ANALYSIS OF ABA METHOD IN DECREASING THE RISK OF WORK THERAPY OF AUTISTIC CHILDREN IN THE ABA MAKASSAR THERAPY COMMUNITY

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ABSTRACT

This study aims to determine whether the Applied Behavior Analysis (ABA) method can reduce occupational risks for autistic child therapists in the Makassar ABA Community. The study was conducted at the ABA Therapy Community in Makassar. The research approach uses combination research (mixed methods) with descriptive research. The total respondents were 60 therapists. Data collection techniques with questionnaires and in-depth interviews. The method used to measure work risk is NASA-TLX. NASA-TLX method is a method of measuring work risk that divides into 6 dimensions of aspects of work elements. The results showed that there were 49 therapists (82%) evaluating moderate work risks, 10 therapists (17%) assessing heavy work risks, and 1 therapist (2%) assessing mild work risks. Of the 6 NASA-TLX workload variables, there are three high job risk categories, namely the Own Performance (OP) variable of 25.0%, Effort (EF) of 22.0%, and Temporal Demand (PD) of 17.0%. This shows that work performance (OP) is needed to determine how much and hard the effort (including mental and physical) of the therapist in completing therapeutic work (EF) with the available time (TD). Whereas the variables of Mental Demands (MD), Physical Demands (PD), and Effort (EF) are classified at a moderate level, with a value of 13.0% each; 10.0% and 12.0%. This shows that the therapist in doing his job requires a moderate mental burden. Efforts to reduce the risk of mental work on the therapist can be done by dividing the work and rotating so that the therapist does not do the same work continuously.

Keywords: ABA Method, Occupational Risk, Therapist, Autistic Children, Therapeutic Community.

INTRODUCTION

The development of autistic people currently tends to experience a very significant increasing trend. Being a serious problem and not yet found a meaningful way to prevent new cases and the discovery of treatment and treatment that is able to treat autistic patients quickly and accurately. So that treatment and treatment requires a long time with quite expensive costs and no guarantee of recovery (Rogers & Vismara, 2008).

Autism is a persuasive developmental disorder in children characterized by disturbances and delays in the fields of cognitive, language, communication, and social interaction. Autistic children seem to have their own world It takes good persuasive communication techniques in dealing with Autism (Yauminnisa, 2019). Autism is a developmental disorder that can affect several aspects, how children see the world and how to learn through their experiences (Woodgate et al., 2008). Children who have autistic disorders will have difficulty in making social contact, tend to be alone and avoid contact with others, regard people around them as

objects, and not as subjects who can make an interaction and communication. The role of parents has an important role in the development of children with Autism (Safitri et al., 2019). Data published by the Autism and Developmental Disabilities Monitoring (ADDM) collection results from the ADDM network by combining from many sources shows the prevalence of autism spectrum sufferers has been identified from 2010 to 2014. As an illustration in 2010, 1.3% of children aged 4 years or 1 out of 75 out of five communities have ASD. In 2012 it increased to 1.5% in 4-year-old children (1 in 66) in 5 communities. In 2014 the prevalence of autistic people became increasingly alarming to 1.7% in children aged 4 years (1 in 59) in communities throughout the United States.

The increasing trend of cases of ASD (Autism Spectrum Disorder) shows symptoms that are increasing every year. The Center for Disease Control and Prevention (CDD) in April 2018 released survey data from 11 states in the United States from 2010 to 2014. The Autism and Developmental Disabilities Monitoring (ADDM) in the Centers for Disease Control and Prevention. (2012) reviewed this network to survey all children aged 4-8 years in 11 states in the United States. The results every year experience an increasing trend. From the survey results, the CDC predicts that in 2018 the prevalence of ASD 1 is compared to 59 children.

In Indonesia, the increase in Autism is followed by the rapid development of therapy centers and the handling of autistic children both run by the government and private institutions. Therapists who work as autistic child therapists, in therapist centers managed by the private sector are informal workgroups. Which has several characteristics such as high school education and certain professional education.

One of the therapist methods most widely used today is therapy using the ABA (Applied Behavior Analysis) method. In addition to being proven effective in dealing with autistic children, this method is the easiest and most flexible method to be carried out by anyone and anywhere. This ABA therapy will give maximum results if it is run at least 40 hours per week. That's why this time a community helps parents who have autistic children to get intensive therapists.

The Makassar ABA therapy community, as a non-governmental organization, facilitates the needs of parents in preparing therapists for children who need ABA therapy. Occupation as a therapist is not an easy job, many risks must be faced by a therapist in carrying out his work. Starting from the behavior of autistic children who are very difficult to control and the treatment of parents or families of clients who are less comfortable for work as a therapist with a home visit system.

Based on data available at the ABA Makassar Therapeutic Community, an overview of the risks faced by therapists is obtained. Since its establishment at the end of 2015, the institute has carried out its function. The first therapist stopped being a therapist because parents stopped their children's therapist program in 2016. In 2017, a therapist had received treatment for a sharp object attack on the stomach of the therapist and a therapist who had to get treatment intensive due to an impact on the therapist's head area. While the case of bites, scratches, punches, kicks, snaps, and head collisions almost all experienced by the therapist.

Until 2019 from information obtained from the ABA Makassar Therapy Coordinator, 2 therapists left the contract before 1 year, 18 therapists refused to continue their contract in the second year after the first contract expired, out of the 20 therapists for reasons of discomfort with the treatment and attitude of parents for therapists, including workloads, heavy targets,

disrespect for the therapist profession, cannot be invited to work together. The rest of the therapists choose to continue or stop with the reason to find a therapist's work location in the area of origin, get married, and give birth.

The problem is that usually optimal ABA method therapy is usually only seen if the child is treated for a minimum of 1.5 years or 2 years without a break with at least 8 hours of study time per day. This is a problem faced by parents who have autistic children however many therapists do not continue contracts with children they have handled before 2 years have passed. When the therapist refuses to continue the contract in the second year, it is the impact of various factors that occur during the therapy process in the first year.

METHODS

The approach used in this research is the approach of combined research methods (mixed methods). This type of research is descriptive (descriptive research) which aims to make a picture or describe aspects in the measurement of the occupational risk of therapists with the National Aeronautics and Space Administration Task Load Index (NASA-TLX) and work sampling methods. The total respondents were 60 therapists. Data collection techniques with questionnaires and in-depth interviews. The method used to measure work risk is NASA-TLX. NASA-TLX method is a method of measuring work risk that divides into 6 dimensions of aspects of work elements.

This research was conducted at the Makassar ABA Therapeutic Community and was carried out from March to April 2020. Secondary data was obtained from information, documents, and data from the Makassar ABA Therapeutic Community by means of document review. In this study, primary data collection was carried out through observation and in-depth interviews. The data processing model used is twofold, namely descriptive data and interactive data models. In the interactive model of data processing techniques, there are three stages, namely Data Reduction, Data Presentation, and Drawing Conclusions.

RESULTS AND DISCUSSION

Determine work risks for autistic child therapists by adding up all the values for each indicator, so that total weighting is obtained for all indicators of Mental Needs, Physical Needs, Time Needs, Work Performance, Physical and Mental Effort, and Frustration Level. Then the value is divided by 15 and the magnitude of the average value of WWL.

Table 1. Final Recap of Overall Indicators

Indicator	Total Weighting		
Mental Needs	8.140	135.67	13%
Physical Needs	6.685	111.42	10%
Time Needs	11.105	185.08	17%
Work Performance	16.300	271.67	25%
Physical and Mental	14.325	238.75	22%
Business			
Frustration rate	7.910	131.83	12%

Based on the recapitulation in table 1. it can be seen that the autistic child therapist in the ABA Makassar Therapist Community is more inclined to work performance indicators that have high work risk values.

Following is an explanation of the analysis of data processing that has been done. Analysis of the current condition of the ABA Makassar community therapist and the results of the analysis of NASA-TLX data that has been filled by 60 therapists who are members of the ABA Makassar therapy community is also included so that the continuity between problems and existing conditions can be clearly illustrated.

Condition of Therapists by the ABA Method

Based on the in-depth interview process that has been carried out which aims to find out the use of the ABA method, work environment, workload, the influence of autistic children, work stress, and the influence of the therapist's motivation in applying the ABA method for autistic children.

Based on the presentation of the description of the results of previous interviews to a number of informants relating to the use of the ABA method, it is known that the use of the ABA method has been going on for 3-4 years and all therapists have attended training in handling autistic children and produce results for the healing of autistic children. This is in line with Kingley's opinion (Handojo, 2009) which states that the ABA method is representative for dealing with children with special needs because it has measurable, directed, and systematic principles, so as to improve fine and gross motor skills, communication, and social interaction.

In the implementation of therapy for children with autism using the ABA method, the therapist revealed the main reasons for remaining an autistic child therapist, with consideration of: (1) wanting to know the autistic world more closely; (2) lack of knowledge and understanding of the world of therapists, both educating and applying the ABA method; (3) discovering new knowledge in channeling creativity, honing analytical skills to a problem faced and not just world-oriented but also investing in the afterlife. Although it is recognized that being an autistic child therapist is very risky, both psychologically and emotionally and physically, it is still practiced. In the therapist's view, risk can be minimized by learning to understand child handling techniques both in teaching and in tantrum conditions.

Adaptation to the work environment is part of the work demands of a therapist. Some adapted by giving enthusiasm and techniques for handling children in each training in order to continue to have enthusiasm, motivation, and comfort. There are also those who adapt to local conditions, whether related to religious or customary or cultural issues.

Regarding the learning environment, children with autism have different habits from other normal children. Therefore, in using the ABA method a special room is needed that can train children with autism to be more sensitive, independent, and can socialize well. The standard room for autistic children is equipped with several tools, for example, a table and 2 chairs and a room that only has 3 people. However, attention must be given to the spacious area of the child, therapist, and assistant therapist. In addition, CCTV recorders or monitors are also needed to ensure ongoing activities between therapists and children, so parents can monitor learning directly.

In the process of adaptation to the work environment and the role of the therapist in using the ABA method, there are things that are often done. The interview results revealed that the

adaptation process carried out varied according to the conditions encountered. There are therapists who make it through a persuasive approach by maintaining mutual trust and honesty with the child's parents and building hospitality through home visits. In addition, educating parents by providing understanding about autistic children, the goals and functions of therapy, so that it is expected to understand the duties and responsibilities of the therapist well. This is in line with the opinion of Mulyadi & Sutadi (2014) that the role of parents is one aspect of the success of the therapy process, in addition to professionals and therapists. Therefore, the presence of the therapist along with the assistant therapist is a thanksgiving for the child's parents who are very helpful in guiding their children to be better.

Therapists are able to adapt in an environment where they conduct a series of structured behavioral therapies by providing behavioral changes for children with autism to be more directed and effective, so it needs to be studied in-depth regarding what makes them feel comfortable and safe while working as therapists. This is important considering the work of therapists who are at risk and have a psychological and emotional burden.

Based on the results of interviews revealed that the therapist is in a safe condition if there is CCTV in the child's therapy room so that the parents with the therapist feel comfortable in seeing the child's development. Comfort, calm, and security can be created and errors can be minimized. This is important because it is not uncommon for children with autism therapists to get accidents at work such as scratched, pinched, beaten even the risk of broken or broken glasses.

In addition to the therapist and assistant therapist involved in the therapy process, the patient's family may also assist the therapeutic process. His involvement is limited to preparing facilities for the child's needs and helping the therapist with regard to the child's diet or assisting certain programs the therapist needs to be involved in, for example, making teaching materials or presenting materials needed in learning.

Therapists during their duties have been treated as uncomfortable and unpleasant from the family and the environment. This happens because there is no collaboration between parents in the dietary issues of children and therapists who are less aware of the words when therapy takes place. Another thing is triggered by the lack of appreciation and cooperation of parents towards the therapist's hard work in dealing with children who are in a tantrum. For example, parents do not have the initiative to help therapists reduce child tantrums. Precisely what parents do to convey to people around the condition of their children. In addition, it intervenes when the child cries, so the learning session is stopped. This condition affects the therapist and becomes a victim of errors even though CCTV is available in the room.

Occupation as a therapist is hard, easy, and quite enjoyable. Said to be easy when the therapist and parents are in line, both disciplinary problems and program problems. There is a physical burden when a child is tantrums and psychologically when a therapist is racing against a child whose age is entering school age. In using the ABA method, every problem that arises, both the learning program and the child's reaction during therapy, must have its own solution.

The work of the therapist is fun and quite enjoyable. Although there are burdens in them, it is not a barrier for therapists to educate autistic children. For therapists, there is a distinct satisfaction with using the ABA method in which children experience a lot of changes, both in the ability to speak and the independence of children when compared to previous conditions. So that it can be said that the therapist's work is heavy but quite enjoyable when he is able to solve problems that have an impact on children's success so that it becomes extraordinary, initially feels heavy but

does not trace anymore.

The work of the therapist is said to be very heavy if the conditions of the parents are unable to establish cooperation with the therapist in terms of being consistent and disciplined with the child's diet. However, severe conditions can be left to therapists whose conditions are fairly young, so that they still do not understand the tasks and job descriptions even learning to understand each child and appropriate actions taken for children. Moreover, he was unable to find a way out of every problem faced, especially children with mental problems.

These conditions are in line with the results of workload/risk measurements using NASA-TLX. From the 6 existing variables, the highest Own Performance (OP) variable is first followed by the Effort (EF) and Temporal Demand (PD) variable which indicates if the therapist requires work performance (OP) to determine how much and hard the effort including mental and physical therapist in completing therapeutic work (EF) with available time (TD). Whereas the variables of Mental Demands (MD), Physical Demands (PD), and Frustration (FR) are classified at a moderate level. This shows that the therapist in doing his job requires a moderate mental burden.

Related to the application of the ABA method, one of the success factors of therapy is the intensity of therapy in this case the therapist's working hours. In the ABA method, it is recommended that therapy time is 40 hours per week. Given a large amount of basic material in the ABA method of therapy, both language skills and the ability to identify. In the field implementation, working hours for ABA method therapists have followed the standard rules as other workers, starting at 08 am to 05 pm and there is comfort for therapists with 2 days off, Saturday and Sunday. Although sometimes the therapist's work hours are found to be excessive from normative work standards. However, these advantages are used to find solutions to problems that arise with parents.

In implementing therapy using the ABA method, the therapist is assisted by a therapy assistant and consultant. Consultants help provide answers to problems that arise with full openness while the therapist's assistant helps train the therapist by sitting behind the child while learning or helping to hold or calm the child, so his physical presence is very helpful.

The presence of a therapist's assistant is enough to ease the workload of the therapist especially in the midst of the condition of autistic children, who often tantrums. Not excessive if the presence of a therapist's assistant, 70% of the process of therapy for children with autism can run because in the process of learning the ABA method there must be a recording and measurement of values. Of course, what does and helps is the assistant therapist to see the child's response when the therapist gives the material to the child.

While undergoing the profession as a therapist, in addition to being psychically burdened, he is also physically burdened. But there are other burdens that burden the therapist in educating autistic children. For example, there are additional tasks when the child's family or parents are not at home, then the therapist's responsibility to accompany as well as provide food supplements to the child. Even though there was an agreement before that outside working hours, the therapist was not allowed to hold the child's parents' household chores. For some therapists, do not consider it a burden if the child's parents have interests outside the city. The presence of a consultant also helps alleviate the workload of a therapist when facing problems in a learning session, thereby minimizing the existing burden.

The amount of workload that must be held by each therapist should be balanced with wages or salaries that they receive accordingly financially because wages are the most important thing in determining satisfaction in their work, but in reality, what they receive each month is very far from what is expected. according to Robbins (2001), basically, every individual who works expect wages in accordance with what they do.

Based on the informant's explanation of a number of questions raised, the red thread can be drawn that in the implementation of the ABA method, the age of autistic children who are fostered varies, ranging from toddlers to the age of children entering school. The more the age of the child, the more effective therapy is given in the form of independence assistance to children. When the child is in puberty, physical pressure is greater, so that male therapists are needed to understand the child's condition.

Parental understanding and cooperation about diet can minimize the aggressiveness and tantrums of children and treatment that is less comfortable for the therapist. This is important because it is not uncommon for therapists to experience minor conflicts with parents because they do not heed the rules of eating and educating children. However, interpersonal conflict is not too flashy, they can solve it well. High trust, mutual support between coworkers and between therapist and parents. This is a major factor in the health of individuals and communities. The existence of children with autism for parents makes parents more patient and understanding and able to find solutions to problems around autism (Altiere & von Kluge, 2009; Wing, 2013). According to Bashir et al (2014), the family will experience several changes when a child is diagnosed with autism, including stress in care, financial stress, and adjustments in marital life.

Important therapists are given training in handling techniques for children who are often stunned in learning sessions. The therapist's understanding of all the shortcomings that autistic children have does not deny the risks faced by the therapist in carrying out their work. The forms and methods in therapists for autistic children are important in the development of autistic children in their social behavior. (Suteja, 2014).

Family support is one of the stressors for therapists. To get an idea of work support from family and loved ones, some therapists say they get support from family. The form of support in the form of motivation and support when rounded up wants to be a therapist and must be patient in dealing with children with special needs. The family also does not provide limits even freedom to placement in any desired area and even encourages to help others and move for humanity by educating children with autism who are urgent to get therapy.

The pressure is closely related to the demands of the child's parents who want to achieve therapeutic targets in the learning session. This desire must also be supported by parents by disciplining the child's diet. If the problem is related to child handling techniques, it must improve all with all the abilities and knowledge that the therapist has. Work professionalism is still prioritized so that there is satisfaction for the child's parents.

On the other hand, some parents of children are very impressed and grateful for their children's development, which shows a change, even the children's parents receive a good therapist and appreciate their hard work. There are also parents once a month meeting with the therapist to unite perceptions about the obstacles and expectations in order to get solutions to problems that arise during the child's learning period. So that the vision and mission of the parents and therapist are achieved so that what the therapist feels and wants the parent is resolved.

Therapy for autistic children has the goal of reducing behavioral problems, improving children's learning abilities and development in terms of language acquisition, and helping children to be able to socialize in adapting to their social environment. In doing so, he has the motivation to work, not just present to accompany the child alone even though many get uncomfortable treatment, but the therapist has the motivation, hope, and achievement so that all children who are coached can go to regular school. This is in line with the research of Putri and Lukmawati (2015) that all unique events experienced by therapists such as being hit, bitten, clawed, spat on, the hijab pulled off, etc. can make the therapist have a patient person because of educating or guiding children with autism disorders is not easy, it takes a lot of patience, determination, perseverance, and great energy in carrying out therapeutic activities.

There are also those who are motivated to work wholeheartedly by helping autistic children to have the ability to speak, interact socially like with children out there so that parents' complaints can be remedied when facing their children experiencing greater growth. Another motivation is the trust and high expectations of the child's parents for healing their children with perceived development so that there is satisfaction for him. In addition, the motivation of the therapist starts from an awareness that the best human being is a human who has benefits for others, not only world-oriented but more oriented to the hereafter.

Based on the description that has been described, it can be concluded that the therapist in charge of the ABA Makassar Therapeutic Community has relatively high motivation, with internal motivation (intrinsic motivation) greater than outside motivation (extrinsic motivation). This shows that despite having various challenges in carrying out the task of autism therapy, therapists still have high motivation in carrying out the task and trying to achieve the expected results.

Therapist's Work Risk Analysis on the NASA-TLX Questionnaire

Based on the results of the occupational therapist's risk calculation using the NASA-TLX questionnaire, then the average value of the rating and weighting of the six NASA-TLX variables is calculated and presented in table 2.

Table 2. Average Values of Rating Ratings of the NASA-TLX Variables

	MD	PD	TD	OP	EF	FR
Total Score	8.140	6.685	11.105	16.300	14.325	7.910
Mean	135.67	111.42	185.08	271.67	238.75	131.83
Percentage (%)	13%	10%	17%	25%	22%	12%

Based on table 2. three high occupational risk categories were obtained, namely the Own Performance (OP) variable by 25%, Effort (EF) by 22%, and Temporal Demand (PD) by 17%. This shows that work performance (OP) is needed to determine how much and hard the effort (including mental and physical) of the therapist in successfully completing therapeutic work (EF) with the available time (TD). Whereas the variables of Mental Demands (MD), Physical Demands (PD), and Frustration (FR) are classified at a moderate level, with a value of 13% each; 10%, and 12%. This shows that the therapist in doing his job requires a moderate mental burden. Analysis of the NASA-TLX questionnaire can be presented in the following pie chart:

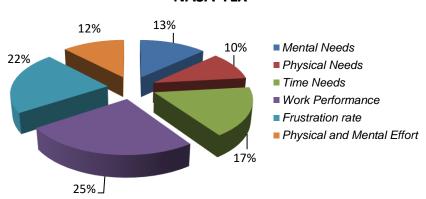


Figure 1. NASA-TLX Final Results Pie Chart
NASA-TLX

Based on figure 1. it is known that the work performance therapist has an average of the highest total product of 25%, where this percentage states that the performance aspect shows how much the level of success achieved in completing the work in accordance with the specified goals. The therapist must be able to meet the demands of the perceived time in completing his work. So if the demands are high and the therapist is unable to complete his work according to working hours, the therapist must be able to meet these demands. This is what makes the aspect of performance is the aspect that most influences mental workload.

Then the indicator with the second-highest result is the indicator of physical and mental effort (EF) of 22%. This percentage states that how much mental and physical activity is needed to achieve the desired performance in completing the work of autistic child therapy. At certain times, some therapists undertake additional activities to help families of children or patients who travel outside the city or have not yet arrived home.

Based on observations through interviews found that work performance is an indicator of high mental burden because on a daily basis there are many therapists who handle autistic children in accordance with the requests/orders of parents so that the therapist must be able to complete the task as well as it will also be compared with the assessment of the community.

CONCLUSION

There are 49 therapists (82%) assessing moderate work risk, 10 therapists (17%) assessing heavy work risk, and 1 therapist (2%) assessing mild work risk. Of the 6 NASA-TLX workload variables, there are three assessments of high occupational risk categories, namely the Own Performance (OP) variable of 25.0%, Effort (EF) of 22.0%, and Temporal Demand (PD) of 17.0%. This shows that work performance (OP) is needed to determine how much and hard the effort (including mental and physical) of the therapist in successfully completing therapeutic work (EF) with the available time (TD). Whereas the variables of Mental Demands (MD), Physical Demands (PD), and Effort (EF) are classified at a moderate level, with a value of 13.0% each; 10.0% and 12.0%. This shows that the therapist in doing his job requires a moderate mental burden.

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