# APPLICATION OF VERBAL BEHAVIOR METHOD (ABA-VB) FOR CHILDREN WITH SPEECH DELAY DISORDER

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#### **ABSTRACT**

Speech delay is disorder that attacks the speech organs so that speech delays occur in children who have entered the speaking up. Speech delay disorder is seen as a disorder that most often affects children. The reasons for this disturbance also, starting from internal and external factor. Internal factors are more concerned with the physiological condition of the child. It is likely that the child has a disorder that he carries from birth. The external factors can be obtained environment and play. Verbal Behavior was introduced by Skinner where research on verbal behavior began in 1935, verbal behavior aims to apply language skill that children have, with a richer language vocabulary of communication for children with their environment. The purpose of this study was to see the effectiveness of the verbal behavior method (ABA-VB) which is applied to children with speech delay disorder at Bintang Kecil therapy center. The research location is at Bintang Kecil therapy center, Banda Aceh, Indonesia. This study uses experimental techniques the one group pretest posttest with single research subject (SSR), which is an approach that provides treatment to one research group using only one research subject, then the result will be calculated the difference. The treatment uses is to provide the ABA-VB method treatment. This research analysis uses descriptive statistics by using graphs to see changes in learning outcomes. The result of this study is that there is a significant increase in verbal ability in children with speech delay disorder. This research can be used as a reference for target subjects, and a support for the application of the ABA-VB method to children with speech delay disorder that are balanced with balance disorders in various theraphy center and special schools for children with special needs in Banda Aceh, Indonesia.

Keywords: Speech Delay, ABA-VB, Early Childhood

# PENERAPAN METODE PERILAKU VERBAL (ABA-VB) PADA ANAK DENGAN GANGGUAN LAMBAT BICARA

# **ABSTRAK**

Keterlambatan bicara merupakan gangguan yang menyerang organ bicara sehingga keterlambatan bicara terjadi pada anak yang sudah memasuki usia berbicara. Gangguan keterlambatan bicara dipandang sebagai gangguan yang paling sering menyerang anak-anak. Penyebab gangguan ini pun, mulai dari faktor internal dan eksternal. Faktor internal lebih mementingkan kondisi fisiologis anak. Kemungkinan

anak tersebut memiliki kelainan yang dibawanya sejak lahir. Faktor eksternal dapat diperoleh lingkungan dan bermain. Perilaku Verbal diperkenalkan oleh Skinner dimana penelitian tentang perilaku verbal dimulai pada tahun 1935, perilaku verbal bertujuan untuk menerapkan keterampilan berbahasa yang dimiliki anak, dengan perbendaharaan kata bahasa komunikasi yang lebih kaya bagi anak dengan lingkungannya. Tujuan penelitian ini adalah untuk melihat efektivitas metode perilaku verbal (ABA-VB) yang diterapkan pada anak dengan gangguan keterlambatan bicara di pusat terapi Bintang Kecil. Lokasi penelitian di pusat terapi Bintang Kecil, Banda Aceh, Indonesia. Penelitian ini menggunakan teknik eksperimen one group pretest posttest with single research subject (SSR), yaitu suatu pendekatan yang memberikan perlakuan kepada satu kelompok penelitian dengan hanya menggunakan satu subjek penelitian, kemudian hasilnya dihitung selisihnya. Perlakuan yang digunakan adalah dengan memberikan perlakuan metode ABA-VB. Analisis penelitian ini menggunakan statistik deskriptif dengan menggunakan grafik untuk melihat perubahan hasil belajar. Hasil dari penelitian ini adalah terdapat peningkatan kemampuan verbal yang signifikan pada anak dengan gangguan keterlambatan bicara. Penelitian ini dapat digunakan sebagai referensi bagi subjek sasaran, dan dukungan penerapan metode ABA-VB pada anak dengan gangguan keterlambatan bicara yang seimbang dengan gangguan keseimbangan di berbagai pusat terapi dan sekolah khusus anak berkebutuhan khusus di Banda Aceh, Indonesia.

Kata Kunci: Keterlambatan Bicara, ABA-VB, Anak Usia Dini

## Introduction

Speech delay is a disorder that attacks the speech organs so that there is a delay in speaking in children who have entered the age of speaking. Speech delay is included in the group of speech impaired. This is in line with the writings of Maria Ulfa (2018) that the classification of the speech impaired can be grouped into 4 groups, namely (1) Speech Delay is a speech delay, (2) Stuttering is an abnormality in starting sentences which can be in the form of phoneme or preposition lengthening, syllable repetition occurs and chaotic tone of speech, (3) loss of language skills (dysphasia), (4) voice disorders (Voice Disorder).

Speech delay disorder is seen as the most common disorder affecting children. The reasons behind this disorder also vary, ranging from internal and external factors. Internal factors are more concerned with the physiological condition of the child, it is likely that the child has a disorder that he has been carrying since birth. The external factors can be obtained from the environment, such as family, learning environment, and playing. Therefore, children who experience speech delay are not only children who have disorders and carry disorders genes, but also can attack normal children but get influenced by their environment. Children who are starting to enter the age of 2-5 years are children with peak brain development, or what is often called the Golden Age.

Where the brain begins to develop almost 90% and must be filled with nutritious nutrients that can integrate basic knowledge into all body functions. So that speech delay disorders can affect a child's development at a later stage if it is not detected as early as possible for immediate treatment. One of the impacts is that children will experience disturbances in learning and psychosocial abilities. This is in accordance with recent phenomena, one of which is speech delay caused by gadgets or gadgets. According to Hanna Monareh., M.Psi (2019), "Many parents provide YouTube viewing through gadgets with children who are less than two years old. These actions can affect the development of children in the future." Then according to the pediatrician, dr. Munadia in a parenting teacher and parent seminar held in Banda Aceh revealed that "children's brains at an early age, namely the age range 0-5 years, are 30% influenced by biological conditions, and 70% are influenced by the environment in which children explore." So in conclusion, children with speech delay disorders are most likely influenced by environmental factors or family parenting patterns.

Several experts have suggested that there are several methods that can be used to treat children with speech delay disorders, one of which is using speech therapy or sensory integration. Sensory Integration Therapy is a speech therapy that organizes the sensory body with the surrounding environment (Sunanik, 2013). So in this therapy, children are trained to be able to pronounce objects that are around them. Like uttering his needs that need the help of others. In addition, it can also be supported by oromotor therapy, namely moving the muscles of the mouth with the organs in the mouth. Therapy of moving the mouth muscles aims to make children accustomed and not hesitant to pronounce nouns and sentences with basic consonant pronunciation, such as the letters A, I, U, E, O.

Along with the development of science, the methods developed to overcome speech delay also develop. The focus of therapy in dealing with speech delay children is how children can speak by integrating the acquired knowledge that is applied to their behavior. Skinner (2014) revealed that "verbal behavior is a medium to find out individual behavior in meeting their needs in the form of sentences or verbal." This Verbal Behavior Theory became known as ABA-VB (Applied Behavior Analysis Verbal Behavior).

Then the ABA-VB or Verbal Behavior method was introduced by Skinner where research on verbal behavior began in 1935, and began to be developed in 1957 but after receiving various criticisms and evaluations until finally this method was considered relevant and began to be developed in the world

in 2013. The ABA-VB method aims to apply the language skills possessed by children, with a richer language vocabulary as a medium of communication for children and their environment. (Harold L. Miller. 2016).

According to Carbone and Carr (2013) "The ABA-VB method is the application of behavioral analysis science for verbal learning accompanied by the growth of strong motivation." Based on the above opinion, the ABA-VB method is known as a behavioral analysis method or habituation with a focus on learning children's verbal abilities. Children are trained to be able to optimize their verbal abilities with a minimum standard of children being able to express their needs.

The ABA-VB method can be applied to all children with various disorders, especially children who have disorders in their verbal abilities. In line with this, Palmer (in David C Palmer..2014) "Verbal Behavior or ABA-VB can be applied in all conditions, even though the child does not have a listening partner". So children who are treated with the ABA-VB method are expected to be able to have their own reinforcement for themselves, do not depend on others and have the ability to solve problems on their own. Simply put, when a child needs to drink, the child points or takes a glass as a sign of needing to drink and understands the articulation of the word "drink" well.

The ABA-VB method also has several other working principles, namely:

## A. Mand or Manding

Mand or what is often referred to as manding is a vocabulary used to ask for something you like. For example, if you want to explain 'coffee', the pronunciation of the word 'please get coffee' must sound loud and clear in articulation. In this phase, children are taught to communicate which should be used in communicating. Mand or manding serves as an exercise for children to enrich vocabulary and use vocabulary with broad placement and adapted to the ongoing culture. (David C Palmer.2014). Rury (2019) explained that "the bathing stage is a stage that children like, because children are trained to ask for objects they like. Children are allowed to get the desired object after being able to do or verbally pronounce the name of the object they like.

# B. Tact or tact

Tact or tacting is a labeling activity for the object that becomes the object. In this activity children can be helped by relying on the child's sensory abilities. As in the ABC principles in behavior

theory, children must rely on the senses of smell, sight, touch, hearing, and taste to integrate in responding to instructions with their behavior or behavior. (Rury.2019). So to be able to respond optimally, children must first integrate their senses with objects.

## C. Echoic

Echoic is the activity of imitating the sound or word spoken by the other person. Children are trained to imitate sounds or sounds according to instructions. Echoic serves to add new vocabulary to children, the purpose of repetition is to help children remember vocabulary accompanied by movement or behavior.

### D. Intraverbal

The child's activity is to continue the puzzle or answer the therapist's question and the answer must be correct. So that the child will train his cognitive to think about the answer to the question. Intraverbal can also be said that part of combining all techniques into one session.

Language is a medium that children can use to solve problems in their lives. In addition, language also plays an active role in improving children's intellectual abilities and speech delays can cause obstacles to other aspects of child development. In line with the opinion of Santrock (2016) that "children who experience language development but are different from children their age, this can hinder their psychosocial development". Language plays an important role in the development of children in carrying out their developmental tasks. This is because language is the opening bridge for children to recognize various things in the form of vocabulary to sentences. Children will also find it difficult to meet their needs if their speaking ability is hampered, this is because the only person who knows their world in detail is themselves.

According to Laurance B. Leonard (2016) stated that "problems in speaking or language skills are developmental problems". This opinion is supported by Julia Maria (2016) who reveals that "In the spectrum picture, language occupies the lowest level. So that the delay in the child's speech ability can be detected through the factors that influence the delay in the child's speech ability. Based on these two opinions, speech delay disorder or what is often referred to as speech delay is a disorder that attacks children in their language skills and is seen as a delay in proper development. Simply put, Speech Delay

is a speech delay disorder in children who have entered the age of speaking by attacking the verbal part, causing disruption of articulation clarity, voice sounds, to language.

#### Methods

The research method used in this study is an experimental approach with the Single Subject Research (SSR) method, which is a research method using one subject or a single subject. Single Subject Research is used to examine behavior, this method is considered ideal because the treatment or experiment carried out can be maximized and this method is designed to see changes in participant behavior (Jennifer R. Ledford, David L. Gast.2009). Researchers want to see how to see the effect obtained from the treatment given repeatedly in a certain time. And the use of SSR makes it easier for researchers to explore changes in the behavior of the subjects given the treatment.

The research design of Design A-B-A is as follows:

Baseline (A1)-Intervention or treatment (B)- intervention outcome (A2).

The design procedure is: (1) the sample or target of behavioral research is measured at the first baseline, namely in group A1, (2) then the sample is given periodic intervention according to a predetermined time, namely in group B, and (3) the sample or target is measured for behavior after given treatment by researchers, namely group A2.

The measurement in the third phase or A2 aims to see the extent to which the intervention or treatment given has an effect on the target's behavior and can be a way to draw final conclusions (Juang sunanto, Koji Takeuchi, and Hideo Nakata.2005).

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	A1	В	A2	
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# Information:

A1 = Subject's initial condition before being given treatment

B = The treatment given by the researcher to the subject

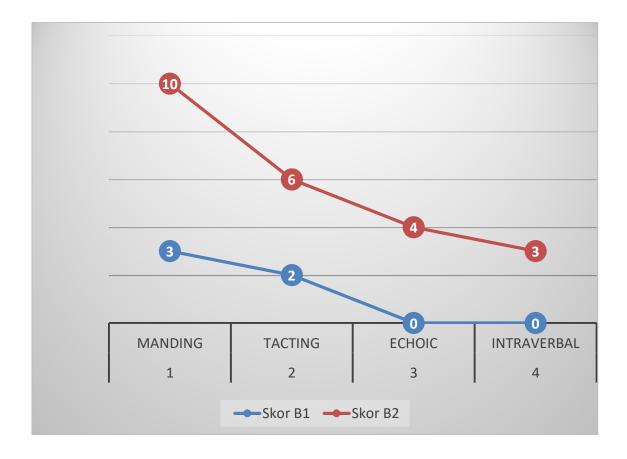
A2 =Condition after the subject is given treatment

Based on the writings of Struggle Sunanto (2005), the treatment or therapy given to the subject was 3 or 5 times or more until the required data were obtained. Then, referring to Mary Lync's writing (in the book The Verbal Behavior Approach.2007) it is explained that verbal behavior therapy or ABA-VB is applied for 35 hours per week.

#### Result

Relationship Between ABA VB and Speech Delay

From the measurements that have been made, data on changes in each aspect of the working principle of Verbal Behavior are obtained, namely: Manding, Tacting, Echoic and Intraverbal. The results of this study can be seen in the following graph.



Graph 1. Baseline of children's reading development

Based on the graph 1, it can be seen that from each aspect such as Manding, Tacting, Echoic and Intraverbal, there is an increase in scores before learning to use the Verbal Behavior method and after learning to read using the Verbal Behavior method. The highest improvement is seen in the manding (command) aspect which reaches 70%, the best increase from the other four aspects. Subjects have a very large addition of vocabulary after learning to use this verbal behavior method.

The results of interviews with the subject's parents assessed that after participating in the learning program with this method, the subject seemed more enthusiastic in learning the language and was more happy to speak. Previously the subject was very lazy to talk to, it still looked difficult to make a sound but after learning while using picture cards, telling stories and practicing writing while playing, the subject was more enthusiastic and began to show his enthusiasm to ask this and that question. Subjects are also used to asking for something using verbal language and do not use sign language anymore.

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In terms of vocabulary, the subject has a large vocabulary, but the subject is not very clear in his pronunciation. However, after learning to use verbal behavior, the subject is able to understand the meaning or meaning of the noun and has been able to pronounce the noun well. Subjects also respond more quickly to any new information they receive from their teacher/therapist. When viewed from the percentage results of each aspect, the average increase is almost 50%.

Manding: mand which is often referred to as manding, is a vocabulary used to ask for something you like. For example, "drink". Children are trained to be able to say the word drink. Next is tacting, Tacting: is the activity of labeling the object that becomes the object. Children are asked to label activities such as drinking, how can the child show a picture of a glass to take his drinking water. The third stage is echoic, Echoic: is the activity of imitating the voice or word spoken by the interlocutor.

Children are trained to imitate sounds or sounds according to instructions. This exercise is repeated slowly until the child recognizes the sound well. Like the sound of drinking, which begins with the sound "mmm". The last stage of this verbal behavior method is Intraverbal, which is a child's activity to continue the puzzle or answer the therapist's question and the answer must be correct. So that children will train their cognitive to think about the answers to their questions. What is this picture like? (The therapist shows a picture of a glass?. This concept is to train the understanding of the words that have been mastered by the child. So that the child does not only imitate sounds but also understands its meaning.

Picture 1. The Process of Therapy Using The Verbal Behavior Method









Speech delays for early childhood are very common, which is a form of speech disorder that is often found by experts. The problem that often occurs in children with language disorders is speech delays, so parents need to be alert and immediately detect and carry out more complete examinations so that children's development, especially in language development, remains in accordance with the age of growth and development. (Campbell, et al, 2003).

Children with speech delays can be detected based on the conditions that occur in children. The general picture of children with speech delays in this study is the ability of children to use language skills and speak slower than children their age (Wenty, 2011). When viewed from the aspect of child development as defined by Hurlock (2003), a child who is late to speak is when the child is in speech development below the speech ability of children his age. This can be seen from the child's articulation when speaking and the accuracy of the use of words. The definition of a child with a speech delay from

Papalia, 2004 also states that children prefer to use baby language and sign language, so that other people who are not members of their family will have difficulty understanding the signs shown by the child.

The ability to communicate verbally is the basis of development for an early child to be able to communicate with other people, apart from family members. Some of the steps or methods to develop speaking skills in early childhood are by doing exercises to make sounds and sounds on a regular basis. Parents also need to explore the child's speaking ability. Like the research by Sawyer (2017) which conducted an assessment of children's motivation in speaking. The research fact found is that children with speech delays do not have a strong motivation to speak compared to normal children, this condition occurs at the age of 2 years early in life (Sawyer, 2017). This sign is often ignored by parents, because children are considered funny if they just smile and laugh without uttering words.

Based on the results of the study, it was found that learning in the right way and method and in accordance with the conditions of the child's development, will make the child more cheerful. A pleasant mood will make children happy, so children will be more comfortable when learning. Learning with a pleasant mood will have an impact on the learning process and results. This verbal behavior method is a method developed by Skinner. BF Skinner is an American Behaviorist figure. Behavioral changes that occur in the learning process are the relationship between the stimulus and response that occur in interactions in the learning environment. The verbal behavior approach developed by Skinner is known as the directed instruction model, where behavior is controlled through operant conditioning.

Operant conditioning or role conditioning is a strengthening process that is formed repeatedly to get good results or behavior as desired (Isti`Adah, 2020). Through this ministry, children with speech delays are conditioned by applying reinforcement in language behavior. Exercise that is done repeatedly will produce a permanent change in behavior as desired.

According to Skinner, the procedure for forming children's behavior with speech delays in operant conditioning, namely:

## 1. Schedule of reinforcement

Learning in this procedure is to provide a stimulus, reinforcement (reinforcement) and response.

# 2. Shaping

In this process, behavior change is changed slowly and continuously, referring to the response you want to change. For example in the case of children who want to be trained to call the word "mama". The subject is trained slowly and repeatedly until the desired behavior is formed. Umaimah, 2017 states that the formation of the desired behavior begins with reinforcement of the response shown. For example, when the child has issued the word "ma ..." then the therapy or parents train and strengthen repeatedly "ma ma".

## 3. Behavior modification (behavior modification)

This strategy is carried out to change problematic behavior, namely by changing and shaping the desired behavior of children.

## 4. Generalization and discrimination

Generalization is done to strengthen the behavior that has been formed and expand the behavior that has been formed with a different stimulus.

This means that this verbal behavior method provides an effective and integrated way of handling children with speech delays with a behavioral approach, so that children will be able to pass the barriers to language development. As has been shown in the graph of the results of the study, that there was a significant increase in language skills in children. The spirit of learning and consistency in undergoing the learning process is one thing that is taken into consideration for children who are learning to speak, so this needs to be maintained so that children get faster progress and learning outcomes. Giving rewards becomes an option when children succeed in changing their behavior as expected.

## Conclusion

The application of the ABA-VB method is carried out by integrating all aspects that exist in children including sensory and cognitive aspects. The essence of the ABA-VB method is how children are able to optimize their verbal abilities so that they can communicate in two directions with other people around them, and help children to improve their psychosocial conditions.

Children who experience speech delays are influenced by various factors, both internal and external. When the method used can allude to two factors that hinder a child's speaking ability, the child will start practicing to optimize his verbal ability well. experienced a slight increase in vocabulary. Observations, interviews and continuous repetition of material are important factors in the language development of speech-delayed children.

# **Suggestion**

Verbal behavior therapy will be effective if parents and therapists can work together during the therapy process. Parents must also consistently carry out the therapy program so that the results will also be good.

#### References

- Amato, L. D. (2013). Applied Behavior Analysis: The Italian Experience of the Scoulaba Model For Children With Autism Spectrum Disorder. In D. Riva, S. Bulgheroni, & M. Zappela, Neuorobiology, Diganosis, And Treatment Autism An Update (p. 14). Paris: Jhon Libbey Eurotex.
- Andriyani, A. (2013). Gangguan Tumbuh Kembang Pada Anak. In B. Raehanul, *Bagaimana Mendidik Anak yang Bandel* (p. 17). Pustaka Muslim: Yogyakarta.
- Barbera, M. L. (2007). The Verbal Behavior Approach How To Teach Children With Autism and Related Disorder. London and Philadelpia: Jessica Kingsley Publishers.
- Bellack, A. S., Hersen, M., & Kazdim, A. E. (1990). *International Handbook of Behavior Modification And Theraphy*. New York: Plenum Press.
- Campbell, dkk. (2003). Risk Factors for Speech Delay of Unknown Origin in 3Year-Old Children. http://www.waisman.wisc.edu/phonology/pubs/PUB18.pdf. Diakses pada tanggal 21 Februaari 2018
- Crain, W. (2016). Theories of Development. New York: Routledge.
- Fitriyani, Sumantri, M. S., & Supena, A. (2018). Gambaran Perkembangan Berbahasa Pada Anak Dengan Keterlambatan Bicara (Speech Delay): Studi Kasus Pada Anak Usia 9 Tahun Kelas 3 Sd Di Sds Bangun Mandiri. *Universitas Negeri Jakarta*, 61.
- Gast, D. L. (2010). Single Subject Research Methodology In Beavioral Science. New York: Rouledge.
- Gemilang, A. (2013). *Aktivitas dan edukasi*. Retrieved Oktober 31, 2019, from nutriclub.co.id: https://www.nutriclub.co.id/kategori/balita/aktivitas- edukasi/kenali-tanda-tanda-keterlambatan-bicara-pada-balita/.

- Greer, R. D., & Keohane, D.-D. (2005). The evolution of verbal behavior in children. *Behavioral Development Bulletin*, 12(1), 31-47. http://dx.doi.org/10.1037/h0100559
- Hamdi, A. S., & Bahruddin, E. (2014). *Metode Penelitian Kuantitatif Aplikasi Dalam Pendidikan*. Yogyakarta: Deepublish.
- Isti Adah, Feida Noorlaila. (2020). Teori-Teori Belajar Dalam Pendidikan. Edu Publisher,
- Khoiriyah; Ahmad, Adizar ; Fitriani, Dewi;. (2016). Model Pengembangan Kecakapan Berbahasa Anak yang Terlambat Berbicara (Speech Delay). *Jurnal Ilmiah Pendidikan Anak Usia Dini* , 39.
- Koswara, E. (1991) Teori-Teori Kepribadian. Bandung: Pt. Eresco,
- Matson, J. L. (2009). Applied Matson, J. L. (2009). Applied Behavior Analysis For Children With Autism Spectrum Disorder. New York: Springer.
- Mc Sweney, F. K., & Murphy, E. S. (2014). *The Willey Blackwell Handbook of Operant and Classica Conditioning*. USA: Jhon Willey and Son.
- MillerJr, H. L. (2016). *The SAGE Encyclopedia of Theory in Psychologi*. United States Of America: Library of Congress Cataloging in Publication Data.
- Papalia, D. . & etc. a. (2008). Human Development (Psikologi Perkembangan). In Cetakan ke-1, edisi ke-9.
- Palmer, D. C. (2014). Verbal Behavior. In F. K. Mc Sweney, & E. Murphy, *The Wiley Blackwell Handbook Of Operant And Classical Conditioning* (p. 368). UK: Jhon Wiley and Son.
- Rury. (2019). Rury ABA dan VB untuk Autisma. Retrieved November 11, 2019, from RurySoeriawinata.com: https://rurysoeriawinata.com/memulai-abavb/
- Sawyer, J. (2017). I think I can: Preschoolers' private speech and motivation in playful versus non-playful contexts. Early Childhood Research Quarterly, 38, 84–96. http://doi.org/10.1016/j.ecresq.2016.09.004
- Syafril. (2019). Statistik Pendidikan. Jakarta: Kencana.
- Skinner, B F;. (2014). Verbal Behavior. Cambridge: B.F.Skinner Foundation.
- Sugiyono. (2017). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta.
- Sunanto, J., Takeuchi, K., & Nakata, H. (2005). *Pengantar Penelitian Dengan Subjek Tunggal*. Jepang: CRICED Unversity Tsukuba.
- Sunanik. (2013). Pelaksanaan Terapi Wicara dan Terapi Sensori Integrasi pada Anak Bicara. *Jurnal Pendidikan Islam*, 24.
- Sunanik. (2013). Pelaksanaan Terapi Wicara dan Terapi Sensori Integrasi pada Anak Bicara. *Jurnal Pendidikan Islam*, 28.
- Ulfa, M., & Rabi, N. b. (2018). Screenig Instrument: Deteksi Dini Anak Berkebutuhan Khusus. Banda Aceh: CBK Publishing.
- Umaimah, Rima. "Konsep Skinner Tentang Pembentukan Perilaku Pada Pendidikan Anak Usia Dini (Studi Terhadap TK Al Tarmasi Pacitan)." Transformasi : Jurnal Studi Agama Islam 10, No. 1 (January 1, 2017): 154–76.
- Van Tiel, Julia Maria;. (2017). Anakku Gifted Terlambat Bicara Masalah dan Intervensi Bahasa pada Gifted plus SLI. Jakarta: Kencana.
- Wenty. (2011). Keterlambatan Bicara (Speech Delay) Pada Anak (Studi Kasus Anak Usia 5 Tahun).lib.unnes.ac.id/2802/1/3489.pdf, diakses 15 Februari 2018.
- Widiastuti, V. (2019, April 15). *Ketergantungan Gawai, Anak Bisa Alami Keterlambatan*Retrieved Oktober 25, 2019, from Himedik.com: http://www.himedik.com

Yusuf, A. M. (2014). Metode Penelitian Kuantatif dan Kualitatif dan Penelitian Gabungan. Jakarta: Kencana.