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Visual Learner Method (Media Pecs) Phase I – Iii to the Improvement of Cognitive Abilitiesin Children with Autism in Aqil Chaleb (Aqca) Center Surabaya

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Abstract
Autism children experiencing to the ability of understanding, communication, social interaction, patterns of play and sensory disorders, behavioral and emotional disorders including the ability knowledge / cognitive. The research proves visual learner method (media PECS) phase I - III to the improvement of cognitive abilities in children with autism. Experiment design using the design of posttest control group design, samples 18 of autistic children aged 6 -12 years in Aqil Chaleb Center Surabaya, Simple Random Sampling intruments using Standart Operational Procedur and observational, data analysis descriptive and test of Wilcoxon Signed Rank Test. Test of Wilcoxon Signed Rank Test p = 0.000 < α = 0.05, which means that there is influence of visual learner method (media PECS) phase I - III to the improvement of cognitive abilities in children with autism. Media PECS is easy to understand and reduce stress levels as a result of learning in children with autism thus reducing aggressive behavior and improve understanding / knowledge.
Therefore, the ongoing optimization of the role of society in Pecs method is mainly engaged in the field of services to children with autism so that cognitive abilities in children with autism is optimal.
Keywords: *Visual learner method (media PECS) phase I – III, cognitive abilities*
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1.0 INTRODUCTION

Children with autism experienced the abilities of understanding, communication, social interaction, playing patterns and sensory disorders, behavior and emotional disorders (Theo Peeters, 2009). Hyperactive often hurts himself and knowledge understanding disorder mainly in concentration. Obstacles and disturbances of every child with autism was not similar so that children with autism had different behavior (Ane Ahira, 2004). The improvement of understanding knowledge/cognitive abilities, mainly children experiencing severe barriers of concentration, can be conducted by increasing the concentration with visual learner method (media PECS), (Lim,2012). Research Question are visual learner method (media PECS) phase I - III to the improvement of cognitive abilities in children with autism in Aqil Chalep (Aqca) Center Surabaya. The research purpose visual learner method (media PECS) phase I - III to the improvement of cognitive abilities in children with autism in Aqil Chalep (Aqca) Center Surabaya.

2.0 RESEARCH METHOD

Experimental research design used posttest control group design. research one step starting with a survey of the cognitive abilities in chlidren with autism at visit children with autism teacher, then explore the variable visual learner method (media PECS) phase I – III, where this variable well be used as indicator Visual Laerner Methode. The location of this research in Aqil Chalep (AQCA) Center Surabaya. Total sample of 18 children with autism Aqil Chalep (Aqca) Center Surabaya . The population sample of the research was taken by Simple Random sampling. Data analysis used a statistical test of Wilcoxon Signed Rank Test.

3.0 RESULTS AND ANALYSIS

The result improvement of cognitive abilities in children with autism. Data respondent characteristics such of ethnic, gender, cognitive abilities in chlidren with autism and cognitive abilities in children with autism also influence of visual learner method (media PECS) phase I – III.

3.1 Characteristics of Respondent

Table 1 explans that among 18 children with autism the majority of male and ethnic Chines.

Table 1. Distibution of the characteristics of the respondent (gender and region) in Aqil Chalep (AQCA) Center Surabaya on September 2015.

Variable	N	%
Gender		
Male	12	66
Female	6	34
Region		
Jawa	7	39
Chines	11	61
Total	18	100

3.2 Cognitive abilities in chlidren with autism with no experiencing of a visual learner method (Media PECS)

Table 2 showed that among 9 chlidren autism with no experiencing a visual learner method (Media PECS) phase I – III mostly had a cognitive ability less than 55,6 %.

Table 2 The cognitive abilities of children autism with no experiencing of a visual learner method (Media PECS) phase I – III in Aqil Chalep (AQCA) Center Surabaya on September 2015.

Variable	n	%
Cognitive abilities		
High	2	22,2
Medium	2	22,2
Low	5	55,6
Total	9	100

3.3 Cognitive abilities in children with autism also influence of visual learner method (media PECS) phase I – III.

Table 3 showed that among 9 chlidren with autism with experiencing a visual learner method (Media PECS) phase I – III had a good score of a cognitive ability that is 55,6%. A statistical test of Wilcoxon Signed Rank Test with p = 0,000 < α = 0,05.

Table 3 The cognitive abilities of children autism with experiencing of a visual learner method (Media PECS) phase I – III in Aqil Chalep (AQCA) Center Surabaya on September 2015.

Variable	n	%
Cognitive abilities		
High	5	55,6
Medium	4	44,4
Low	-	-
Total	9	100
Wilcoxon Signed Rank Test with p = 0,000 < α = 0,05.		

3.4. Cognitive abilities of children autism with experiencing of a visual learner method (Media PECS) phase I – III

A statistical test result of Wilcoxon Signed Rank Test is = 0,000< α = 0,05. It means that it is an influence of conducting visual learner method (media PECS) phase I – III to the improvement of cognitive abilities. It is in accordance with the research hypothesis that is H1; it is an influence of conducting visual learner method (media PECS) phase I – III to the improvement of cognitive abilities. For children with autism, it appeared a chaos of sending impulses in the brain which had caused the decreasing of memory, thinking, language learning and attention process (Theo, 2009). Aunique cognitive ability of children with autism included the abilities of planning, starting, processing

and defending the behavior in the purpose of achieving a goal, the ability of understanding other people's mind and the understanding concentration could be improved by conducting an appropriate care.

One of the appropriate cares to stimulate the cognitive abilities of children with autism wasthe application of an educational approach that is visual learner method (media PECS) phase I – III. A clear and understandable visual learner method (media PECS) phase I – III made children with autism more independent and could receive scientifically, so that it decreased the stress level of learning in children with autism. The stress reduction caused the decreasing of cortisol hormone and the increasing of dopamine and serotonin secretion (Christie, 2009). Serotonin enhancement could hamper an aggressive behavior and, with dopamine facilitated the motor movement which is more focused and goal. The ability of understanding other people's mind and feeling. The reduction of aggressive behavior in children with autism could improve the understanding abilities of other people's emotion and perspective, so that children with autism were more sensitive and understood various social interactions. Therefore, children with autism had given an appropriate respond to the certain emotional situation.

A dopamine enhancement had improved a learning process and memory by managing motivation, starting a complex, aimed and directed activity and the executive functional task that is the ability enhancement of planning, starting, processing and defending the behavior in order to reach the goal and focused to a certain detail. The dopamine enhancement caused the concentration/understandingenhancement by integrating various detailed information to a meaningful unity. The understanding enhancement eased children with autism to follow the steps of learning. The application of method PECS phase I – III was gradually in accordance with the responses steps of thinking. It included Pre-Structural that was children got an uncorrelated little information,to ease children with autism understanding the uni-structural step. It was a simple and clear relationship between one to other concept. However, the core of concept wasn't widely understood.

A good understanding ability of pre-structural and uni-structural phases eased children with autism to understand a multi-structural phase that wasto understand many components, but it was separated to each other. Therefore it had not created a comprehensive understanding. The relational phase was to connect a fact and a theory, an action and a goal. An extended abstract wasn't only a connection between given concepts, but also the concepts beyond them (Atherton, 2005). To maintain and even improve optimally the cognitive abilities of children with autism, an educational/health institution should give knowledge and optimize comprehensively an appropriate stimulation of conducting visual learner method (PECS method).

4.0 CONCLUSION

The cognitive abilities of children with autism that had not been conductedby visual learner method (media PECS) is mostly deficient and the cognitive abilities of children with autism that had been conducted by visual learner method (media PECS) is good.

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