

## **“Isutan Jarat” A Traditional Game to Improve Perception and Autism Concentration in the Barito Riverside**

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**Abstract:** The difficulty of finding media to play in the Barito Riverside Stream, affects the low level of autistic children in the development of perception, attention, and communication because of those aspects. This study aims to determine the effectiveness of traditional games Isutan Jarat to help the development of autistic children. The single subject research method with the design of cross variable multiple baselines are used to reveal the effect of treatment or intervention on the target behavior. The results of data analysis show that the traditional game Isutan Jarat Effective Line is used to improve the perception, attention, and concentration of autism. Based on the findings of this study, it is recommended that the Isutan Jarat game is used as an alternative play media for autistic children in the Barito Riverside Stream.

**Keywords:** Autism, Isutan jarat, Perception, Concentration.

### **INTRODUCTION**

The low attention and perception of autistic children who live in the Baito Riverside are one of them is the lack of playing media in these areas. Older education levels and lifestyles on the river banks will also trigger the development of autistic children.

The term autism comes from the Greek “auto” (alone) or someone who shows symptoms of life in his own world (Wright et al., 2014). Autism is a developmental disorder of brain function that includes the social field and the effective function of verbal (language) and non-verbal communication, imagination, flexibility, the scope of interest, interest, cognition, and attention. Research has shown that individuals with ASD struggle with peer relationships (Vicki et al., 2018). Locke, Ishijima, Kasari, and London (2010) found individuals with ASD experienced an increase in feelings of loneliness and lower quality of friendship compared to colleagues who usually developed. This is also confirmed by the opinion of Bott et al. (2006) autism is a disorder of pervasive development in children characterized by the presence of disturbances and delays in the fields of cognitive, language, behavior, communication and social interaction. The behavior that arises from autistic children is very unique because each child has distinctive characteristics (Kouklari et al., 2018).

In certain cases, the autistic child is very passive (silent) sitting quietly, confused and eyes empty, angry for no reason, paying attention to an object is very excessive. The feelings and emotions of an autistic child are unstable, this can be seen from the behavior of laughing, sending tears or anger for no reason, often

raging uncontrollably (temper tantrums) especially when not getting something they want. Autistic children have disorders in sensory perception including feelings of sensitivity to light, hearing, touch and smell and taste from mild to severe such as biting, licking, kissing toys or any object (Arnett et al., 2018; Schultz, 2005; Webb, Neuhaus & Faja, 2017; Rostron, 2010).

Paying attention to this condition, we need a media game that can influence the development of perception, attention, and concentration. In turn, autistic children not only think visually but also think verbally. Some studies reveal that playing is a world of children so that with the game it can be used as an intervention for autistic children, especially in terms of knowing the environment and developing cognitive, affective and psychomotor abilities. Play is a complex phenomenon that occurs naturally for most children. They move through various stages of play development and able to add complexity, imagination, and creativity to their thought processes and actions when playing (Woodard, & Chung, 2018).

Isutan Jarat is a traditional game that is often played by children in the riverside area which is a game that can stimulate thought, vision and hearing simultaneously. The game of Isutan Jarat is a type of game that requires the function of the sense of sight and hearing and concentration and perception where the location of the hide is hidden. Isutan Jarat is the name of a traditional game that developed in the South Kalimantan area. The name builds from isutan and jarat, this isutan is probably from the word ‘usutan’ which means ‘looking for’. While ‘jarat’ is the term of Banjarese for straps with knotted ends for trapping or binding (like lasso straps in America).

**Table 1. Scores in the baseline phase (A) Perception Ability"**

Perceive Autistic Children Ability				
1st Session	2nd Session	3rd Session	4th Session	Total Score
3	3	2	2	10

So the Isutan Jarat means to look for a rope that is *bajarat* (has a snare). In this game, each player tries to find other players who are hidden sticking sticks/wood/bamboo in the sand.

This game actually guesses where the jarat in the sand is. The location of this game is usually on the banks of the river at low tide or in the yard that has a lot of sand. The jokes game has nothing to do with certain types of ceremonies or events. Free play time can be played at any time if in the village the children will play it in the afternoon before taking a bath in the river.

The number of incumbent players has a minimum of two people and as many as four people. Two people are needed because there will be a tide position (which hides the line) and an up position (who is looking for a hole). Four people were felt enough because it would be too crowded which could cause confusion. The play equipment is based on the original game, which is a rope from banana tree fibers and wooden blades from bamboo or other types of wood.

The dried banana tree is usually seen by its fiber, this part is taken by the children to make ropes. While the blades are made of wood or bamboo, which is slightly pointed with no more than the arms.

**METHOD**

This study uses single subject research (SSR) method which is an experimental method that is carried out using a single subject. The purpose of the study was to determine the effect of an intervention on the behavior you wish to change. This research does not require to be generalizable, because loyal people behave differently from others. The subject of the study was a child who was suspected of experiencing symptoms of autism in the Bantara area of the Barito river. The design used is a cross variable multiple baseline type. According to Wang & Tsao (2015) the design of cross variable multiple baselines is a research design to change behavior with an intervention that is expected to have an effect on two target behaviors (target behavior) or more. The target behavior in this study is the ability of perception, attention, and concentration. This design basically consists of two stages of conditions, namely:

Baseline A (initial observation), which is taking subject data before being given treatment or treatment. The subject is observed and the data is taken repeatedly so that the subject's initial ability will be seen. (a) bbbb; (b) nnnnnn; (c) nnnnnn.

Intervention (B) Giving treatment (treatment) that is a condition when the intervention has been given and the target behavior is measured under certain conditions (Wang & Tsao, 2015). (a) Subjects are entered into the room like at the baseline; (b) Condition the subject to take part in the game Isutan Jarat. This treatment is carried out for 15 minutes in the form of stretching games to stimulate the ability of perception, attention, and concentration. In the game Isutan Jarat played by 4 children, these four children split into their respective sand areas to hide their paths, the technique of hiding this line determines the shrewdness of each child in playing stretch, there is a hiding lane with a winding end so the opponent is difficult to guess the actual location of the line. The line that you want to hide is buried slowly with rather thick sand so it's not visible. The end of the rope that has no jars is left outside to pull it later.

The step of looking for a lane: first determine who the sand heap will be searched first, after which each child sticks his blade into a pile of sand to guess where it is. If all the children who turn to look for have inserted the blade then that has an interesting distance so that it will be found out who managed to guess the landing. The player who succeeds in the blade will get caught in the gap. And so on, each player takes turns guessing the opponent's opponent. c. After the treatment is complete, the inventor measures the subject's perception ability; (d) Measurement of attention ability, by giving instructions to the subject consisting of five instructions: called names, sitting, standing, see this, here. In this attention measurement, the subject is seen and observed whether or not when given instructions from inventor there is eye contact and also how long subyke will make eye contact. Then intervals of 5 minutes were carried out again by the treatment process by playing a piece of jute to take data on concentration ability.

**FINDINGS AND DISCUSSION**

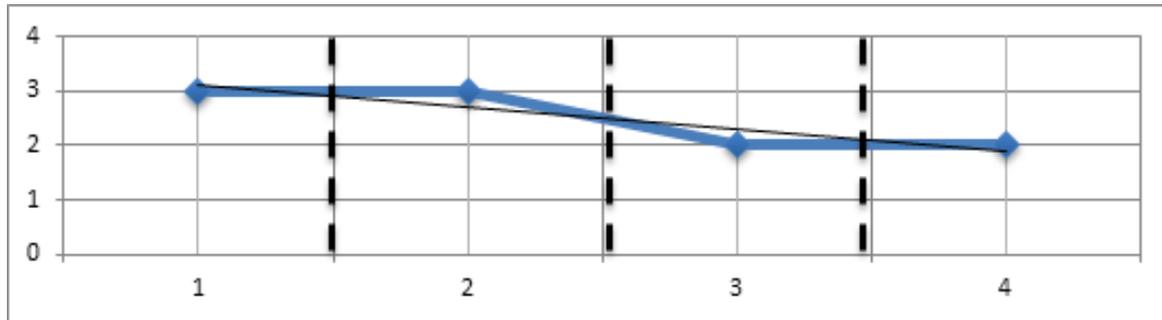
**Findings**

The results of the study describe the level of perception, attention and concentration ability of the subject both before and after the intervention using the traditional game Isutan Jarat. The research data are listed in the form of tables 1 and figure 1.

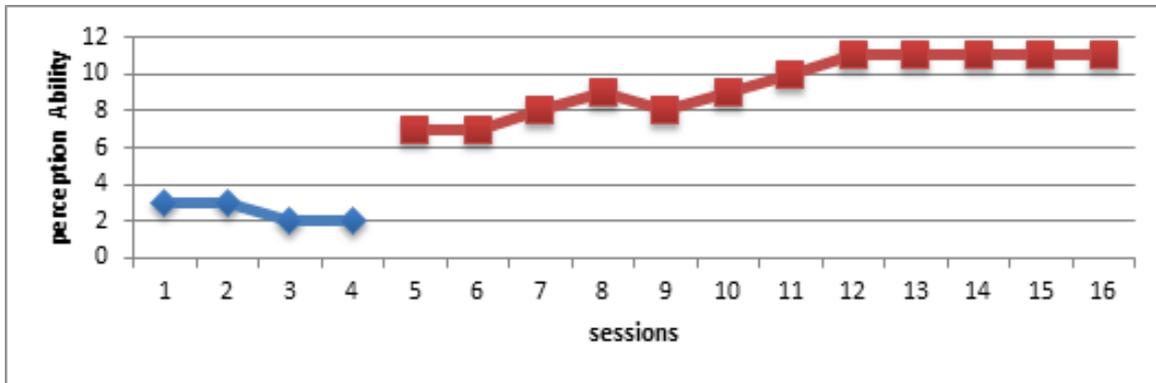
**Table 2. Intervention data (B) perception ability**

Perception Ability of Autistic Children												
S.5	S.6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	Jml
7	7	8	9	8	9	10	11	11	11	11	11	105

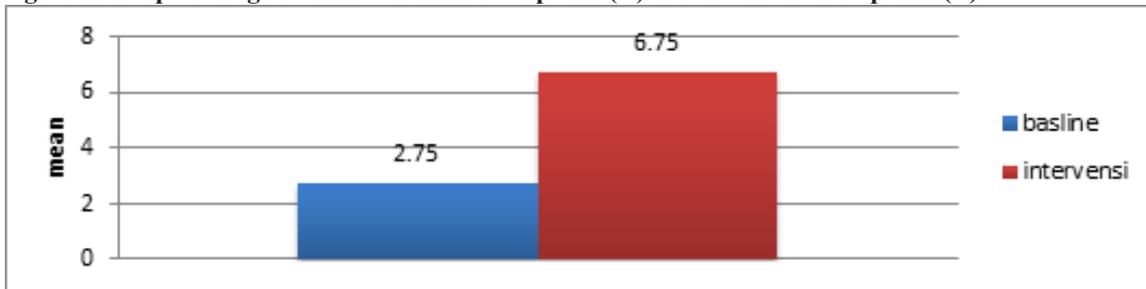
**Figure 1. Graph trend of baseline phase (A) perception ability**



**Figure 2: Graph trend of the baseline phase (A) to the intervention phase (B) perception ability**



**Figure 3. Graph change of data in the baseline phase (A) to the intervention phase (B)**



Based on table 1, the score obtained by the subject in the first session 3, the second 3 session and fourth sessions are 2. Thus the trend toward the graph in this baseline phase is decreasing. This can be seen in figure 2. The level of stability of changes in data obtained results by 75%, it shows that the subject data is in a stable condition. Then the intervention phase is done.

Based on table 2 the results of the score in the intervention phase indicate that the fifth and sixth sessions of the score are obtained 7. The seventh session of the eighth session rises to 9. Then in session nine, it drops again to 8. Sessions ten, eleven and twelve

increase to 9.10 and 11 While the eleventh session score until the sixteenth session score was stable, in 11. The trend toward data in the baseline phase tended to decrease while the intervention phase tended to rise. As shown in the figure 2.

Figure 2 shows that the baseline phase (A) of the subject decreased in the third, and the fourth session, but the score was stable 2. Although the baseline was conducted in only four sessions the stability of the data was apparent, this meant that intervention could continue.

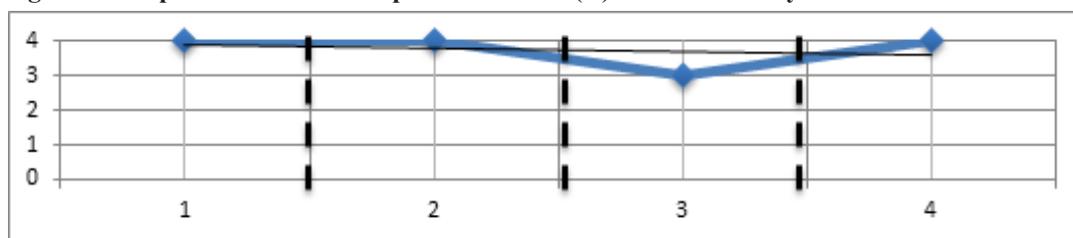
**Table 3. Scores in baseline phase (A) attention ability**

Attention Ability of Autistic Children				
1st Session	2nd Session	3rd Session	4th Session	Total Score
4	4	3	4	15

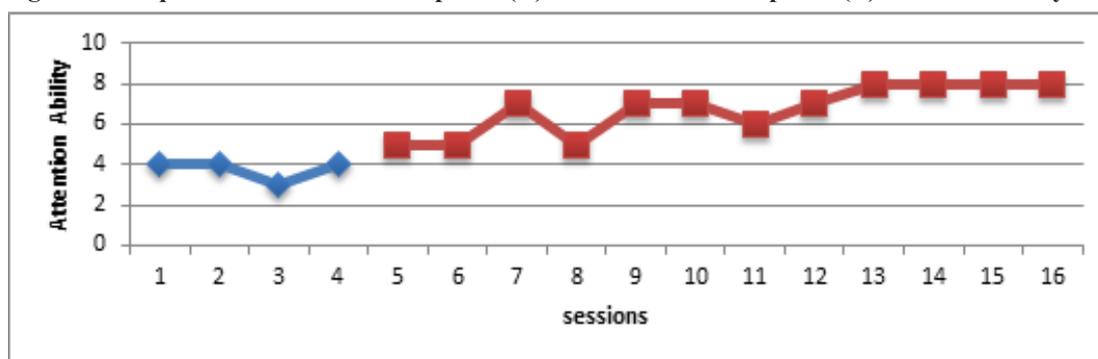
**Table 4. Intervention data (B) attention ability**

Attention Ability of Autistic Children												
S.5	S.6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	Jml
5	5	7	5	7	7	6	7	8	8	8	8	81

**Figure 4. Graph trend of baseline phase direction (A) attention ability**



**Figure 5. Graph trend of the baseline phase (A) to the intervention phase (B) attention ability**



In the Intervention phase (B) which was conducted in 12 sessions, there was a significant increase. This can be seen from the change in data in the baseline (A) phase condition is -0 and in the intervention phase the data changes by +3, while the change in data between the conditions obtained by the subject is +6 or it is said that the data changes are improving.

Based on figure 3, it appears that there is a change in perceptual abilities after being given an intervention using the game Isutan Jarat. In the baseline phase (A) the ability of the subject's average perception is 2.75. While after intervention the perception ability increased by 6.75. This shows that the game Isutan Jarat can improve the perception ability of autistic children.

Based on table 3 scores obtained by the subject in the first session 4, the second 4 and the second session 3 and fourth equal to 4. Thus the trend toward the graph in this baseline phase is decreased. This can be seen in figure 4. The level of stability of changes in the data obtained results of 80% it shows that the data subject is in a stable condition. Then the intervention phase can be done.

Based on table 4 the results of the score in the intervention phase indicate that the fifth and sixth sessions of the score are obtained 5. The seventh session of the eighth session drops to 5. Then in session nine and ten go up again to 7. Session eleven and twelve scores 6 and 7. More stable in a score of 8. The trend in the direction of the data in the baseline phase is slightly decreased while the intervention phase tends to rise.

In figure 5 shows that the baseline phase (A) of the subject decreased in the third session, but the score was stable 4. Although the baseline was conducted in only four sessions the stability of the data was apparent, this means that intervention could continue. In the Intervention phase (B) which was conducted in 12 sessions, there was an increase in scores. This can be seen from the change in data in the baseline (A) phase condition is -0 and in the intervention phase the data changes by +3, while the change in data between the conditions obtained by the subject is +6 or it is said that the data changes are improving.

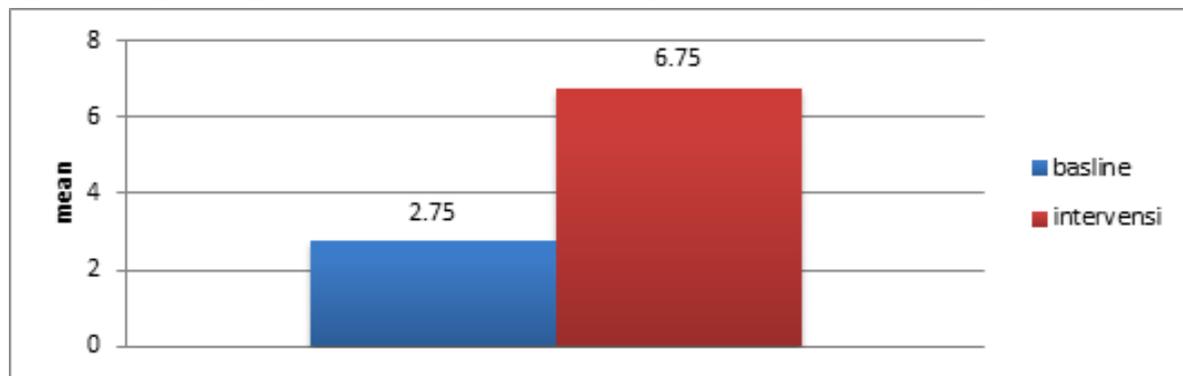
**Table 5. Score in the baseline phase (A) “Concentration Ability”**

Concentration Ability of Autistic Children				
1st Session	2nd Session	3rd Session	4th Session	Total Score
3	2	2	2	9

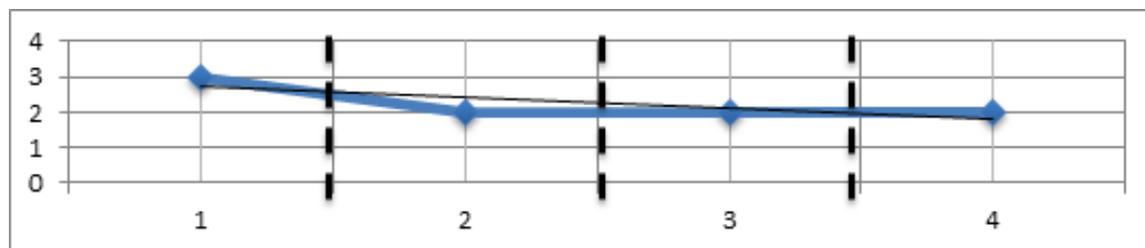
**Table 6. Intervention data (B) “Concentration Ability”**

Concentration Ability of Autistic Children												
S.5	S.6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	Jml
6	6	7	7	8	9	12	13	13	13	13	13	81

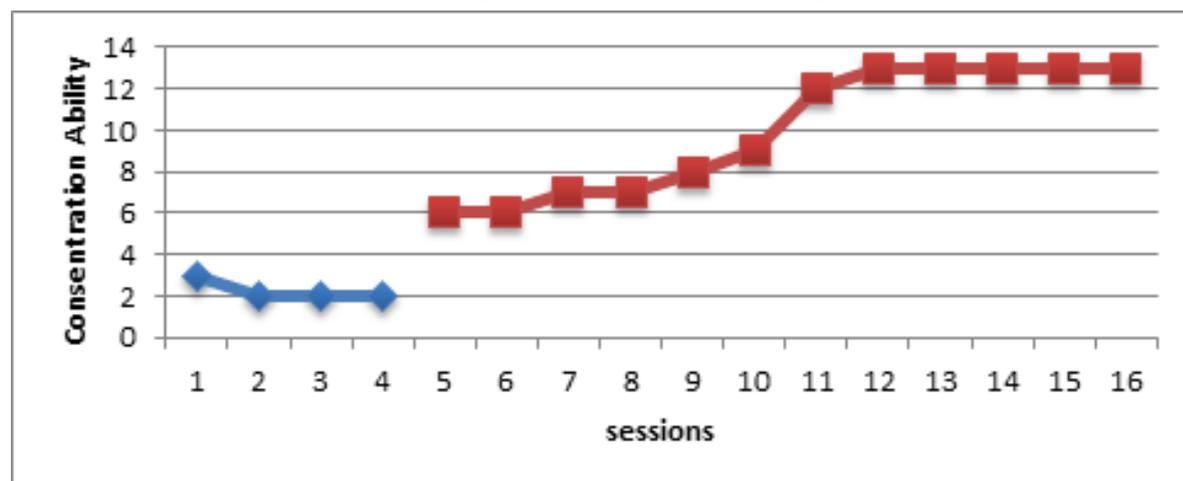
**Figure 6. Graph change of attention data in the baseline phase (A) to the intervention phase (B)**



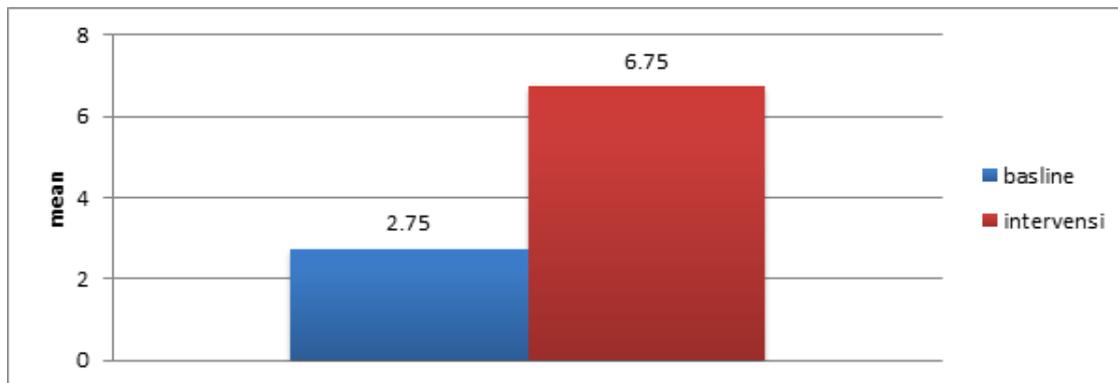
**Figure 7. Graph Trend of baseline phase direction (A) concentration ability**



**Figure 8. Graph Tendency of the baseline phase (A) to the intervention phase (B) concentrate ability**



**Figure 9. Graph Change in concentration data in the baseline phase (A) to the intervention phase (B)**



Based on figure 6, it appears that there is a change in perceptual abilities after being given an intervention using the game Isutan Jarat. In the baseline phase (A) the subject's average attention ability is 2.75. While after intervention the perception ability increased by 6.75. This shows that the game Isutan Jarat can increase the attention ability of children with autism.

Based on table 5 scores obtained by the subject in the first session 3, and the remaining sessions 2. Thus the trend towards the graph in this baseline phase is decreasing. This can be seen in figure 7. The level of stability of changes in the data obtained results of 80% it shows that the data subject is in a stable condition. Then the intervention phase can be done.

Based on table 6, the results of the scores in the intervention phase show that the fifth and sixth sessions of the score are obtained. The next session continued to increase until the score was stable 13. The trend of data directly in the baseline phase decreased slightly while the intervention phase tended to continue to rise. Listed in the following figure 8.

In figure 8 shows that the baseline phase (A) of the subject decreased in the second session but the score was stable 2. Although the baseline was only conducted in four sessions the stability of the data was already apparent, this meant that intervention could continue. In the Intervention phase (B) which was conducted in 12 sessions, there was an increase in scores. This can be seen from the change in data in the baseline (A) phase condition is -0 and in the intervention phase the data changes by +3, while the change in data between the conditions obtained by the subject is +6 or it is said that the data changes are improving.

Based on figure 9, it appears that there is a change in perceptual abilities after being given an intervention using the isutan game. In the baseline phase (A) the subject's average attention ability is 2.75. While after intervention the ability to concentrate increased by 6.75. This shows that the game Isutan Jarat can increase the concentration ability of autistic children.

## Discussion

The concentration power of autistic children can be developed through play (Woodard, & Chung, 2018; Irwin et al., 2014). There are games that are repeated from the simplest to the ones that are difficult to stimulate children's perceptions (Schultz, 2005; Falkmer et al., 2016; Kennedy & Adolphs, 2012). According to him, autistic children are very easily divided (distributed) with a variety of media or colors that are striking in a room, eye contact that has not been well directed, tantrums, tend to parrot with what is heard, and easily hysterical when hearing a loud voice.

The game of autistic children will focus more on concentration (Rofi'ah, 2016). Because playing is an activity that makes children feel happy and not forced to think. Game therapy influence the concentration ability of autistic children during the learning process and interact with the teacher. Autism has cognitive, language, social interaction, and behavior barriers. Therefore it is necessary to practice through play that is encouraging. Concentration is the main key to one's success. If someone can focus his mind to concentrate, then all the potential he has will be explored to the fullest. Beside that, play activities can increase excitement and relate to children's emotions.

## CONCLUSION

The traditional game Isutan Effective Line is used to improve the perception, attention, and concentration of autism. Based on the findings of this study, it is recommended that the Snare Isutan game be used as an alternative medium for autistic children in the Barito River Basin.

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