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Resilience of Digital Learning for Children in Early Childhood with Autism Spectrum in Manado

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Abstract— Children in Early Childhood (AUD) with Autistic Spectrum have a condition of developmental disorder of brain function (brain nerve cells) that can affect almost all aspects of individual development. The symptoms begin to appear from early childhood. Children in Early Childhood with Autistic Spectrum is surely facing physical, psychological, and social challenges to survive in family and school environments. This fact happened in several schools that have children in Early Childhood with Autistic Spectrum in Manado City. At the initial observations, the researchers interviewed some teachers who deal with children in Early Childhood with Autistic Spectrum who said that these children loved learning using gadgets, they were easier to understand the learning material using digital media than learning with non-digital media. For this reason, researchers were interested in conducting research on how the resilience of digital learning is on children in Early Childhood with Autism Spectrum in Manado city.

This study used the theory of resilience and a qualitative approach with methods of observation, interviews, and documentation studies. The result of this study indicated that the resilience of children in early childhood with autism spectrum in using digital devices can be directly used by teachers and parents to develop their interests and talents with loving parenting style rather than compassionate. Teachers and parents must understand that children in Early Childhood with the autism spectrum also have sense of empathy, even though it is difficult for them to express it in the usual way because of the limitations both verbally and non-verbally. Children in Early Childhood with the autism spectrum also do not like changes, so it requires patience in educating them especially in directing those who have interest and resistance to digital learning devices.

Keywords— *resilience, digital learning, children in early childhood, autism spectrum*

I. INTRODUCTION

Autism spectrum disorder is a term that is related to developmental disorders. Conditions included in this spectrum are autism, Asperger syndrome, Heller syndrome, and pervasive developmental disorder (PPD-NOS) [1]. Autism spectrum disorder is a developmental disorder that can be started at early childhood [2]. In general, the symptoms can be detected at the early age of child

development, that is before reaching the age three. "Spectrum" of autism refers to various symptoms and different severity levels that is low and high [3].

Every child who has autism spectrum disorder has different symptoms between one child and another child. Some children who have lower than normal intelligence levels find it difficult to learn. While some other children also have high intelligence and are able to learn quickly, but experience difficulties in communicating and applying what they know in everyday life and adjusting to their surroundings [4].

Based on the research observations, it was shown that some students in early childhood who had autistic disorders were more interested in learning using laptops and gadgets and other digital devices [5]. They easily understand the materials used by digital devices compared to conventional systems. Some teachers and parents have difficulty dealing with students focus on this case, and let them use the digital device in the learning process [6]. The reason is, when students spend a lot of time using digital devices, they become more individualistic, it is difficult to socialize with other children, but makes them less independent. Researchers were interested in conducting research on the resilience of using digital devices for children in early childhood with Autism spectrum in the Manado city. This study intended to describe in depth the resilience of using digital learning devices for early childhood with autism spectrum in Manado.

Researchers were interested to take a closer look at how children with autism spectrum, especially in early childhood (age 0-6) have resilience in terms of social and adaptation to the society and what learning processes is preferred or that can be well understood by children with autism spectrum. Resilience of the ability to adapt and remain unwavering in difficult situations. Resilience is built from seven different abilities and none of the individuals as a whole has that ability well [7].

II. RESEARCH METHOD

This study used qualitative approach with the techniques of data collection in the form of observations,

interviews, and documentation studies. The collected data was analyzed to be concluded. This research was conducted in Januari – Juni 2019 at SLB Permata Hati, AGCA Center and Hizkia Inclusive Kindergarden in Manado, North Sulawesi

III. RESULT AND DISCUSSION

A. *Autistic Children Are Loved Not pitied*

The autistic children are aware that they are also loved and cared for by parents, teachers, and people around them. It often makes them behave as they pleased, including forcing them to comply with their wishes regarding the use of digital media (tablet computers, cellular phones, laptops, etc.) which basically have both positive impact and negative impact.

As the children in early childhood with autism spectrum, sometimes parents feel sorry and do not have the heart to not obey their children's wishes. Parents will feel very guilty and feel cruel when they find out what the children wanted cannot be given, as found in AGCA CENTER Manado, Jl Kemiri Lingk II 11, Tikala Baru, Wenang Manado (95126) which is a Special School for autistic children. Although these autistic children are born with certain privileges but they must remain educated as the children in early childhood in general, The firmness of parents becomes determining factor in the success of children with autism spectrum to be able to have resilience in controlling the urge to act as their wishes. Resilience theory of impulse control for children in early childhood with autism spectrum can be realized when parents understand the right way to love children.

Cooperation between parents and teachers is needed, as explained by a teacher at SLB PERMATA HATI Manado, JL. Babe-Palar No. 25 Wanea (95117). Children in Early childhood with autism spectrum in the Era 4.0 are indeed children who born at digital speed. However, the good and bad effects of digitization depend on the understanding and treatment of parents and teachers in nurturing them. A teacher at HIZKIA Inclusive Kindergarten in Manado explained that the autistic children there, are regulated and communicated with the teacher so that children can continue to have the same teaching and nurturing patterns as the school had applied. It is done so that learning, habituation and treatment can be carried out continuously because educating children in early childhood with autism spectrum is not only the responsibility of teachers but also a part of parents efforts to help children.

B. *Between the ABA Method and Digital Learning*

Each learning method is designed with purpose that through it the child is able to capture what teacher intended to learn and it will help teacher easily finding a good method to apply to children, especially children in early childhood with autism spectrum. The ABA method is a behavioral approach whose emphasis is on obedience, children skills in adopting behavior and also eye contact [8]. A teacher at PERMATA HATI SLB in Manado, JL. Babe-Palar No. 25 Wanea (95117) explained that there were children in early childhood with autism spectrum having interest in tv remote and digital devices (gadgets).

Positive aspects Increase in resilience theory can combine the use of digital technology (gadgets) to train children focus, eye contact and children behavior. Children in Early childhood with autism spectrum who have an interest in digital technology such as gadgets are able to have positive improvement aspect, as in the theory of resilience. For example, there were students who had been trained in Hezekiah Inclusive Kindergarten from early childhood, after growing as high school students they were able to learn graphic design and other IT skills such as creating a blog. They are so special with their abilities. The teacher can develop the interest of autistic children on digital learning devices with a one on one approach as found in the ABA method to produce positive aspects improvement as in the theory of resilience.

C. *Different empathy*

Every child has a sense of empathy, including the children in early childhood with autism spectrum. They love within the limitations of interaction and communication as said by the teacher at AGCA CENTER Manado: "There are children in early childhood in this place who have shown affection to the teacher but with physical actions that tend to be violent even though it is not their intentions. Children in Early childhood with autism spectrum is aware of the love they have, it's just that the way to express love is different. Empathy in resilience can still be understood by children in early childhood in the form of digital technology like films/movies (visualization of affection) [9]. They have a sense of empathy expressed in limited ways both verbally and non-verbally.

D. *Change is not something that is liked*

Change in this life is something that cannot be denied. Everything will definitely change in life. Like or dislikes, all of us have to change. We temporarily adjust to continue to survive in life. That is also what happened to the lives of children in early childhood with autism spectrum. They survive in a life that continues changing with their own way and with the help of others. Autistic children don't like change. It was said by the teacher of Hizkia Inclusive Kindergarten in Manado that "the trash cans that are usually placed on the right in the classroom, can not be moved, if a teacher move them, it will definitely be rearranged to the original position by autistic children . It is something difficult but also can be interesting, because what has been attached to this autistic child will be very difficult to change. They are used to being monotonous. In using digital media similar things often happened, autistic children who are already used to using cellular phones or whose interest is using technology media will be difficult to manage while in the learning process in the classroom [9]. In terms of analysis, the causes of resilience problem of children in early childhood with autism spectrum are needed. Finally, unpredictable style of thinking makes autistic children assume that prohibition on the use of technology is a mistake in their eyes.

IV. CONCLUSION

The conclusions that can be drawn from the research results above are as follows: resilience of children in Early Childhood with the autism spectrum in using digital devices can be used by teachers and parents to develop directly their interests and talents with loving parenting style rather than compassionate. Teachers and parents must understand that children in Early Childhood with autism spectrum also have a sense of empathy even though it is difficult to express it in the usual way because of limitations both verbally and non-verbally. Children in Early Childhood with the autism spectrum also do not like change, so it requires patience in educating and nurturing them especially in directing those who have interest and resilience to digital learning devices.

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