International Journal of Multidisciplinary Research And Studies

Available online at https://ijmras.com/

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND STUDIES
ISSN: 2640 7272
Volume:04; Issue:01 (2021)

Page no.- 14/14

COGNITIVE BEHAVIORAL THERAPY FOR PATIENTS WITH AUTISM

Tasmin Perween

M.Phil., Roll No.: 150585 Session-2015-16
Department of Psychology, B.R.A. Bihar University, Muzaffarpur, India
E-mail: tasminperween99@gmail.com

ABSTRACT

Autism is a developmental condition that manifests itself in childhood and impedes the typical progression of a person's social, linguistic, and cognitive capabilities. Because a diagnosis of autism cannot be made if the symptoms of the illness don't appear until after the third year of a person's existence, autism is always considered to be a psychiatric condition that first appears in very early infancy. Although the other major psychological problems that can affect children, such as attention deficit disorder, anxiety, and depression, often don't appear until later in life, there may be signs of them earlier on. Autism manifests itself at such a young age; thus, it is important to differentiate it from preset systemic disorders. One further trait of autism is its heterogeneity, which may be seen in both the symptoms and the developmental course of the disorder.

Keyword: psychiatric, linguistic, person's social, cognitive capabilities,

INTRODUCTION

Autism is sometimes referred to be a syndrome rather than a disorder because of its high degree of variety and the existence of less severe symptoms in the general population as well as in the families of autistic persons. The presence or absence of mental impairment in a

Tasmin Perween *, *Department of Psychology, B.R.A. Bihar University, Muzaffarpur, India.*
E-mail: tasminperween99@gmail.com

group of people diagnosed with autism is a significant factor that contributes to the community's overall diversity (Sigman et al., 2006). Early on in the development of the syndrome's diagnostic criteria, this variation's existence was recognised and acknowledged. The term "autism" wasn't coined until the 1940s, when it was first characterised by two doctors who, at the time, were ignorant of each other's work due to the disruption that World War II created. Leo Kanner recognised the condition in early childhood in children whose communication development was substantially affected in 1943, whereas Hans Asperger characterised a clinical picture a year later that was less severe and had fewer communicative deficiencies. Both diagnoses were made in early childhood (Sigman et al., 2006).

Autistic disorder, Asperger's disorder, and pervasive developmental disability not otherwise specified are the three diagnoses that fall under the umbrella of autism spectrum disorders (PDD-NOS). The word "autism" will be used to refer to this cluster of diagnoses throughout. There is currently no biological test that can accurately diagnose autistic spectrum disorder. The criteria for diagnosis are behavioural, and they include a specified number and amount of impairment in each of the three primary areas: social interaction, communication, and repetitive or stereotypic behaviour (Newschaffer et al., 2007). People who have some of these challenges but whose behaviours do not meet the criteria for the entire syndrome are labelled with widespread developmental disorders. These problems can be found in both children and adults. The latter is diagnosed without any history of language impediment, despite the fact that distinguishing between Asperger disorder and high-functioning autism is sometimes challenging to do. Children who have autism can be classified as high-functioning or low-functioning, based on whether or not they have mental retardation, which can be determined by whether or not their IQ is greater than or lower than 70. Youngsters with autism often have an IQ of between 50 and 70 points lower than typical children. Alongside the advancement of research on core deficits and the development and standardisation of tools to measure and score the presence or absence of these deficiencies, there was also a gradual but steady increase in the level of consensus about diagnostic criteria (Sigman et al., 2006). Autism is frequently accompanied by a number of other problems, including developmental, behavioural, psychiatric, and medical issues. In the past, a diagnosis of mental retardation was often given to children who were identified as having autism. Problems with behaviour may have a connection to the fundamental traits (such as perseveration, hyperactivity, or self-injury), or they may be connected to sensory

Tasmin Perween *, *Department of Psychology, B.R.A. Bihar University, Muzaffarpur, India.*
E-mail: tasminperween99@gmail.com

abnormalities. The degree of core deficiencies, cognitive impairments, and/or associated medical conditions may have an effect on psychiatric symptoms (such as anxiety and sadness). In autistic children, particular genetic, neurologic, or metabolic problems are recognised as etiologic factors that contribute to the condition. Children who have autism have a higher risk of developing a wide variety of additional medical conditions or symptoms, including epileptic seizures, a dysregulated immune system, gastrointestinal symptoms, difficulties with feeding, such as refusal, selectivity, selectivity to textures, and sleep disruption (Newschaffer et al., 2007).

DEVELOPMENTAL FEATURES OF AUTISM

The developmental psychopathological view on autism seeks to explain the empirical data about aberrant behaviour and development within the context of normal developmental principals. This perspective seeks to do so with reference to autism as a developmental disorder. From this vantage point, the notions of normal development provide light on the particular kinds of normal deviations, anomalies, rates, and patterns of development that are associated with people and groups who have perspective disorders.

SOCIAL FUNCTIONING IN AUTISM

According to Volkmar et al. (2005), the most powerful predictor of diagnosis for older adults with autism is social impairments; this is likely true for infants as well. Children with autism who are in preschool often do not display the social abilities that should have been present in the first few months of life. Rutter (1978) noted that the unique social development that is found in autism was one of the important elements for characterization; it was different and was not merely a byproduct of concomitant mental disability. Autism is characterised by these distinctive and distinctive qualities. According to Berger (2006), Kanner stressed that autistic individuals struggle to create emotional attachments with their parents, which is one of the abnormal social traits of properly developing neonates and babies. The challenges are characterised as being in "reciprocal social interaction and ability to create connections" by Lord and Rutter (1994). These issues include the inability to use mutual gaze, facial expression, shared attention, and unfavourable reactions to physical contact. A child that is growing normally will have developed abilities in social awareness and interaction by the age of 2 years. These skills include imitation, symbolic play, and the ability to communicate

Tasmin Perween *, *Department of Psychology, B.R.A. Bihar University, Muzaffarpur, India.*
E-mail: tasminperween99@gmail.com

through gestures and words. It has been discovered that children with autism have issues with a good number of these elements.

Gaze

According to Skuse (2003), one of the characteristics of autism is the tendency to "avoid" making eye contact. Persons with autism, on the other hand, are unable to establish a pattern of reciprocal gaze with their caretakers, whereas typically developing newborns spend a considerable percentage of their waking time making eye contact with those who care for them. According to Dawson et al. (2000), there is a significant decrease in both eye contact and general social involvement and responsiveness. According to research conducted with preschoolers and older children, autistic children show little interest in the human face, and it also appears that they do not have a preference for the sounds that are made by the human voice. There is also a correlation between the child's developmental level and their pattern of gaze behaviour. Children that are farther along in their development tend to make more frequent eye contact (Sigman., 1992).

Joint Attention

Skills in joint attention entail paying attention along with other people by pointing, demonstrating, and coordinating one's gaze between an item and the people around it. Deficits in shared attention are visible before to the learning of language, and it is one of the earliest social behaviours to emerge. According to Kasari et al. (2006), conceptually speaking, collaborative attention represents the earliest stages of comprehending the mental representations of others, and knowing the mental representations of others leads to improved social-cognitive and linguistic abilities. Research conducted by Charman and colleagues (2003) indicated that there are substantial connections between early joint attention skills and later linguistic ability. Children with autism do show some improvement over time in their ability to initiate and respond to bids for shared attention; nonetheless, this ability is substantially impaired in real circumstances. It's possible that autism will present with abnormal patterns of these talents (Volkmar et al., 2004).

Imitation

Imitation and play are critical for the growth of children who are growing normally in terms of their symbolic and social-cognitive capacities. Autism seems to have a disproportionately

Tasmin Perween *, *Department of Psychology, B.R.A. Bihar University, Muzaffarpur, India.*
E-mail: tasminperween99@gmail.com

negative impact on individuals' abilities to imitate the motions of other people. Children with autism can be distinguished from children who have other developmental issues by the difficulties they have in imitating others (Rogers et al., 2003). It would suggest that the ability to imitate is also a need for later symbolic tasks; yet, children with autism demonstrate significant deficiencies in this area as well (Prior et al, 1979). According to a number of studies, younger children with autism have a persistently difficult time copying even the most fundamental of bodily motions and those that incorporate objects (Stone, Ouslely, & Littleford, 1995., Charman et al, 1997) These challenges are prevalent by at least the second year of life in older children who have autism (Hobson & Lee, 1999; Loveland et al., 1994; Smith & Bryson, 1994); furthermore, older children with autism consistently exhibit difficulty in imitation (Hobson & Lee, 1999). (Charman et al, 1997; Dawson et al., 1998., Roeyers et al., 1998). There is a positive correlation between the levels of information and the levels of language (Sigman & Ungerer., 1984).

LANGUAGE AND COMMUNICATION IN AUTISM

According to Bailely et al. (1996), one of the defining characteristics of autism is a profound impairment in one's capacity for verbal and nonverbal communication. In addition to the delay in language development, there are significant qualitative anomalies. Level of language is a good predictor of social educational success, and it is highly connected with severity of behavioural symptoms, social cognitive performance, and family loading. In addition, level of language is a good predictor of social educational outcome. Because language aspects play such an important role, and because it has been shown that some persons with autism do not acquire any effective language at all, it is imperative that language impairment be taken into consideration in a wide variety of psychological theories. The current psychological approaches to autism have sought to explain the linguistic traits as one result of distinct cognitive abnormalities. These methods are not entirely successful.

Children with autism have abnormal patterns of sound production even before they begin to produce spoken language (Witherby et al., 2000). Children with autism also have abnormal vocal quality (Sheikopf et al., 2000), which is a likely precursor of the notable deficits in information and vocal quality seen later on in life (Shriberg et al., 2001). The development of children's non-verbal communicative abilities is intimately engaged with the development of conventional communicative abilities and marks the beginning of children's deliberate

Tasmin Perween *, *Department of Psychology, B.R.A. Bihar University, Muzaffarpur, India.*
E-mail: tasminperween99@gmail.com

communication. This is true for children who are normal (Bates et al., 1979). On the other hand, very young children with autism communicate far less frequently than similarly situated toddlers with developmental delays. They are less likely to utilise contact and conventional gestures, but they are more likely to employ extremely unorthodox gestures such as manipulating their conversational partner's hand to gain things. This is because they are less likely to use contact and conventional gestures (Stone et al., 1997). Autism affects a child's ability to both express and produce affective reactions, and the child's affective display is abnormal in terms of range, frequency, and integration. Children with autism have difficulty with both of these processes (Yirmia et al., 1989). Children with autism have difficulty mimicking facial expressions of emotion (Sigman et al., 1992), and they are less likely to glance at an adult who appears to be in distress (Loveland et al., 1994). Rutherford (2005) states that some persons who have autism display echolalia, which is the instantaneous repetition of both words and intonations in place of communicative speech. Autism is characterised by a delay in the learning of language in comparison to average development, as well as a delay in the comprehension of words in comparison to their production. On the other hand, articulation abilities appear to have been spared. According to Osterling et al. (2001), children with autism who are verbal do not readily utilise language to convey knowledge. The researchers who conducted this study hypothesised that this occurrence may be attributed to a lack of interest. Children that have autism have trouble starting and keeping subjects of conversation, taking turns in discussion, and maintaining an adequate degree of detail. Additionally, these children struggle with speaker-listener interactions and pronominal reversal. As a result, a significant number of individuals with autism have difficulties with the ways in which language is used in social contexts. As a result of this fact, a number of researchers have come to the conclusion that at least part of the linguistic difficulties observed in autistic individuals are caused by deficits in social relatedness or a lack of grasp of speaker-listener conversational conventions.

REVIEW OF LITERATURE

Valerie Gaus (2014) Purpose Adults who are afflicted by autism spectrum disorders (ASD) may be more likely to seek the assistance of psychotherapists for difficulties in managing day-to-day living, including difficulty with social functioning and self-direction, as the number of people diagnosed with ASD continues to grow. These individuals frequently have co-morbid conditions for which there are evidence-based treatment procedures for cognitive

Tasmin Perween *, *Department of Psychology, B.R.A. Bihar University, Muzaffarpur, India.*
E-mail: tasminperween99@gmail.com

behavioural therapy that may be found in the published medical literature (CBT). The purpose of this study is to offer recommendations to psychotherapists who work with these folks. Design/methodology/approach There has been no outcome study on CBT with adult ASD conducted in recent years; however, there is evidence from other literatures on cognitive functioning in ASD and CBT for adults who are not autistic that can influence therapy for this population. This study presents a model for psychotherapy that may be used to any individual with autism spectrum disorder (ASD) who possesses sufficient linguistic ability and interest to participate in regular sessions with a psychotherapist. The model is based on the findings mentioned above. Findings Individuals who have ASD process information in a manner that is unique to them, and it is probable that these variations are at the root of the social difficulties they describe. Implications on daily life. The cognitive behavioural therapy (CBT) techniques are intended to educate people how to monitor their own thoughts and perceptions, with the goal of becoming more aware of interpretative mistakes and focusing on those that are connected with mood and anxiety disorders. Originality/value This demographic requires additional attention be paid to the development of abilities, particularly in the overarching areas of social and coping skills. This article presents a discussion of the primary objectives of CBT along with examples of techniques that are particularly helpful for patients with ASD. The authors come to the conclusion that these methods can be successful with adults who have ASD if certain modifications are made and additional attention is paid to the development of skills.

Martha Feucht (2018) In children diagnosed with autism spectrum disorder (ASD), to conduct a prospective evaluation of the effectiveness of cognitive behavioural treatment (CBT) (ASD). Methods: Children who had never used drugs and fulfilled all of the DSM-V requirements for an autism spectrum disorder diagnosis were recruited from a day care facility that specialised in the long-term treatment of children and adolescents with ASD. The Aberrant Behavior Checklist (ABC) was used to undertake symptom evaluation both before (at the baseline) and after 12 months of cognitive behavioural therapy (during the follow-up). The findings showed that there were nine male participants, with a mean age of 6 (2.0) years. At follow-up, substantial improvements were seen in symptoms of irritability ($p = 0.012$), hyperactivity ($p = 0.008$), and lethargy ($p = 0.008$) when compared to the baseline. The findings suggest that cognitive behavioural therapy (CBT) is a viable treatment option for

Tasmin Perween *, *Department of Psychology, B.R.A. Bihar University, Muzaffarpur, India.*
E-mail: tasminperween99@gmail.com

children who have ASD. It is necessary to conduct larger research in order to provide more specific information on which symptoms react better in these people.

It was John T. Danial (2013) Cognitive behavioural therapy, sometimes known as CBT, is becoming an increasingly popular treatment option for children who have a high level of functioning yet suffer from autism spectrum condition. This article set out to describe the processes involved in cognitive behavioural therapy for children diagnosed with autism, in addition to the outcomes of such therapy. This article discusses cognitive behavioural therapy (CBT) techniques that help children with autism deal with anxiety, disruptive behaviour, and other key autistic symptoms. Emerging data suggests that cognitive behavioural therapy (CBT) may be effective for anxiety and autistic symptoms; however, methodological limitations must be addressed before definitive conclusions can be formed. The application of cognitive behavioural therapy (CBT) to the treatment of autism in children requires further investigation. Specifically, in the future, research should employ methodological approaches that are more strict and evaluate the efficacy of particular cognitive methods and adaptations that are relevant to autism.

Peter E Langdon (2021) This thorough CBT clinician's handbook was written by professionals who are renowned globally, and it incorporates educational elements that are easily accessible as well as disorder-specific chapters. This is an ideal reference work for certified CBT practitioners, students enrolled in post-graduate CBT courses, and clinical psychology PhD students because of the cutting-edge research, sophisticated theory, and attention to particular adaptations. The case studies illustrate how to modify CBT procedures for a variety of different demographics and demonstrate therapeutic uses of various therapies. It simulates the experience of receiving private supervision from a foremost authority in the subject by striking a balance between fundamental, theoretical concepts and intervention strategies that are based on protocols.

RESEARCH METHODOLOGY

This chapter focuses mostly on providing specifics of the methodologies followed for this research. The most basic definition of the term "methodology" describes it as "the set of procedures or guidelines that are used to conduct a particular piece of study." However, it is typically used in a larger meaning to denote the entire system of ideas, beliefs, and ideals that drive a specific method to study. This broader understanding of the term is how it is used in

Tasmin Perween *, *Department of Psychology, B.R.A. Bihar University, Muzaffarpur, India.*
E-mail: tasminperween99@gmail.com

this article (Somekh & Lewin, 2005).

RESEARCH DESIGN

A research design may be thought of as an overarching blueprint for carrying out a research approach. In a research design, it is specified whether the study will involve groups of subjects or individual subjects, whether the study will compare members of the same group or members of other groups, and how many different variables will be included in the study (Gravetter & Forzano, 2003). According to Kothari (1993), a good design is one that reduces the amount of bias in the data collection and analysis as much as possible while simultaneously increasing the amount of dependability in the data. The study design technique used in psychology is based on the ideas used in research methodology used in other scientific disciplines.

In the current investigation, two distinct strategies for conducting research—a descriptive exploratory design and a pre-/post test between-group strategy with follow-up—were utilised (Asher, 1994).

PARTICIPANTS

The current investigation made use of the approach of purposive sampling to choose its sample subjects (Sapsford & Jupp, 1996). The participants in this study were all diagnosed with autism and ranged in age from 3 to 12 years old, with a mean age of 6.5 years. Both boys and girls were included in the sample. The group was split into two categories based on the GARS score: those with average autism (90-110) and those with above average autism (111-and above).

Those individuals who have been identified as autistic and given a diagnosis of autism by the Institute for Communicative and Cognitive Neurosciences (ICCONS), which is located in Shornur, Palakkad, make up the autistic groups that are included in the current sample. Participants in this study also include individuals who have been given a clinical diagnosis and are now enrolled in one of three special schools located in the Calicut region of Kerala. The distribution of sample characteristics is presented in table 1.

Distribution of Participants characteristics

	Boys	**Girls**	

Tasmin Perween *, *Department of Psychology, B.R.A. Bihar University, Muzaffarpur, India.*
E-mail: tasminperween99@gmail.com

Particulars	Age (in years)		Age (in years)		Total
	3 -5	6-12	3-5	6-12	
Average Autism (90-110)	12	13	1	5	31
Above average in Autism(111and above)	8	12	2	7	29
Total	20	25	3	12	60

Children who fall into the specified age range have an increased risk of suffering from a wide variety of behavioural or physical/physiological conditions, in addition to or concurrently with autism (Gillberg & Coleman, 2000). As a result of this, in order to make the findings of the study more reliable, an inclusion-exclusion criterion was used to the process of selecting individuals for the current sample.

RESULT AND DISCUSSION

In light of the first three goals of the research project, an exploratory investigation of the cognitive and behavioural features of children who have autism was carried out in four stages. Research on chosen cognitive and behavioural factors was the focus of the first three phases, which were designed to be carried out with autistic children. In the fourth step, the goal was to study the interrelation between the Cognitive, Behavioural variable and major symptomatology of autism on the one hand, and to assess the predictive validity of the Cognitive, Behavioural variables in assessing the severity of autism on the other. This was done in preparation for the fifth step, which was to study the interrelation between the Cognitive, Behavioural variable and major symptomatology of autism in preparation for the fifth

In the first stage, descriptive statistics were compiled for both the cognitive variables and the behavioural variables. This was done in relation to the first aim, which was to investigate the cognitive functions in relation to the varying degrees of autism. As a second stage, a separate three-way ANOVA was run for each of the two sets of variables, with the three independent factors being gender, age, and severity of autism. This was done in order to compare the results of the three different sets of variables. In the third phase, a t-test was used to

Tasmin Perween *, *Department of Psychology, B.R.A. Bihar University, Muzaffarpur, India.*
E-mail: tasminperween99@gmail.com

determine whether or not significant differences existed between the mean scores of paired variables. The descriptive statistics for cognitive factors are included in Table 4.1 with all of their features.

N, Means and SDs of the Cognitive variables for children withautism

Variable	N	Score		Mean	SD
		Minimum	Maximum		
Receptive language	60	5	29	16.21	5.18
Expressive language	60	2	46	13.48	11.88
Written language	60	0	13	0.73	2.09
Number concept	60	0	23	4.43	5.45
Communication domain	60	8	82	30.43	17.70

As can be seen in Table 4.1, the children with autism who participated in this research project achieved the highest mean score in the receptive language domain, which was 16.21. This score was higher than any other particular variable. It appears that children with autism are able to grasp language; nevertheless, difficulties arise when it comes to their ability to express themselves through language. The expressive language score was found to vary from 2 to 46, with a mean of 13.48, which demonstrates that children with autism always demonstrate difficulty communicating their wants and needs with other people. Written language had a mean score of 0.73 out of a possible 1, which suggests quite clearly that the majority of children with autism have very limited skill in this domain. The similar pattern can be seen when looking at the notion of numbers as well. The mean score for the communication domain, which includes receptive, expressive, and written language scores, was 30.43, and the standard deviation was 17.70, indicating that there is a significant amount of variation in the children with autism's capacity for communication.

CONCLUSION

This chapter is neatly divided up into four sections for organisational purposes. The first section is a summary of the aims and hypotheses that have been established for the study. Second, it describes the approach that was taken in conducting this inquiry. The most

Tasmin Perween *, *Department of Psychology, B.R.A. Bihar University, Muzaffarpur, India.*
E-mail: tasminperween99@gmail.com

important discoveries are discussed in the third segment, and the final portion offers some recommendations for further investigation.

The current study is an effort to examine the cognitive and behavioural analyses of autism, as well as to assess the efficiency of parent training intervention for improving the circumstances of children who have autism. In order to accomplish this goal, a few objectives and hypotheses have been developed. You may find them down below:

PARTICIPANTS

Purposive sampling was used to choose participants for the present study's sample, which was then analysed. The participants in this study were all diagnosed with autism and ranged in age from 3 to 12 years old, with a mean age of 6.5 years. Both boys and girls were included in the sample. Those individuals who have been identified as autistic and given a diagnosis of autism by the Institute for Communicative and Cognitive Neurosciences (ICCONS), which is located in Shornur, Palakkad, make up the autistic groups that are included in the current sample.

Participants in this study also include individuals who have been given a clinical diagnosis and are now enrolled in one of three special schools located in the Calicut region of Kerala.

MEASURES

This study made use of a variety of measurement tools, such as five standardised observation and interview schedules, as well as a socio-demographic data sheet.

1. Socio-demographic Data Sheet.
2. Childhood Autism Rating Scale (CARS).
3. Gilliam Autism Rating Scale (GARS).
4. Vineland Adaptive behaviour Scale-Survey Edition (VABS).
5. Behavioural Assessment Scale for Indian Children with Mental Retardation (BASIC-MR).

PROCEDURE

The measurements that were discussed earlier are supplied to each individual, and an

Tasmin Perween *, *Department of Psychology, B.R.A. Bihar University, Muzaffarpur, India.*
E-mail: tasminperween99@gmail.com

intervention consisting of parent training was carried out with a particular group. Following this, the information is subjected to the proper statistical procedures for analysis.

REFERENCES

1. Aldred, C., Green, J., & Adams, C. (2004). A new social communication intervention for children with autism: pilot randomised controlled treatment study suggesting effectiveness. Journal of Child Psychology and Psychiatry, 45, 1420–1430.
2. Anderson, A., Moore, D. W., Godfrey, R., & Fletcher-Flinn, C. M. (2004). Social skills assessment of children with autism in free-play situations. Autism, 8, 369-385.
3. Andrews, N., Miller, E., Grant, A., Stowe, J., Osborne, V., & Taylor, B. (2004). Thimerosal exposure in infants and developmental disorders: a retrospective cohort study in the United Kingdom does not support a causal association. Pediatrics, 114, 584–91.
4. Aylward, E.H., Minshew, N.J., Field, K., Sparks, B.F & Singh, N. (2002). Effects of age on brain volume and head circumference in autism. Neurology, 59, 175-187.
5. Baron-Cohen, S. & Belmonte, K.M. (2005). Autism: a window onto the development of the social and the analytic brain. Annual Review of Neuroscience, 28, 109-126.
6. Baron-Cohen, S. (2004). Autism: research into causes and intervention.Pediatric Rehabilitation, 7, 33-78.
7. Barry, L. M., & Burlew, S.B. (2004). Using social stories to teach choice and play skills to children with autism. Focus on Autism and Other Developmental Disabilities, 19, 45-51.
8. Bauminger, N., Shulman, C., & Agam, G. (2003). Peer Interaction and Loneliness in High-Functioning Children with Autism. Journal of Autism and Developmental Disorders, 33, 489-507.
9. Beadle-Brown, J. (2004). Elicited Imitation in Children and Adults with Autism: the Effect of Different Types of Actions. Journal of Applied Research in Intellectual Disabilities, 17, 37-48.
10. Ben-Itzchak, E., & Zachor, D. A. (2007). The effects of intellectual functioning and autism severity on outcome of early behavioral intervention for children with autism.

Tasmin Perween *, *Department of Psychology, B.R.A. Bihar University, Muzaffarpur, India.*
E-mail: tasminperween99@gmail.com

Research in Developmental Disabilities, 28,

11. Berger, M. (2006). A model of preverbal social dysfunctions in autism. Journal of Child Psychology and Psychiatry, 47, 338-371.
12. Bernard-Opitz, V. & Ing, S. (2004). Comparison of Behavioural and Natural Play Interventions for Young Children with Autism. Autism, 8, 319- 333.
13. Bildt, A., Serra, E., Luteijn, E., Kraijer, D., Sytema, S., Minderaa, R. (2005). Social skills in children with intellectual disabilities with and without autism. Journal of Intellectual Disability Research, 49, 317-328.
14. Bono, M. A., Daley, T., & Sigman, M. (2004). Relations Among Joint Attention, Amount of Intervention and Language Gain in Autism.

Tasmin Perween *, *Department of Psychology, B.R.A. Bihar University, Muzaffarpur, India.*
E-mail: tasminperween99@gmail.com