### SHELTER HOUSE PLAY THERAPY FOR A CHILD WITH AUTISM

<sup>1</sup>Azizi Yahaya, <sup>2</sup>Irnawati Binti Haji Mahir ,<sup>3</sup>Gooh Mo Lee, <sup>1</sup>Ismail Maakip, <sup>4</sup>Baharudin Mohd Arus, <sup>1</sup>Peter Voo dan <sup>1</sup>Sharon Kwan

<sup>1</sup>Faculty Of Psycholopgy and Education
<sup>2</sup>University Brunei Darussalam
<sup>3</sup>Universiti Kebangsaan Malaysia
<sup>4</sup>Faculty of Humanity and Heritage
Universiti Malaysia Sabah

#### Abstract

The aim of this present study is to identify the effectiveness of Shelter House Play Therapy towards the social responsiveness and social communication of children with autism in Brunei Darussalam. Instruments including Social Responsiveness Scale (SRS) and Social Communication Questionnaires (SCQ) were used to collect data from 27 respondents; 12 respondents were the experimental group and 15 respondents were the control group. It also incorporates the perception of parents and teachers towards the behaviour of their autistic children and students. Split-Plot ANOVA (SPANOVA) and Independent Sample T-test analyses were used to evaluate the treatment effectiveness of Shelter House Play Therapy towards the social responsiveness and social communication in autistic children. It was found that Shelter House Play Therapy has an impact towards the social responsiveness and social communication in children with autism, and there is a significant difference of social responsiveness and social communication between the experimental group and control group in terms of pre and post-test. These findings indicate the overall effectiveness of Shelter House Play

**Keywords**: Autism Spectrum Disorder (ASD), Autistic children, Shelter House Play Therapy (SHPT), social responsiveness, social communication and behaviour of autistic children.

## 1. INTRODUCTION

### 1.1 Background of the Study

Autism is not a recent phenomenon in Brunei Darussalam. The term is becoming recognised and as a result autism is prominently being monitored. To some the term autism is equivalent to being disabled; to some it is in fact the worst form of disability. Early features of autism are social interaction, communication, stereotyped and repetitive routines, behaviours and interests, and difficulties in play and sensory (Gray & Tonge, 2001)

This is when taking into account that an autistic child has ears but does not use them efficiently; an autistic child has a brain but could not comprehend easily; possessing the same senses but experience sensory dysfunctions; having to look normal but is deprived of normalcy. Thus, in certain situations the term autism can be a controversial term.

It is not easy to totally understand and accept children with autism. It is believed that only parents and those

who are directly involved in upbringing a child with autism understands the challenges in raising a child with autism (including caregivers). According to Brereton (2011), some studies have interviewed parents to establish what problems initially cause them the most concerned; others have observed children in controlled play and assessment situations.

Often, there is a certain level of tension felt in parents with an autistic child. Some parents accept their autistic child of who they are but at the same time require proper guidance and skills in the up-bringing of their child. Some parents are denial (some illustrates ignorance) and this makes the situation worst. If parents are denial, the likelihood of therapies is minimal or nil.

A community pediatrician in the Child Development Centre (CDC) in Brunei Darussalam, records one new case of autism among children aged two and above every week. The center had diagnosed 340 individuals with autism in 2012, but the number increased by 105 within two years. One in every 1,000 individuals are autistic based on the sultanate's population, this is the current prevalence and is alarming. Until April 2014, the center has 445 registered autistic patients (353 are males) (The Brunei Times, 2014). One of the hottest current issues in the field of autism is the reported tremendous increase in the incidence and prevalence of the disorder (Tait & Mundia, 2012)

Having a child with autism is not every parent's dream but when their child is diagnosed with autism, it takes time for the parents to accept the fact that their child is autistic (when what they see is a 'normal' child). It would be detrimental for the parents and also the child if the parents remain in their denial stage and the child is introduced to no intervention.

According to Dr Hj Saquib, a community pediatrician, late intervention will not be effective as the outcome will be limited when therapy starts late. The earlier the child is exposed to therapies, the better and that depends on CDC and the parents' awareness of their child condition. He also articulated that when parents are in denial and later realize their child is autistic and brings them for intervention, according to him, it may be a little too late (The Brunei Times, 2014).

The researcher is aware that play therapy involves a variety of techniques and these various types of play therapy have been studied (through case studies) towards children with autism. For instance, non-directive play therapy is used for children and adolescents with a wide variety of emotional and behavioural problems (Gurney, 1984; Landreth, 1991; Ryan & Wilson, 2000; Wilson-Kendrick & Ryan, 1992). However, research on using non-directive play therapy with children with autism is almost non-existent, based upon our own and others' literature searches (Mittledorf, Hendricks, & Landreth, 2001).

In another study, two case studies found, one of a pre-adolescent girl with high-functioning autism, who had brief play therapy incorporating both directive and non-directive techniques (Kenny & Winick, 2000) and another of 18-months' duration with a 5-year-old child who might have been higher-functioning (Mittledorf et.al.; 2001).

Previous studies incorporated the traditional play therapy towards autistic children, and this study is using a recent technique that might have an impact towards children with autism.

Shelter house play therapy (SHPT) is a creative counseling technique and with this study, it is hoped that it achieve what other play therapy techniques had achieved or even more than what was achieved previously.

With this study, the researcher aims to reveal that intervention through play therapy; specifically Shelter House Play Therapy (SHPT) would be able to improve the social communication, social responsiveness of autistic children. In addition to that, the researcher aims to discover teachers' and parents' perception towards the behavior of the autistic children.

The focus of the researcher's study is on the autistic children; to identify whether introducing Shelter House Play Therapy (SHPT) is effective towards improving their social communication and social responsiveness.

#### 1.2 Statement of the Problem

It is apparent that what an autistic child feels, sees, hears, senses and experiences are not being understood thoroughly. From the observation of the researcher, a child with autism lives in their "own world" and with minimal knowledge and passion to understanding them would make it difficult to enter their life and promote their social development. The researcher feels that autistic children are part of the community and without them the world is incomplete. The researcher also identifies that parents are the first to feel the stress or some might say, challenge of raising a child with autism.

The researcher also feels that if parents, teachers, friends, the community as a whole understands the world of children with autism, the world is a better place for these children and also to everyone. As stated earlier,

there are an increasing number of children being diagnosed with autism in Brunei Darussalam (The Brunei Times, 2014).

Due to these reasons this study is imperative to be conducted to illustrate whether with shelter house play therapy would have an impact towards children with autism, though those with high functioning mild autism might benefit more. According to Danial (2013), though individuals in this group may experience varying levels of autism symptoms, they are generally characterized as "high-functioning," as these individuals usually have normal IQ levels and relatively normal language skills.

Thus, this study hopes to determine if play therapy can be an effective tool for children with autism to improve their social communication and social responsiveness. The researcher is also determined to understand the perception of parents and teachers towards the behavior of their autistic children/students.

In addition to that, the purpose of the researcher study is to identify if autistic children are able to participate in the Shelter House Play Therapy (SHPT), which is a recent play therapy technique an experienced play therapist, sand therapist developed (Stangline, 2014).

## 1.3 Purpose and Focus of Study

The purpose of this study is to determine the effectiveness of Shelter House Play Therapy (SHPT) towards autistic children. The rationale of conducting this research is due the researcher being a parent of an autistic child. It is through the researcher's experience being a parent of an autistic child that at the beginning it is very difficult to acquire even attention of the researcher's child.

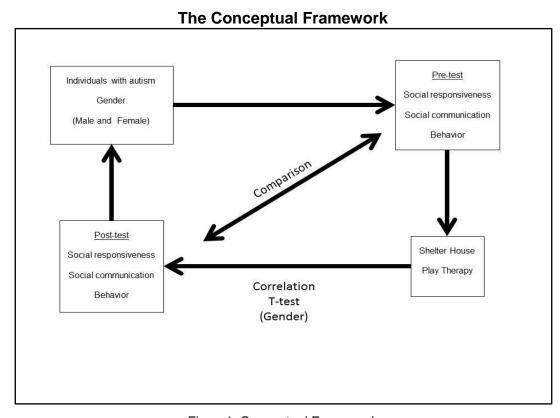


Figure 1. Conceptual Framework

The figure above is the conceptual framework for this study. Before the Shelter House Play Therapy is introduced to the autistic children, questionnaires are distributed to parents and teachers in order to acquire social responsiveness and social communication of the children. Prior to the therapy, another set of questionnaires are distributed for the post-test. The impact of the therapy presumably affects the social responsiveness and social communication of the autistic children.

# 1.4 Limitations of the Study

There are several limitations in conducting this study:

The researcher intended to gather the parents and teachers to explain the questionnaires being distributed. However, this was not possible due to most parents are working and the teachers have their classes to

attend to. Therefore, the researcher requested one of the teachers as a focal-point for the parents and teachers (distribution and collection of questionnaires).

In responding to the questionnaires, parents were required to respond separately (one questionnaire for the mother and one for the father). However, some parents preferred to respond to only one questionnaire.

The study was only conducted in the Brunei-Muara district and from two Model Inclusive Schools (MIS). The participants are purposively selected from both schools.

The materials used in the study can be costly or expensive to order; and it was time-consuming to produce and improvise.

The autistic children are sometimes in a tantrum and bad mood. If the children is showing tantrum, the researcher has to wait for the child's tantrum to ease and end. Then only the researcher is able to conduct the therapy.

The Shelter House Play Therapy (SHPT) is a recently established Play Therapy technique (2014); there is limited literature review about the SHPT in comparison with the classic play therapy techniques.

Some of the therapy sessions were recorded (video-taped); with written consents from the parents. Thus, only those sessions with parental consents were recorded. The researcher felt that there is a need to increase the number of video cameras; preferably from different angles. This is in order to capture the play therapy session in every angle. This would provide a broader picture of the whole session; at one point, the researcher's participant hugged the researcher's assistant.

## 1.5 Research Methodology

The study is a mixed method of quantitative and qualitative. The researcher conducted an experimental study towards the autistic children using the Shelter House Play Therapy. This includes four therapy sessions being conducted towards the autistic children at duration of 30-45 minutes per session. The participants were studied in a case to case basis (an autistic child is not similar to another autistic child).

The first phase of the therapy includes two sessions and for each session, the researcher introduces one shelter house (one color; blue color) and fuzzy balls (dolls that are soft and fuzzy in nature). The researcher will then let the autistic children to play with them. The second phase of the therapy includes two sessions and for each session, the researcher introduces four shelter houses (four colors; blue, red, green and yellow colors) (Appendix A) and again the fuzzy balls.

### 1.6 Shelter House Play Therapy (Experiment)

Beforehand, the therapist sets up the Shelter House and places the fuzzy balls near the house. The therapist then introduces and develops rapport with the autistic child. Then, the therapist introduces the house (this may be done also by asking what the item is).

The therapist and child will sit next to each other while the child plays with the house and fuzzy balls. The therapist will allow the child to continue playing while also prompting or asking while the child is playing. The child is free to choose what fuzzy balls to use for playing the house and places them in any quadrant of the house (or the top of the house). The therapist then allows the child to play but if child turns to the therapist, the therapist will assist the child's needs.

For the second phase, the similar procedure is conducted but the child is exposed to different colors of houses (red, yellow, blue and green) with the fuzzy balls. In addition to that, a few miniatures (including figurines), furniture and miniature doll houses were also provided by the therapist.

#### 1.7 Population and Participants.

The researcher used two-group simple randomized design. This is when first of all, the population is defined and then a sample is selected randomly from the population. The sample is then randomly assigned to the experimental and control groups (Kothari, 2004).

The population of the study is the total autistic children from two Model Inclusive School the researcher is referred to by the Special Education Unit (SEU) that comprises of a total of 21 autistic children (respondent). Another six autistic children were identified by the researcher from a Facebook group of autism in Brunei, and they are all in school in the country. In this study, Non-probability sampling was applied. In other words, the samples or participants were purposive sampling.

## 1.8 Instruments/ Administration of the Instrument(s)

The research instrument used in this study is questionnaire in order to gather the required data.

## 1.9 Instrument (qualitative)

The instrument that the researcher used for the qualitative part of the study is interview and this answers the research question to identify the type of behavior of autistic children according to perception of parents and teachers.

The use of the interview with parents and teachers sought to discover the behavior and personality of the autistic children before and after the Shelter House Play Therapy is conducted.

## 1.10 Questionnaires (quantitative)

For the study, there are two adopted sets of questionnaires used; (1) The Social Responsiveness Scales (Appendix C) developed by John N. Constantino, M.D. and (2) The Social Communication Question (Appendix D) developed by Michael Rutter, M.D., F.R.S., Anthony Bailey, M.D. and Catherine Lord, Ph.D.

For the Social Responsiveness Scales (SRS), there are two (2) sections in the questionnaires; (1) Demographic questions. This is placed after the page about the background of the study and then followed by the second section which comprise of sixty-five (65) questions. Previous studies have utilized the scales in assessing autistic traits and found its inter-reliability test to be in between  $\alpha = .76$  and  $\alpha = .95$  and internal consistency between .91-.97 which are relatively high (Bolte, Constantino & Poutska, 2008).

For the Social Communication Question (SCQ), the questionnaire is made up of forty (40) questions and respondents are required to answer either yes, no or not sure. Studies by Bolte and his colleagues (2008) suggested that the reliability of this scale in assessing the trait of autistic children is satisfactorily good  $\alpha = .35 - \alpha = .58$ 

The questionnaires were distributed to parents of the autistic children and also teachers from the MIS centers. A total of 27 sets of questionnaires (2 questionnaires for the pre-test and 2 questionnaires for the post-test) were distributed to teachers and parents for the study. The researcher received 27 sets of questionnaires back from the respondents.

Objective (1): To identify the impact of Shelter House Play Therapy towards the social responsiveness and social communication in autistic children through pre and post-test on the experimental group and control group. The second research question was measured based on the results obtained from the experimental group and control group in the pre and post-test. In order to identify the impact, the Split-Plot ANOVA (SPANOVA) was applied.

Table 1Descriptive Statistics Analysis on the pre-test results of the experimental group and control group (n=27)

<u>Pre</u>	<u>Design</u>	<u>Mean</u>	<u>Sd</u>	Sd error mean
Social responsiveness	Experimental	2.4648 .31094		.08976
	Control	2.5833	.45626	.11781
Social communication	Experimental	1.5292	.18023	.05203
	Control	1.8133	.32056	.08277

The descriptive analysis shows the mean differences according to the designs experimental and control. In this analysis, the independent variables are the experimental and control groups, whereas the dependent variables are the social responsiveness and social communication. The descriptive analysis is being used to describe the summary of the sample, which shows the mean, standard deviation and standard deviation error.

Table 4.7 above shows the descriptive statistics analysis of the pre-test results of experimental group and control group. Based on the results shown in the table, it indicates that control group acquire higher mean score for social responsiveness and social communication than the experimental group. The mean score for social responsiveness of the control group is 2.5833, which is higher than the experimental group with mean

score of 2.4648. The social communication of control group has a higher mean score of 1.8133 than the experimental group with mean score of 1.5292.

Table 2: Descriptive Statistics Analysis on the post-test results of the experimental group and control group (n=27)

Post	<u>Design</u>	<u>Mean</u>	<u>Sd</u>	Sd error mean
Social responsiveness	Experimental	2.5244	.29986	.08656
	Control	2.5641	.41070	.10604
Social communication	Experimental	1.6292	.20666	.05966
	Control	1.7983	.30742	.07938

Table 2 above shows the descriptive statistics analysis of the post-test results of experimental group and control group. Based on the results shown in the table, it indicates that control group acquire higher mean scores for all variables than the experimental group. The mean score of social responsiveness of control group is 2.5641, which is higher than the experimental group with mean score 2.5244. The social communication of control group has a higher mean score of 1.7983, than the experimental group with mean score of 1.6292.

As shown in the descriptive statistics analysis, there are slight differences between experimental group and control group based on their pre-test and post-test results; the mean difference is evident as the mean score in the post-test of experimental group is much higher than the control group.

Table 3: The difference between design (experimental and control), pre-post and pre-post\*design.

		<u>Value</u>	<u>F</u>	Hypothesis df	Error df	Sig.	Partial Eta Squared
Design	Pillai's Trace	.302	5.185 <sup>b</sup>	2.000	24.000	.000	.302
Pre-post	Pillai's Trace	.013	.161 <sup>b</sup>	2.000	24.000	.000	.013
Pre- post*Design	Pillai's Trace	.005	.058b	2.000	24.000	.000	.005

Table3 shows the difference between design: experimental and control, pre-post and pre-post\*design. As illustrated by the table, the main effect of design: experimental and control, F(2,24)=5.185 p<.000, as was the main effect of pre-post, F(2,24)=.161 p<.000. The interaction of these two factors was significant, F(2,24)=.058 p<.000. The result further suggests that SHPT does have positive impact towards the social responsiveness and social communication in autistic children through pre and post-test on the experimental group and control group, hence reject the first hypothesis.

## 2. DISCUSSIONS

The results of this study along with the researcher's observations and parents and teachers perceptions provide information regarding the social responsiveness and social communication of autistic children who received Shelter House Play Therapy sessions.

In the study there were comments from the parents and teachers that supported the premise of the Shelter House Play Therapy. For instance, parents that reported the positive improvement (less tantrums and being in a good mood) about their autistic children. Teachers have made comments that such therapy ought to be conducted in a regular basis in schools in order to sustain and improve social responsiveness and social communication in autistic children. The Shelter House Play Therapy furthermore had also attracted the interests of other students with various types of disabilities.

Thus, this information from interviews and also informal meetings with parents and teachers supports the

concept of Shelter House Play Therapy. These subjective impressions and also thorough observations from them reflect the potential benefit of this play therapy.

The researcher feels that the findings were likely affected by the fact that the sample size is small, a limited period of therapies and probably the method of conducting the therapy; and these may be viewed as the weakness of the study. However, parents' and teachers' verbal support towards the play therapy in this study and the effect it had onto some of their children is the strength of this study. They stated and recommended that such therapy be conducted more frequently.

In the researcher's opinion, the findings can be generalised to the population of the study. It is true when one autistic child is not similar to another looking at the spectrum they are in. However, a child with autism will definitely show a certain degree (it might not be as great; but importantly there is) of social responsiveness and social communication.

According to Peters (2008), the effectiveness of a play-based intervention on the development of social, communication, and play skills of children with autism was investigated and made progress. In terms of individual progress, review of data collected suggests that all participants made some progress within the intervention.

In addition, according to Brunshon-Upshaw (2009), structured role-play activities benefit some children with autism, but future research needs to be conducted on a larger and more diverse group of children with autism.

In another study conducted by Smith (2012) revealed that with group play therapy was found to be effective in increasing the interpersonal skills of the children with autism. The children with autism made significant gains in the somatization, interpersonal relations, social problems and critical items which indicate the overall effectiveness of group therapy interventions for children with autism.

In order to identify the impact of Shelter House Play Therapy towards the social responsiveness and social communication in autistic children through pre and post-test on the experimental group and control group, the Split-Plot ANOVA (SPANOVA) was applied and the results showed significance. This means that the Shelter House Play Therapy has an impact towards the social responsiveness and social communication of the autistic children.

The independent sample t-test reveals that there is a significant difference of social responsiveness and social communication between experimental and control group in terms of pre and post-test.

#### 3. CONCLUSIONS

Based on the findings of the Study, the researcher feels that if more data were obtained, thus this would increase the significance of the study. The data obtained was sufficient to answer the research questions, and resulted to the Shelter House Play Therapy having significant impact towards social responsiveness and social communication of the autistic children. In addition, it revealed a significant difference of social responsiveness and social communication between the control and experimental group in terms of pre and post-test.

According to the researcher's opinion, there is a need to continue this study because autism is one of the challenging issues in Brunei Darussalam and is becoming more prevalent in the country.

#### REFERENCE LIST

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4<sup>th</sup> Ed). Washington, DC: American Psychiatric Association

American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (5th ed. – text revision). Washington, DC: American Psychiatric Association.

Astin, J.A., Carlson, L.E., Freedman, B., & Shapiro, S.L. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology*, 62, 373–386.

- Bolte, S., Poustka, F., & Constantino, J. N. (2008). Assessing autistic traits: Cross-cultural validation of the Social Responsiveness Scale (SRS). *Autism Research*, *1*(6), 354–363
- Bouma, R. and Schweitzer, R. (1990). The impact of chronic childhood illness on family stress: A comparison between autism and cystic fibrosis. *Journal Clinical Psychological*, 46: 722–730.
- Brunson-Upshaw, D.L. (2009). The Effects of Role-Play Activities on the Social Interaction of elementary students with autism. ProQuest LLC.
- Capps, L., & Sigman, M. (1997). *Children with autism: A developmental perspective* (Vol. 34). Harvard University Press.
- Carmichael, K. D. (2006). Play Therapy: An Introductory. Upper Saddle River, NJ: Prentice-Hall.
- Cashin, A. (2008). Narrative Therapy a psychotherapeutic approach of merit in the treatment of adolescents with Asperger's Disorder. *Journal of Child and Adolescent Psychiatric Nursing*, 28(1), 48-56.
- Constantino, J. N., & Gruber, C. P. (2005). Social Responsiveness Scale. Retrieved from, <a href="http://www.rbup.no/CMS/CMSpublish.nsf/E96A2E89C8DD66ABC12575670028A04A/\$file/Western%20Psychological%20Services%20om%20Social%20Responsiveness%20Scale.pdf">http://www.rbup.no/CMS/CMSpublish.nsf/E96A2E89C8DD66ABC12575670028A04A/\$file/Western%20Psychological%20Services%20om%20Social%20Responsiveness%20Scale.pdf</a>.
- Corsello, C., Cook, E., & Leventhal, B. (2003). Dania What is Social Communication? Center of Excellence on Autism Spectrum Disorders, Southern Connecticut State University. Retrieved from, <a href="https://www.southernct.edu/academics/schools/education/asdcenter/Social%20Communication%20final%206-13-13.pdf">https://www.southernct.edu/academics/schools/education/asdcenter/Social%20Communication%20final%206-13-13.pdf</a>.
- Danial, J. (2013). Cognitive Behavior Therapy for Anxiety: Adapting Interventions for Children with Autism and Intellectual Disability. Thesis submitted as part of Degree Arts in Education.
- Deitz, J., Kanny, E., & McLaughlin, J., & Watling, R., (1999). Current practice of occupational therapy for children with autism. *American Journal of Occupational Therapy*, 53, 498-505.
- Dubowski, J., & Evans, K., & (2001). *Art therapy with children on the autistic spectrum: Beyond words.* Jessica Kingsley Publishers.
- Dunn-Snow, P. (1997). The Gorilla Did It!: Integration of Art Therapy and Language Arts in the Public Schools. *Art Therapy*, *14*(1), 50-53.
- Hobson, R. P. (1993). The emotional origins of social understanding. *Philosophical psychology*, *6*(3), 227-249.
- Hobson, R.P. (1993). Autism and the development of mind. Hove, UK:Erlbaum
- Josefi, O., & Ryan, V. (2004). Non-directive play therapy for young children with autism: A case study. *Clinical Child Psychology and Psychiatry*, *9*(4), 533-551.
- Kenny, M. C., & Winick, C. B. (2000). An integrative approach to play therapy with an autistic girl. *International Journal of Play Therapy*, *9*(1), 11.
- Kunce, L., & Mesibov, G. B. (1998). Educational approaches to high-functioning autism and Asperger syndrome. In *Asperger Syndrome or High-Functioning Autism?* (pp. 227-261). Springer US.
- Kothari, C.R. (2004). Research Methodology Methods and Techniques. New Age International (P) Limited, Publishers.
- Landreth, G. L. (1991). Play therapy: The art of the relationship. Muncie, IN: Accelerated Development.
- Lebo, D. (1953). The present status of research on non-directive play therapy. *Journal of Consulting Psychology*, 11(3), 177-183
- Lindon, J. (2001). *Understanding children's play*. Nelson Thornes.
- Tager-Flusberg, H (2007). Evaluating the Theory-of-Mind Hypothesis of Autism. *Current Directions in Psychological Science*. 16 (6). London: Association Psychological Science.
- Tait, J., & Mundia, L. (2012). The impact of a child with autism on the Bruneian family system. *International Journal of Special Education, Vol. 27, No.*3, 2012.