Al-Quran-Based Script Fading to Reduce Aggression Behaviour of Autistic Child

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Abstract: Autism Spectrum Disorders (ASD) or autism is a serious problem in the field of pediatric psychiatry since it includes 0.3% of the global disease burden. Autism has characteristics that lead to a deficit of social interaction and communication that can lead to behavioral problems, one of which is aggression. Therefore, we need a method that can overcome the problem of interaction and communication of children with autism to reduce their aggressive behavior. One of them is using a fading script that is integrated with the verses of the Koran as a cue stimulus that can change the behavior of children with autism. The purpose of this study is to explain the potential of Al-Quran-based fading scripts to reduce aggressive behavior in children with autism. The employed method was a narrative literature review by analyzing 24 journals taken through a reputable online database with relevant keywords in the last ten years (2010-2020). The conclusion from this narrative review is that the application of script fading integrated with the verses of the North Al-Quran has the potential to reduce aggression in children with autism.

Keywords: Aggression, Al-Quran, Autism, Script Fading

1. Introduction

Autism Spectrum Disorders (ASD) or what is called autism is a serious problem in the field of child psychiatry because it is included in 0.3% of the global disease burden (Wiranti, Yanis, & Saputra, 2020). According to the World Health Organization (2019), based on epidemiological studies conducted over the last 50 years, the prevalence of autism has increased significantly. Autism is known to have characteristics that lead to deficits in social interaction and communication caused by neurodevelopmental disorders (American Psychiatric Association, 2013). With these characteristics, children with autism have language skills that are poorly understood by others, which can lead to behavioral problems (Flowers et al., 2020). One of the most common behavioral problems experienced by children with autism is aggression (De Giacomo et al., 2016; Flowers et al., 2020).

Some of the aggressive behaviors of children with autism include kicking, hitting, throwing, squeezing, mocking, and criticizing (Trisanti & Abdurahman, 2014). According to McGuire et al. (2016), this behavior has been identified as an important treatment target in autistic children. This is because, without appropriate intervention, this behavior tends to last throughout the life span of an autistic child (Matson & Adams, 2014). According to research conducted by Fitzpatrick et al. (2016) strategies that have a significant impact in reducing aggressive behavior in children with autism are therapeutic and pharmacological. However, pharmacological strategies are often associated with conditions of dependence (addiction) (Van Schalkwyk et al., 2015). Thus, many therapists prefer therapeutic strategies in dealing with autistic children's behavior.

Various therapeutic strategies have been carried out to reduce aggressive behavior in children with autism. Among them are using music (Lundqvist, Andersson, & Viding, 2009), Applied Behavior Analysis (ABA) therapy (Robertson, Wehby & King, 2013), strengthening strategies (Fulton et al., 2014), and communication training (De Giacomo et al. , 2016). One of the strategies that have the most significant influence in reducing the frequency and intensity of aggressive behavior in children with autism is communication training (Fitzpatrick et al., 2016). One of the intervention techniques proved to be significant in practicing communication and interaction with autistic children, namely script fading (Wichnick-Gillis, Vener & Poulson, 2016; Akers et al., 2018).

Script fading is a script fading technique that is done to form a targeted behavior such as the pronunciation of a phrase or word in particular (Akers et al., 2016). Based on the results of the first study on the script fading procedure conducted by Krantz & McClannahan (1993) also found that the application of script fading not only teaches communication to autistic children but also reduces aggression or selfinjurious behavior. However, various previous studies regarding the application of fading scripts have focused more on the communication of children with autism (Akers et al., 2018). Until now, there has been no further research that focuses on and specifically, that script fading can change behavior, especially aggression in children with autism. Besides, the application of fading scripts is also rarely used in Indonesia in providing interventions for children with autism.

In line with that, in the context of Indonesian society, which is predominantly Muslim, the Koran is believed to be one of the medicines (Asy-syifa) in curing a certain disease or disorder (Chamalah & Arsanti, 2019). According to Prasetya (2019), Al-Quran can also function as a syifa, which is an antidote for someone who is experiencing inner restlessness and becomes a psychological therapy for listeners and readers so that their mind can be healed. Moreover, treatment with the Koran has also been proven and perceived by many people to be able to make conditions better. They experience changes faster than the various problems faced with miracles from the Quran, which can be overcome (including the problem of autism) (Chamalah & Arsanti, 2017). Therefore, the use of the verses of the Koran as medicine is the best alternative to cure all human ailments.

Based on the above, in this case, the writer wants to examine the script fading method as an alternative to reduce the aggressive behavior of children with autism by using the Koran which is believed to provide health benefits or certain behavioral disorders. One of them is to reduce the aggressive behavior of children with autism. Therefore, an in-depth study is needed to analyze the literature regarding "The potential of Al-Quran-based fading scripts to reduce aggressive behavior of children with autism", as a new alternative to reduce aggressive behavior in children with autism using fading scripts based on Al-Quran verses.

2. Method

The employed method was a narrative literature review using national and international literature that were accessed through the PubMed database, Google Scholar, ResearchGate, ScienceDirect, Sage Journal, and Proquest. Initially, a journal search was carried out through the online database with the keywords "script fading" (script, training script, and visual clue), "aggression" (challenging behavior, destructive behavior, and maladaptive behavior), and "Al-Quran" (tahfidz and tahsin) who utilized research subjects using autism (autism spectrum disorder, ASD, and PDD-NOS) to obtain 218 journals. Secondly, screening of journals with inclusion criteria published in the last 10 years (2010-2020), and Scopus quartile indexed journals Q1, Q2, and Q3 or SINTA 1, 2, and 3 so that 148 journals were found. Then, the article feasibility analysis was screened which comprised the full paper could be accessed, there was an employed theory, and there was a theory that supported the research topic. Afterwards, the obtained journals, which comprised 24 journals, were reviewed and analyzed.

3. Results and Discussion

Script Fading for Autistic Child

Script fading is a script fading technique that is carried out systematically (Wichnick et al., 2010; Higbee & Brodhead, 2016) by using scripts in the form of text, images, and audio as a cue stimulus (Wichnick-Gillis, Vener, & Poulson, 2016). Currently, many studies on script fading have been carried out, especially as an intervention for children with autism (Dotto-Fojut et al., 2011; Rosdahl, 2016) which is generally used for children aged 2-15 years (Akers et al., 2016). According to Akers et al. (2018), the general procedure for script fading consists of several steps, namely that autistic children are taught to pronounce the entire script orally. Then after the autistic child can properly pronounce the entire script, the script will systematically fade from the end to the beginning of the sentence so that the individual can issue words without a script that has been taught before.

In research conducted by Wichnick-Gillis, Vener, & Poulson, (2016), Koegel et.al. (2012), and Alsubhi (2014) state that the script used in script fading is not only a stimulus for autistic children to speak according to the contents of the script but also as a stimulus for textual cues to form an understanding of the intended behavior. For

example, in a study conducted by Higbee & Brodhead (2016), script fading is used to teach independence, verbal behavior, and social skills for children with autism, so that in this study using a script in the form of words or pictures that are appropriate to the child's activities and given a mission to complete that activity. Thus the script can provide a stimulus for autistic children to be independent, have good social and verbal skills.

The use of fading techniques (fading) in the script fading procedure is also one of the techniques often used to teach the behavior to children (Larassati & Hartiani, 2018). Fading is a change in the response-controlling stimulus that occurs systematically during the experiment, which in the end the response can occur when faced with a stimulus that has changed or even recently (Parmawati, Prasetyawati, & Prianto, 2017). Thus, the target behavior will be generalized to the environment other than what is taught (naturally) (Goldstein, 2010). Furthermore, the procedure for implementing the fading script also uses additional stimulus in the form of reinforcement, token economy, reinforcement, or instructions (Wichnick-Gillis, Vener, & Poulson, 2018) which will be able to bring out the targeted target behavior (Koegel et.al. . (2012).

Based on the explanation above, the application of the fading script used for autistic children can also form an expected behavior. This is supported by the use of scripts as cue stimuli, fading techniques as response control stimuli, and reinforcement, token economy, reinforcement, or instructions as additional stimuli to form a targeted behavior change.

Al-Quran towards Autistic Child

Al-Quran has the meaning of goodness and benefits contained in it so that at this time many therapists are using Al-Quran verses to help minimize the behavior problems of children with autism (Zulkafli, Majid & Ishak, 2018; Chamalah & Arsanti, 2019). According to research conducted by Akhyarul, Uswatun, & Isworo (2019), audio therapy using the murottal Al-Quran can influence behavior problems in children with autism. This study found that Al-Quran therapy using Surah Al-Rahman has been proven effective in reducing levels of violent behavior and helping children with autism express their emotions. Another study by Astuti et al. (2017) and Chamalah & Arsanti (2017) also support that when autistic children read or listen to verses of the Koran, they will be calm, be able to control their emotions, not act too much, and feel happy.

Apart from using the verses of the Al-Quran (in Arabic), the meaning (meaning) of the verses of the Quran can also provide clues to certain behaviors. According to research conducted by Hakim (2014), Al-Quran-based teaching is also very helpful in shaping the character and behavior of children who have noble morals. Thus in addition to providing emotional benefits, namely calmness which can affect the behavior of children with autism, Al-Quran can also have a cognitive influence, namely by providing instructions for the formation of good character and behavior of children with autism.

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Script Fading with Al-Quran towards Autistic Child

The application of the fading script used for autistic children can also form an expected behavior. This is supported by the need for the use of scripts as cue stimuli, fading techniques as response control stimuli, and additional stimuli such as reinforcement, token economy, reinforcement, or instructions as stimuli for the formation of a targeted behavior change. This reinforces the question of script fading which can reduce aggression and self-injuring behavior in autistic children as stated by Krantz & McClannahan, (1993) in their first study on script fading procedures.

But even so, the use of fading scripts to reduce the aggressive behavior of children with autism, of course, must be supported by correct procedures, such as the use of appropriate scripts as cue stimuli to form target behaviors (Wichnick-Gillis, Vener & Poulson, 2016; Akers et al., 2018). One of them can use the verses of the Koran as the script. According to research conducted by Zulkafli, Majid, & Ishak (2018), it is found that listening to and reading the verses of the Koran repeatedly will give a positive impression on humans, such as in dealing with emotional, mental, and behavioral problems. In addition to the use of verses from the Koran that can give a positive impression on every problem, the Koran can also have a cognitive influence in shaping a noble behavior or character in children (Hakim, 2014).

As an example of the application of the script fading procedure using the verses of the Koran, one of which can use the meaning (meaning) to provide guidance and understanding of the character to be built. For example, given the manuscript of Al-Quran Surah Ar-Rahman verse 18 which means "So which blessings of your Lord do you deny". Then the text is assisted by the additional stimulus in the form of reinforcement, economic tokens, reinforcement, or guidance on the meaning of the given verse. Thus, it will provide stimulation for children to understand and do what is being taught. After autistic children can convey the script perfectly, the next step is to carry out systematic fading of the words starting from the last word of the sentence in the text that is taught, which is "So, which of your Lord's blessings are you", the second step is "Then the blessing of your Lord", the third step delicious ", and the next step" So ". The fading technique used in this step is a response control stimulus so that it can be generalized to different environments (Wichnick-Gillis, Vener, & Poulson, 2018).

According to Marliani (2019), the Al-Quran verse of surah Ar-Rahman also contains the meaning of love, tenderness, calm, and peace of mind. Therefore, the use of verses from the Al-Quran, one of which is Surah Al-Rahman, can become a cue stimulus that provides understanding to shape behavior such as calm, gentleness, and peace of mind. The use of the Al-Quran verse in the form of Arabic (original) also has a significant impact in shaping the behavior of children with autism. Research conducted by Mayrani & Hartati (2013) also found that there was a decrease in behavioral disorders of children with autism in the aspects of social interaction, and emotions after receiving audio therapy with the verses of the Al-Quran Surah Ar-Rahman (in the form of native Arabic). Besides, according to research conducted by Akhyarul, Uswatun, & Isworo (2019), it is found that murottal Al-Quran therapy of surah Ar-Rahman has also been proven effective in reducing violent behavior and helping autistic children express their emotions.

Based on the above, the use of the script fading method with Al-Quran verses, whether translated or verses of the Koran in the form of the original Arabic, can have the potential to reduce behavioral problems, especially aggression in children with autism. Aggressive behavior in children with autism is also closely related to the deficit in communication and social interaction which is characteristic of children with autism (Fitzpatrick et al., 2016). Therefore, the use of speech and communication therapy has an impact on reducing aggressive behavior in children with autism. Al-Quran as a therapy for children with autism has also been used as an effective speech therapy (Chamalah & Arsanti, 2017, 2019) and effective communication (Marliani, 2019). Furthermore, the script fading procedure has also been shown to improve communication for children with autism (Akers et al., 2018). Thus, it also strengthens that the use of the script fading method with the verses of the Koran has the potential as a new alternative in reducing aggression in children with autism. The schematic can be seen in the image below.



Picture 1: Analysis Scheme

4. Conclusions and Recommendations

Departing from the results of the studies and analyzes that have been carried out, it is concluded that the application of the script fading procedure which is integrated using the Al-Quran in the form of translation or Arabic verses in the form of audio or visual has the potential to reduce the aggressive behavior of children with autism. This is supported by the existence of a cue stimulus from the Al-Quran text as a text that can provide good and also benefits in curing problematic behavior in children with autism. However, further research is needed to test directly towards the effect

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of implementing fading scripts that are integrated with Al-Quran verses in reducing aggression in children with autism. Thus, further experimental research is needed to see how big and effective the effect of this method is.

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