conduct decreasing to 40%, fighting levels

decreasing to 5%, talking in class decreasing to 40%, joking in class decreasing to 10%, arguing in class decreasing to 13%, and eating in class quitting entirely(Bourne, 2018). Another research study using "Quasi-experimental Pre-Post Test with Control Group" with economic token therapy intervention was provided with an aim to determine the impact of effect of Economic Token Therapy on Preschool Children in Kindergarten. The analysis's conclusion indicates that after receiving economic token therapy, preschoolers' attachment behavior dropped to 0.59 (14,75%) with a standard deviation of 0.701 where the value of Z = -5,184 if the significant level is 0,05 by using Wilcoxon test. This study indicated the effects of economic token therapy on preschoolers in an intervention group as well as the significant differences in attachment behavior between children in the intervention group before and after the therapy (Bourne, 2018).

In this study, the mean value was increased token earning rate after applying token economy system that indicated the better occupational performance among psychosocial difficulties children.

Another study was conducted with an aim to evaluating the Impact of token economy methods on student on-task behaviors within an inclusive Canadian classroom. Concerning any variations in the collective student behavior while on task among the three circumstances (no intervention, physical technique, virtual method). Between any of the stages, no significant difference ($p<.05$) was seen (Williamson & Mcfadzen, 2020).

The association between demographic characteristics and the individual child token earning on occupational performance areas; between child age, sex, education, years of SPP, Child's mother age, mother occupation, education and token earning was not strongly significant. Database showed there is no association between child's and mother's demographic characteristic and child's token earning rate excepts child

mothers' age and token earning rate were done by the Mann-Whitney U test and Kruskal Wallis H test. Child's mothers' age and token earning rate showed significant. There was little connection among them. The Z value and P value was -4.00 and 0.049 which was statistically significant [p>0.05]. The association results indicated if the mother's age changes then the rate of token earnings also changes. Child's token earnings mildly depend on child's mother's age. As the token economy program plays an important role to shape child behaviors and increasing occupational performance, it could be used as a treatment technique broadly in psychosocial rehabilitation.

CHAPTER VI: CONCLUSION

6.1 Strength and Limitation

6.1.1: Strength of the study

The are some strengths of this study. The researcher directly observes the child behavior and noted token earning and deduction, so there is highly validity in data. The researcher used quantitative study design as quantitative research often relies on numerical data and statistical analysis, which can help reduce the influence of researcher bias. This objectivity enhances the reliability of the findings. Moreover, the study followed a strong methodology which made the study stronger.

6.1.2: Limitation of the study

The current study has some limitations. The researcher chose only 47 samples due to time limitation and unavailability of participants which is very simple to generalize the results in all over the proportion. There are few literatures found about the token economy on occupational performance of children with psychosocial difficulties. Thus, it is difficult to compare the results with other studies in discussion. Another limitation of the study is the survey questionnaire. The researcher used the survey checklist sheet which was developed by study setting organization “SPP. There is no standardized questionnaire was used to conduct the study was another limitation of the study. Moreover, the token economy system in Bangladesh is not used broadly than other country to shape child behaviors. So, there was a problem finding the participants to conduct the study. As the study methods design based on the cross-sectional study, there was needed to more participants to conduct the study. Another limitation of the study is the time.

As the research was conducted by the student investigators, there was a problem in data collection. As literature says, measure the impact of token, need to provide minimum 6

months token economy system. Another limitation of the study is the baseline behaviors of the child, as the researcher wasn't able to collect data before implementing token economy.

6.2 Practice Implication (recommendation for future practice and research)

From this study, it seems that there is impact of token economy program on child's occupational performance among children with psychosocial difficulties. The researchers have drawn some recommendations based on the findings of the research.

6.2.1: Recommendations for future practice

- OTs should implement a broader role to use the token economy program in pediatric and other sectors.
- OTs need to update their knowledge and skills in these areas of psychosocial rehabilitation.
- OTs should visit such kinds of organizations who used token economy program and need to know the protocol of these systems.
- OTs need to identify the underlying causes, what are the factors that might be discouraged to find the effectiveness of token programs.

6.2.2: Recommendations for future study

- The researcher recommends that in the future similar research might be conducted in a broader area with a large number of sample size.
- In the same objectives, there would be conduct a similar study with experimental study design.
- Future research is recommended to identify the co-relation between the socio-demographic information and the children's individual token earnings.
- Future research in this sector, it will be effective to use a standard scale to measure the baseline behaviors of the children.

6.3: Conclusion

In conclusion, our research study on the implementation of a token economy among children with psychosocial difficulties has yielded several important insights into its effects on occupational performance. Through a comprehensive analysis of the data collected and observations made during the study period, the following key conclusions can be drawn:

Positive Impact on Behavioral Modification: The introduction of a token economy system has demonstrated a positive impact on behavior modification among children with psychosocial difficulties. Participants showed improvements after the intervention provided. Children token earning on occupational activities was increasing after the implementation of token program.

Child's mother: Child's mother was another factor to improve occupational performance among children with psychosocial difficulties. Mothers can guide their child to perform occupational activities of psychosocial difficulties children. Mother plays an important role in shaping the child behaviors.

Challenges and Considerations: While the findings of this study are promising, it is essential to acknowledge some challenges and considerations associated with the implementation of a token economy. Factors such as individual differences in response to reinforcement strategies, sustainability of behavior change over time, and the need for ongoing support and monitoring warrant further investigation and attention.

Overall, our study contributes to the growing body of evidence supporting the efficacy and applicability of behavioral interventions in enhancing the well-being and functional outcomes of children with psychosocial difficulties within occupational contexts.

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APPENDIX

Appendix A:

Approval letter

বাংলাদেশ হেল্‌থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)
Bangladesh Health Professions Institute (BHPI)
(The Academic Institute of CRP)

BANGLADESH HEALTH PROFESSIONS INSTITUTE

Ref: CRP-BHPI/IRB/10/2023/750

Date: 18.10.2023

To
Disha Biswas
4th Year B.Sc. in Occupational Therapy
Session: 2018-2019 Student ID: 122180309
Department of Occupational Therapy
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Subject: Approval of the thesis proposal **"The Psychological Well-being and Self-efficacy of Elderly Individuals in Community and Residential Care Facility: A Cross-sectional Study"** by ethics committee.

Dear Disha Biswas,
Congratulations.
The Institutional Review Board (IRB) of BHPI has reviewed and discussed your application to conduct the above mentioned dissertation, with yourself, as the principal investigator and Shamima Akter as thesis supervisor. The Following documents have been reviewed and approved:

Sr. No.	Name of the Documents
1	Dissertation/thesis/research Proposal
2	Questionnaire (English & / or Bengali version)
3	Information sheet & consent form.

The purpose of the study is to investigate the self-efficacy and psychological well-being of elderly individuals residing in both community and residential care facilities in Bangladesh. The study involves use of Standardized scales (The General Self-Efficacy Scale and the Psychological Well-being Scale-42) to measure self-efficacy and psychological well-being that may take about 15 to 20 minutes to fill in the questionnaire for collection of specimen and there is no likelihood of any harm to the participants and no economical benefits for the participants. The members of the Ethics committee have approved the study to be conducted in the presented form at the meeting held at 8.30 AM on 23rd September 2023 at BHPI 38th IRB Meeting.

The institutional Ethics committee expects to be informed about the progress of the study, any changes occurring in the course of the study, any revision in the protocol and patient information or informed consent and ask to be provided a copy of the final report. This Ethics committee is working accordance to Nuremberg Code 1947, World Medical Association Declaration of Helsinki, 1964 - 2013 and other applicable regulation.

Best regards,
MUHAMMAD MILLAT HOSSAIN
Associate Professor, Project & Course Coordinator, MRS
Member Secretary, Institutional Review Board (IRB)
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

সিআরপি-চাপাইন, সাভার, ঢাকা-১৩৪৩, বাংলাদেশ। ফোন: +৮৮ ০২ ২২৪৪৪৫৪৬৪-৫, +৮৮ ০২ ২২৪৪৪১৪০৪, মোবাইল: +৮৮ ০১৭৩০ ০৫৯৬৪৭
CRP-Chapain, Savar, Dhaka-1343, Bangladesh. Tel: +88 02 224445464-5, +88 02 224441404, Mobile: +88 01730059647
E-mail : principal-bhpi@crp-bangladesh.org, Web: bhpi.edu.bd

Permission letter:

12 October, 2023
To,
Overseas Director,
Shishu Polli Plus (SPP)
A Project of Sreepur Village,
Tengra, Sreepur, Gazipur, Bangladesh

Subject: Application for permission to collect data for the research project in Shishu Polli plus (SPP).

Dear Ma'am,

With due respect to state that, I am 4th year student, department of Occupational Therapy of Bangladesh health Professions Institute (BHPI), an academic institute centre for the Rehabilitation of the paralysed (CRP). According to our course curriculum, we need to conduct a research project in 4th year under the supervision of our respectable teacher at Bangladesh Health Professions Institute (BHPI). I want to conduct research, titled "Impact of token economy on Occupational Performance of Children with psychosocial difficulties''. The purpose of the study is to find out the impact of token economy on Occupational performance base on their School and house behaviors. To conduct this study I need to use the existing Token economy report sheet of Shishu Polli plus, Named "Child's School and House Behaviors Daily Incident Report". The study will be helpful for Shishu Polli Plus to assess the impact of token economy on Children with psychosocial difficulties. The members of ethics committee have approved the study to be conducted at BHPI 38th Institutional Review Board (IRB) Meeting (study ref: CRP-BHPI/IRB/10/2023/737).

I therefore pray and hope that you would be kind enough to give me permission to use the report sheet to collect data from Shishu Polli Plus (SPP).

Your most obediently,

Md. Shishir Ahamed
4th year, B.Sc in Occupational Therapy
Session: 2018-2019

Supervisor:
Kaniz Fatema
Lecturer in Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
CRP, Savar, Dhaka

SK. Monirruzaman
Associate professor and Department Head
Occupational Therapy Department
Bangladesh Health Professions Institute
(BHPI), CRP, Savar, Dhaka-1343

Appendix B:

Information Sheet & Consent Form

Bangladesh Health Professions Institute

Occupational Therapy Department

CRP, Savar, Chapain, Dhaka

Information sheet (English Version)

Research Title: Impact of Token economy on Occupational Performance of children with psychosocial difficulties.

Name of the researcher: Md. Shishir Ahamed

Roll No: 19

4th year, Department of Occupational Therapy

Supervisor: Kaniz Fatema

Lecturer in Occupational Therapy

Department of Occupational Therapy

Bangladesh Health Professions Institute

Savar, Dhaka.

I am Md. Shishir Ahamed, will like to request you to join the research. Before you make decisions to take part in the research, you need to know about the research and why this is being done. After reading this document you will be able to know how you are related to the research. Please take time to read the given information. If you confront any

problem after reading this document or you need to know more about the research, you can further ask me.

Background and Aim of This Research:

I am Md. Shishir Ahamed, currently studying B.Sc in occupational therapy in Bangladesh Health Professions Institute(BHPI), an academic institute of Centre for the Rehabilitation of the paralysed(CRP). As a part of my course curriculum, I am going to conduct research under the supervision of Kaniz Fatema, Lecturer in Occupational Therapy, Department of Occupational Therapy. The actual aim of the study is to find out the Impact of Token economy on Occupational Performance of children with psychosocial difficulties.

.

What to do to participate in the study?

As I am going to investigate the Impact of Token economy on Occupational Performance of children with psychosocial difficulties. I will use survey questionnaire according to evaluate the children performance. I will record the level of token earning and the level of token deduction by observing children performance and organization staff's opinion by data recorded sheet. It will take 05-10 minutes to complete the record of all the children with psychosocial difficulties.

Why are you invited to participate in the study?

My research topic is to find out the Impact of Token economy on Occupational Performance of children with psychosocial difficulties. As per my topic, Child's mother's and staffs of an organization are interviewed to collect data about the study. So, I invite the child's mothers and staff of a psychosocial setting who are working to establish token economy in a psychosocial rehabilitation's organization.

Inclusion & Exclusion criteria

Inclusion criteria

- Children with psychosocial difficulties.
- Child age range between 3 years to 14 years.
- Children receive token economy programs for at least 2 months.

Exclusion Criteria

- Children who don't have psychosocial difficulties.
- Newly admitted Children.

Do you have to take part?

Participation in the study is completely voluntary. It is important to get consent from the participants before participation in the study. After the participation, participants will be accounted for to answer all the questions asked by the researcher. participants will be given consent and withdrawal paper so that they can cancel their participation within two weeks after collecting data.

What Are the Possible Risks and Benefits Of participation?

Participating in the research is not anticipated to cause any disturbance or discomfort. There is no financial benefit for the participants. Therefore, there is no physical or mental risk to the participants. If any problem is seen after participation, then a doctor or psychiatrist will advise,

Will Taking Part Be Confidential?

The information will not be shared with others. researcher will strictly maintain the secrecy of the study. Participants' names and other information will not come out during the study except the consent form. Only the related researcher and supervisor will be able to know about it directly. All the information that is collected from the

interview would be kept safely and maintained confidentiality.

Who Should You Contact for Further Information?

You can contact me for further information.

Researcher: Md. shishir Ahamed

Bangladesh Health Professions Institute (BHPI)

4th year student, Occupational therapy, CRP

Phone: 01689814100

Email: shishirahamed.ot@gmail.com

You can also contact my supervisor:

Supervisor: Kaniz Fatema

Lecturer in Occupational Therapy,

Department of Occupational Therapy, BHPI, CRP

Savar, Dhaka

Phone:01855611776

Thank you.

Consent form (English Version)

Research Title: Impact of Token Economy on Occupational Performance among children with psychosocial difficulties**.**

Md Shishir Ahamed (investigator) is a 4th year student of B.Sc in Occupational Therapy Department, session-2018-2019 at Bangladesh Health Professions Institute (BHPI), the academic institute of Centre for the Rehabilitation of the Paralyzed (CRP). This study is a part of the course curriculum of Occupational Therapy Department. The study is supervised by Kaniz Fatema, lecturer of the Occupational Therapy Department, Bangladesh Health Professions Institute (BHPI). All participants are informed about the purpose and nature of the study.

After knowing the flowing information, participants will decide to participate in the study-

Investigators will receive permission from participants to take part in the study.

- The participant will not be harmed for participating in the study.
- Investigator will be available to answer the participants any questions related to this study.
- Participants are free to decline to answer any question during the interview.
- Investigator will maintain the confidentiality of the participants.
- Participants can withdraw from the study at any time.

I …… am a participant of this study and is clearly informed about the aim of the study. I am participating willingly in this study. I have the right to withdraw my name from this study at any time and I am not bound to answer anyone for that.

Signature

Participant:	Date
Investigator:	Date

Withdrawal from (English version)

Title of the study: Impact of Token Economy on Occupational Performance among children with psychosocial difficulties**.**

I_____ confirm that, wish to withdraw all of my data from the study before data analysis has been completed and that none of my data will be included in the study.

Name of the participant: _____

Signature of the participant:_____

Date:_____

Consent Form (Bangla Version)

গবেষণার শিরোনাঃ মনোসামাজিক সমস্যাযুক্ত শিশুদের পেশাগত কর্মক্ষমতার উপর টোকেন ইকোনোমির প্রভাব।

মোঃ শিশির আহাম্মেদ, (গবেষক) একজন বিএসসি ইন অকুপেশনাল থেরাপি বিভাগে ২০১৮-২০১৯ সেশনের ৪র্থ বর্ষের ছাত্রী, বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (BHPI), সেন্টার ফর দ্য রিহ্যাবিলিটেশন অফ দ্য প্যারালাইজড (CRP) এর একাডেমিক ইনস্টিটিউট। এই গবেষনাটি অকুপেশনাল থেরাপি বিভাগের পাঠ্যক্রমের একটি অংশ। গবেষণাটি, কানিজ ফাতেমা, অকুপেশনাল থেরাপি বিভাগের প্রভাষক ,বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (বিএইচপিআই) এর তত্ত্বাবধায়নে পরিচালিত। এই ফরমটি দ্বারা সমস্ত অংশগ্রহণকারীদের গবেষণার উদ্দেশ্য এবং প্রকৃতি সম্পর্কে অবহিত করা হয়।

প্রবাহিত তথ্য জানার পর, অংশগ্রহণকারীরা গবেষণায় অংশগ্রহণ করার সিদ্ধান্ত নেবে-

- ✓ গবেষক অংশগ্রহণকারীদের কাছ থেকে গবেষণায় অংশ নেওয়ার অনুমতি পাবেন।
- ✓ গবেষণায় অংশগ্রহণের জন্য অংশগ্রহণকারীর ক্ষতি হবে না।
- ✓ অংশগ্রহণকারীদের এই গবেষণার সাথে সম্পর্কিত যেকোনো প্রশ্নের উত্তর দেওয়ার জন্য তদন্তকারী উপলব্ধ থাকবে।
- ✓ অংশগ্রহণকারীরা সাক্ষাত্কারের সময় যেকোনো প্রশ্নের উত্তর দিতে অস্বীকার করতে মুক্ত।
- ✓ গবেষক অংশগ্রহণকারীদের গোপনীয়তা বজায় রাখবে।
- ✓ অংশগ্রহণকারীরা যে কোনো সময় অধ্যয়ন থেকে প্রত্যাহার করতে পারেন।

আমি, _____ এই অধ্যয়নের একজন অংশগ্রহণকারীকে গবেষণার লক্ষ্য সম্পর্কে স্পষ্টভাবে অবহিত করা হয়েছে। আমি এই গবেষণায় স্বেচ্ছায় অংশগ্রহণ করছি। এই গবেষণা থেকে যেকোনো সময় আমার নাম প্রত্যাহার করার অধিকার আছে এবং আমি এর জন্য কাউকে উত্তর দিতে বাধ্য নই।

স্বাক্ষর:

অংশগ্রহণকারীর স্বাক্ষরঃ	তারিখঃ
তদন্তকারীর স্বাক্ষরঃ	তারিখঃ

Withdraw form (Bangla)

গবেষণার শিরোনামঃ মনোসামাজিক সমস্যাযুক্ত শিশুদের পেশাগত কর্মক্ষমতার উপর টোকেন ইকোনোমির প্রভাব।

আমি, _____ নিশ্চিত করছি যে, ডেটা বিশ্লেষণ সম্পন্ন হওয়ার আগে আমার সমস্ত ডেটা অধ্যয়ন থেকে প্রত্যাহার করতে চাই এবং আমার কোনও ডেটা অধ্যয়নে অন্তর্ভুক্ত করা হবে না।

অংশগ্রহণকারীর নামঃ _____

অংশগ্রহণকারীর স্বাক্ষরঃ _____

তারিখঃ _____

Information sheet (Bangla Version)

গবেষণার শিরোনামঃ মনোসামাজিক সমস্যাযুক্ত শিশুদের পেশাগত কর্মক্ষমতার উপর টোকেন ইকোনোমির প্রভাব।

গবেষকের নামঃ মোঃ শিশির আহাম্মেদ, ৪র্থ বর্ষ, অকুপেশনাল থেরাপি বিভাগ, রোল নং: ১৯

সুপারভাইজারঃ কানিজ ফাতেমা, প্রভাষক, অকুপেশনাল থেরাপি বিভাগ,

বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট, সাভার, ঢাকা।

আমি, মোঃ শিশির আহাম্মেদ, আপনাকে গবেষণায় যোগ দেওয়ার জন্য অনুরোধ করতে চাই। গবেষণায় অংশ নেওয়ার সিদ্ধান্ত নেওয়ার আগে, আপনাকে গবেষণা এবং কেন এটি করা হচ্ছে তা জানতে হবে। এই নথিটি পড়ার পর আপনি জানতে পারবেন কিভাবে আপনি গবেষণার সাথে সম্পর্কিত। প্রদত্ত তথ্য পড়তে সময় নিন দয়া করে. আপনি যদি এই নথিটি পড়ার পরে কোনও সমস্যার মুখোমুখি হন বা আপনার গবেষণা সম্পর্কে আরও জানতে চান তবে আপনি আমাকে আরও জিজ্ঞাসা করতে পারেন।

এই গবেষণার পটভূমি এবং লক্ষ্য:

আমি, মোঃ শিশির আহাম্মেদ, বর্তমানে বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউটে (বিএইচপিআই) অকুপেশনাল থেরাপি,বিএসসিতে অধ্যয়নরত, পক্ষাঘাতগ্রস্তদের পুনর্বাসন কেন্দ্রের একটি একাডেমিক ইনস্টিটিউট (সিআরপি)। আমার কোর্স পাঠ্যক্রমের অংশ হিসেবে আমি, কানিজ ফাতেমা, অকুপেশনাল থেরাপি বিভাগের প্রভাষক -এর তত্ত্বাবধানে একটি গবেষণা পরিচালনা করতে যাচ্ছি। মনোসামাজিক সমস্যাযুক্ত শিশুদের পেশাগত কর্মক্ষমতার উপর টোকেন ইকোনোমির প্রভাব আছে কি না, তা যাচাই করাই অধ্যয়নের আসল লক্ষ্য।

গবেষণায় অংশগ্রহণের জন্য কী করতে হবে?

যেহেতু মনোসামাজিক সমস্যাযুক্ত শিশুদের পেশাগত কর্মক্ষমতার উপর টোকেন ইকোনোমির প্রভাব আছে কিনা যাচাই করব, তাই আমি মনোসামাজিক সমস্যাযুক্ত শিশুদেরর টোকেন ইকোনমি সিস্টেমে আওতাধীন করে তাদের কর্মক্ষমতার পরিবর্তনগুলো, টোকেন পাওয়াএবং টোকেন কাটা যওয়ার উপর ভিত্তি করে এর প্রভাব যাচাই করব একটি জরিপের মাধ্যমে।

কেন আপনাকে অধ্যয়নে অংশগ্রহণের জন্য আমন্ত্রণ জানানো হয়েছে?

আমার গবেষণার বিষয় হল মনোসামাজিক সমস্যাযুক্ত শিশুদের পেশাগত কর্মক্ষমতার উপর টোকেন

ইকোনোমির প্রভাব আছে কিনা যাচাই করা। আমার বিষয় অনুসারে, টোকেন ইকোনমির আওতাধিন মনোসামাজিক সমস্যাযুক্ত শিশুদের ডেটা প্রয়োজন। তাই, আমি আমন্ত্রণ জানাই মনোসামাজিক সমস্যাযুক্ত শিশুদের এই গবেষণায় অংশগ্রহণের জন্য।

অন্তর্ভুক্তির মানদণ্ড:

- ✓ মনস্তাত্ত্বিক অসুবিধা সহ শিশু।
- ✓ শিশুর বয়স পরিসীমা 3 বছর থেকে 14 বছর।
- ✓ শিশুরা অন্তত ৬ মাসের জন্য টোকেন ইকোনমি প্রোগ্রামের আওতাধীন থাকবে।

I. বর্জনের মানদণ্ড:

- ✓ নতুন ভর্তি শিশু।
- ✓ যে শিশুর শারীরিক অক্ষমতা আছে।

আপনি কি অংশ নিতে হবে?

অধ্যয়নে অংশগ্রহণ সম্পূর্ণ স্বেচ্ছায়। গবেষণায় অংশগ্রহণের আগে অংশগ্রহণকারীদের কাছ থেকে সম্মতি নেওয়া গুরুত্বপূর্ণ। অংশগ্রহণের পরে, অংশগ্রহণকারীদের গবেষকের জিজ্ঞাসা করা সমস্ত প্রশ্নের উত্তর দেওয়ার জন্য হিসাব করা হবে। অংশগ্রহণকারীদের সম্মতি এবং প্রত্যাহারের কাগজ দেওয়া হবে যাতে তারা তথ্য সংগ্রহের পর দুই সপ্তাহের মধ্যে তাদের অংশগ্রহণ বাতিল করতে পারে।

অংশগ্রহণের সম্ভাব্য ঝুঁকি এবং সুবিধাগুলি কী কী?

গবেষণায় অংশগ্রহণের ফলে কোনো ঝামেলা বা অস্বস্তি হবে বলে প্রত্যাশিত নয়। অংশগ্রহণকারীদের জন্য কোন আর্থিক সুবিধা নেই. অতএব, অংশগ্রহণকারীদের কোন শারীরিক বা মানসিক ঝুঁকি নেই। অংশগ্রহণের পর কোনো সমস্যা দেখা দিলে চিকিৎসক বা মনোরোগ বিশেষজ্ঞ পরামর্শ দেবেন,

অংশ নেওয়া কি গোপনীয় হবে?

তথ্য অন্যদের সাথে শেয়ার করা হবে না. গবেষক কঠোরভাবে অধ্যয়নের গোপনীয়তা বজায় রাখবেন। সম্মতিপত্র ছাড়া অধ্যয়নের সময় অংশগ্রহণকারীদের নাম এবং অন্যান্য তথ্য প্রকাশ করা হবে না। শুধুমাত্র সংশ্লিষ্ট গবেষক ও সুপারভাইজার সরাসরি এ সম্পর্কে জানতে পারবেন। সাক্ষাৎকার থেকে সংগৃহীত সমস্ত তথ্য নিরাপদে রাখা হবে এবং গোপনীয়তা বজায় রাখা হবে।

আরও তথ্যের জন্য আপনার কার সাথে যোগাযোগ করা উচিত?

আপনি আরও তথ্যের জন্য আমার সাথে যোগাযোগ করতে পারেন

গবেষকঃ মোঃ শিশির আহাম্মেদ

বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (বিএইচপিআই)

৪র্থ বর্ষের ছাত্র, পেশাগত থেরাপি, CRP

ফোনঃ ০১৬৮৯৮১৪১০০

ই-মেইল: shishirahamed.ot@gmail.com

আপনি আমার সুপারভাইজার এর সাথেও যোগাযোগ করতে পারেন

সুপারভাইজার: কানিজ ফাতেমা

প্রভাষক

অকুপেশনাল থেরাপি বিভাগ, বিএইচপিআই, সিআরপি

সাভার, ঢাকা

ফোন: ০১৮৫৫৬১৭৭৬

Appendix C

Survey Checklist (English Version)

Child School and House Behaviors Daily Token Incident & Earning Report

Date:

SI No.	Name	House Name	Morning Study	Assembly	Gate move with Triffin	School Behavior (yellow/Red)	Evening Study	House Behaviors (Lunch/Supper/ Pala/ Sleep)	Minus token	Daily earning Token

Survey Checklist (Bangla Version)

বাচ্চার প্রতিদিনের স্কুলের এবং হাউজের টোকেন কাটা এবং অর্জন করা বিররণ

Date:

ক্রমিক নাম্বার	শিশুর নাম	হাউজ নাম	সকালের পড়া	স্কুল সমাবেশ	স্কুলের টিফিন নিয়ে যাওয়া	স্কুলের আচারণ	সন্ধার লেখাপড়া	হাউজের আচারণ	টোকেন কর্তন	প্রতিদিন টোকেন আয়

Appendix-D

Supervision Contact Schedule:

Bangladesh Health Professions Institute
Department of Occupational Therapy
4th Year B. Sc in Occupational Therapy
OT 401 Research Project

Thesis Supervisor- Student Contact; face to face or electronic and guidance record

Title of thesis: Impact of token economy on occupational performance of children with psychosocial difficulties.

Name of student: Md.Shishir Ahamed

Name and designation of thesis supervisor: kaniz Fatema, Lecturer, Occupational Therapy Department, Bangladesh Health Professions Institute(BHPI). CRP, Savar, Dhaka.

Appointment No	Date	Place	Topic of discussion	Duration (Minutes/ Hours)	Comments of student	Student's signature	Thesis supervisor signature
1	07.08.23	BHPI Library	Research title, aim objectives, Literature review	30 mins	Got an idea about title aim objective	Shishir	
2	13.08.23	BHPI Library	Research title - objectives	1 hours	Understand about the title and objectiv	Shishir	
3	19.08.23	BHPI Library	objectives research methodology	2 hours	Got an idea about thesis methodology	Shishir	
4	20.09.23	BHPI Library	Research methodology objectives, data collection tools	2 hours	Helpful information about data collecting tools	Shishir	
5	25.09.23	BHPI Library	Methodology, literature matrix	2 hours	Got structured idea about literature matrix	Shishir	
6	30.09.23	BHPI Library	Data collection tools, literature review	2 hours	Got idea about literature review	Shishir	

7	7-10-23	BHPI library	methodology, data collection	2 hours	Got precise idea about methodology	Sufficient	
8	15-10-23	BHPI library	Data collection tools, objectives.	3 hours	Understand about data collection tools	Sufficient	
9	28-10-23	BHPI Library	Literature review, data collection, objectives	3 hours	Understand about literature review, data collection tools	Sufficient	
10	03-12-23	OT department	Introduction, Literature Review	2 hours	Got writing about introduction and literature review	Sufficient	
11	11-12-23	OT department office room	Introduction, literature review Data collection	2 hours	Got idea about introduction, literature review	Sufficient	
12	19-12-23	OT department office room	Data collection, objectives,	1.30 mins	Understand about data collection	Sufficient	
13	28-12-23	OT department office room	Data collection, Literature review, Introduction	2 hours	understand about literature review	Sufficient	
14	05-01-24	~~Data~~ OT department office room	Data input and literature review	2.30 mins	Got idea about data input and literature review.	Sufficient	
15	09-01-24	OT depart. office room	Data input and analysis	2 hours	understand about data input and analysis	Sufficient	
16	16-01-24	OT depart. office	Data analysis and results and discussion	2 hours	Got idea about data analysis	Sufficient	

17	30.01.24	OT depart. office room	Result and discussion Analysis	3 hours	understand about how to write result	Supervisor	[signature]
18	03.02.24	OT depart. office room	Result and discussion objectives.	2 hours	Got Precise idea about result and discussion	Supervisor	[signature]
19	17.02.24	OT depart. office room	Results, literature review, methodology	2 hour	understand about how to write discussion	Supervisor	[signature]
20	20.02.24	OT depart. office	Discussion and conclusion.	1 hours	Got idea about the conclusion.	Supervisor	[signature]

Note:

1. Appointment number will cover at least a total of 40 hours; applicable only for face to face contact with the supervisors.
2. Students will require submitting this completed record during submission your final thesis.