

Islamic Learning Methods: Strengthening Analysis of Psychological Aspects of Down Syndrome

DOI: <https://doi.org/10.18196/afkaruna.v19i2.18982>

Lutfiadji Agung Hidayat*

Universitas Muhammadiyah Yogyakarta, Indonesia
Corresponding Author: lutfiadji.a.fai18@mail.umy.ac.id

Azam Syukur Rahmatullah

Universitas Muhammadiyah Yogyakarta, Indonesia
azam.sy@umy.ac.id

ARTICLE HISTORY

Received: 20 August 2023, Revised: 03 November 2023, Accepted: 08 December 2023, Published: 30 December 2023

ABSTRACT

The current research is crucial in order to foster inclusive Islamic education for children with Down syndrome as well as address their psychological well-being. This study aimed to investigate diverse Islamic education methods suitable for children with Down syndrome while emphasizing the importance of educators employing Islamic teaching strategies. This research employed a qualitative approach and the Systematic Literature Review (SLR) method to evaluate the intersection of Islamic learning methods and Down Syndrome. The published papers discussed in this study were obtained using the Publish or Perish 8 software. The papers must be published within the five-year timeframe between 2018 and 2023 with the keywords "Islamic Learning Methods" and "Down Syndrome." The search of papers resulted in the discovery of 222 articles discussing Islamic methods, and only 16 were specific to Down Syndrome, with only four of them addressing the application of Islamic teaching methods for individuals with Down Syndrome. The findings of this study highlighted teaching strategies such as On-Task Conduct, Imitation, Discriminative Usage of Objects, and Word Recognition. The study identifies three main learning strategies for students with Down syndrome: the Talaqqi wa Musyafahah, Quran therapy, and Islamic Full Communication methods. This study concluded the necessity for further research on modified educational approaches that effectively support the learning and well-being of children with Down syndrome within the context of Islamic education.

Keywords: Down Syndrome, Islamic Learning Methods, Psychology

INTRODUCTION

According to the Islamic teaching roots, education is designed to guide and nurture students in comprehending, internalizing, and actively applying the values and morals from the Quran and Hadith. The main goal of education with Islamic values is to provide students with a sense of security and well-being in their earthly existence and the hereafter. As a religion and a universal human way of life, Islam obliges Muslims to contribute to the distribution of knowledge actively. This principle implied the high importance of an educator as well as a warning not to procrastinate for learning purposes. As both a teacher and a Muslim, learning is a top priority before teaching any knowledge. Education is very influential in the life of every Muslim for Allah SWT has set a law for humans that they must live in and

for the Al-Quran. In this case, all human beings, including Muslims with disabilities,¹ have the same right to access space and opportunities to receive education.²

However, one of the problems in the equal distribution of education for all children is the difficulty in organizing education to ensure a proper education for students with disabilities, especially children with Down syndrome. Down syndrome is a hereditary disease caused by excess chromosomes in human cells.³ Inclusive schools are one of the educational solutions available for students with Down syndrome. However, according to education providers, there are scarce educational institutions that are willing to implement inclusive education programs due to various reasons.⁴ The government has implemented the integration of schools into the legal framework through various regulations, including Law No. 20 of 2003 on the Indonesian national education system, PERMENDIKNAS No. 70 of 2009 on inclusive education, which is also further supported by Law No. 14 of 2005 on teachers and lecturers. These regulations make it compulsory to establish inclusive schools, emphasizing the importance of inclusive education.⁵

The crucial factor in implementing inclusive education lies in the school's unwavering dedication to admitting students in all circumstances and allowing all children to receive education.⁶ Following the school's commitment is a dedicated teacher who has full responsibility for providing education for everyone, according to the uniqueness and privileges of each child. A teacher plays an essential role in children's education, especially for children with Down syndrome. Teachers are expected to actively observe and pay attention to the psychological characteristics that manifest in the children using suitable methods or approaches for the child's condition. Thus, teachers can choose the proper method for educating and, more importantly, internalize religious values in the child.⁷

In addition, this research was conducted to explore the types of Islamic learning methods appropriate for educating individuals with Down syndrome. Students with Down syndrome experience significant deficiencies in IQ, indicating the urgency for educators to optimize sufficient learning methods in order to increase the effectiveness of learning itself as well as humanize mentally deficient children. Teachers have a responsibility to teach students and engrave moral values. Therefore, the lessons for Muslim students must reflect the moral principles espoused by Islam. Consequently, it is anticipated that any obstacles encountered in the learning process, specifically those related to Islamic methods, will be successfully addressed and harmoniously integrated.

Research Method

The study used the Systematic Literature Review (SLR) method, which systematically collects and analyzes data from published studies relevant to the topic. The gathered information was carefully interpreted, described, and summarized to obtain well-defined conclusions. The process of conducting research with an open SLR method involves several steps: defining research objectives, conducting a comprehensive search for relevant studies, evaluating the quality of the included studies, and synthesizing the findings using either a qualitative or quantitative approach. The initial step in SLR is to identify the boundaries of the research problem. This strategy necessitates familiarity with the prior literature, its limitations, and its ambiguities, as well as a thorough grasp of the research subject's conceptual frameworks.⁸

In this study, the researchers thoroughly searched articles using specific keywords related to learning methods, Islam, and children with Down syndrome. The software Publish or Perish 8 was used to conduct an extensive search of articles from 2018 to 2023, employing the keywords "Islamic Learning Methods" and "Down Syndrome." The search yielded a total of 222 articles discussing various aspects of

Islamic teaching methods. However, only 16 of these articles were specific to Down syndrome, and merely four papers addressed the practical application of Islamic teaching methods for individuals with Down syndrome.

Afterward, the data collection procedure comprised reviewing relevant research from Google Scholar, specifically concentrating on Islamic education for children diagnosed with Down syndrome in Indonesia. Then, the researcher comprehensively read each paper to find the article's main points and concludes what kind of method the author discussed. Subsequently, the researchers conducted a thorough examination to investigate the implementation of Islamic learning methods in the education of children diagnosed with Down syndrome. This review aimed to provide insights into the specific approaches and strategies employed to facilitate effective Islamic education for this group of learners.

Result and Discussion

A. Islamic Learning Method

The Islamic learning method focuses on enhancing students' faith, understanding, and practice of Islam to cultivate individuals who believe in Allah SWT, exhibit noble character, and contribute positively to personal life, society, nation, and state.⁹ The Islamic learning method aims to holistically develop the human personality, encompassing intellectual, spiritual, emotional, and physical aspects. This preparation equips Muslims to fulfill their purpose as servants and representatives of God on earth. Thus, Islam, as an educational method, is essential for every Muslim.

1. Al-Quran the Basis of Islamic Learning

Islamic learning strives to help students understand, live, and apply Islamic teachings and develop an essential personality based on Qur'anic principles and the sunnah of the Prophet SAW. The foundation lies in Muslims' worldview, primarily based on the Qur'an, Hadith, companions' actions, and independent reasoning (ijtihad). As stated in Al-A'raf verse 52, the Qur'an holds a foundational role in Islamic learning, which serves as a guide and mercy for believers, helping them discern between good and evil. As the basis for Muslims' way of life, the Qur'an contains information about all aspects of practice, and Islamic learning should align with its teachings. Any theories or practices inconsistent with the Qur'an cannot be considered genuine Islamic learning, emphasizing the Quran's central role in shaping beliefs and actions. According to M. Basyiruddin Usman, various learning methods that are commonly used and underlie the formation of Islamic learning methods in Islamic Learning include:¹³

- a). Lecture method or live presentation: teaching students through verbal stories.
- b). Discussion method: investigates a topic by discussing the arising problems and lamenting rational and factual arguments.
- c). Question and answer method: delivers educational messages by asking questions and answers to students or vice versa. Students are allowed to ask questions, and the teacher answers these questions.
- d). Demonstration and experiment methods: one of the teaching techniques carried out by the teacher, and the teacher asks students to demonstrate or practice a process or do something in front of the class.
- e). Task method: a declarative method, assignment method, or homework because students are given special assignments outside the classroom.
- f). Group method: matching students with those with similar skills and interests. The group work approach aims to have the students work together to accomplish a common learning objective.

Apart from the methods above, there are many other variations regarding the way of teaching and learning about Islam. For example, according to Abdurahman An-Nahlawi, among the methods that can be applied in Islamic education and teaching are the Hiwar method (conversations), the Proverbs method (parables), the exemplary method, the habituation method, the Ibrah wa Mau'izzah method, and Targhib wa Tarhib method. However, regardless of the variety of existing methods, the best Islamic learning comes from the nature of *rububiyah* (education or maintenance) of Allah SWT., which includes the concepts of sustenance, forgiveness, and compassion. Additionally, *rububiyah* also mentioned the management of negative emotions such as anger, threats, torture, and many others.¹⁵

- a). Hiwar/Conversation Method: the method starts with simple words and sentences and progresses to more complex topics as students master the fundamentals.
- b). Amsal or parable method: Using parables to explain abstract concepts with concrete examples to help students understand the essence and benefits of the subject.
- c). Exemplary Method: Educators demonstrate good behavior and attitudes, serving as examples for students to emulate. This method emphasizes the importance of personal behavior in teaching values.
- d). Habituation Method: Focusing on familiarizing students with activities through repetition and understanding. It involves consistent practice until concepts are deeply embedded in students' understanding.
- e). Ibrah wa Mau'izzah Method: Learning from past experiences through deep reflection (Ibrah) and gently advising (Mau'izzah) to enhance students' self-awareness and emotional understanding.
- f). Targhib wa Tarhib Method: Persuading students to delay enjoyment to prevent harm (Targhib) and using intimidation through punishment to deter sins or forbidden actions (Tarhib).

B. Understanding Down Syndrome

Down syndrome (DS) or Trisomy 21 results from an extra copy of chromosome 21. Identified in 1866 by John Langdon Haydon, it can lead to slow physical development, varying intellectual disabilities, and distinctive facial features. Adults with Down syndrome typically have an IQ of around 50, comparable to an eight- or nine-year-old's typical IQ. It is not genetically inherited but arises from an additional chromosome, with the risk increasing from less than 0.1% at age 20 to 3.0% at age 45. Prenatal screening detects Down syndrome, sometimes leading to increased abortions for identified cases.¹⁶

1. Characteristics of Children with Down Syndrome

According to the American Psychological Association Dictionary of Psychology,¹⁷ Down syndrome results from an extra copy of chromosome 21, leading to distinct physical features like a round face and slanted eyes. Individuals may have intellectual disabilities ranging from mild to severe, along with slow and clumsy movements. Individuals with Down syndrome may experience stunting, and additional health concerns like heart and respiratory disorders can occur. Despite a generally amiable disposition, life expectancy is shorter, and early onset of age-related diseases like Alzheimer's is common. Down syndrome is a prevalent cause of intellectual disability.

The genetic abnormality that causes Down syndrome is among the most frequent in humans. In the last 30 years, from 1990 to 2020, the number of people with Down syndrome initially decreased slightly but then increased globally. The number of prevalent cases steadily increases, while the standard number and death rate from Down syndrome is gradually decreasing. Previous studies reported that about one in every 1,000 newborns has Down syndrome. The number of fatalities from Down

syndrome decreased to 27,000 in 2015 from 43,000 in 1990, when the global prevalence of the disorder was estimated at 5.4 million. Today, it is estimated that Down syndrome occurs in 1 in 1000 children worldwide. Around 3,000 to 5,000 children are born yearly with this chromosomal abnormality.²²

2. Psychological Aspects of Down Syndrome Children

The most common psychological aspects in children with Down syndrome are physical and intellectual disabilities. The average adult's cognitive capacities are those of a child aged eight or nine. Children with Down syndrome typically have poor immune function. It raises the danger of many other diseases and conditions, including heart defects, epilepsy, cancer, thyroid disease, and psychological illness. In addition, many health risks, including heart defects, epilepsy, cancer, thyroid disease, and psychological illness, can increase. As previously mentioned, Down syndrome is one of the most common mental syndromes experienced by individuals worldwide. Down syndrome accounts for at least one-third of cases of intellectual disability throughout human history. Children with Down syndrome may experience a range of psychological aspects that can impact their development and well-being, as mentioned below:

a. Cognitive or Intellectual Aspects

Children with Down syndrome show varying levels of cognitive challenges, including mild intellectual impairments in learning, memory, and language use. Most have mild intellectual disability, while some cases exhibit moderate to severe conditions. Despite difficulties in verbal recall, memory functions, and association abilities often remain intact. Most individuals with Down syndrome have a mild intellectual disability with IQs in the range of 50 and 69, moderate Down syndrome in the range of 35 to 50, and some cases of severe Down syndrome have very low IQs, lying between 20 and 35. Children with Down syndrome typically have an IQ of 10-30 points higher.³⁰

Individuals with Down syndrome often experience age-related cognitive decline, primarily in the form of dementia, marked by memory loss and language difficulties. They are more susceptible to various age-related disorders, possibly due to genetic predisposition and increased biological health vulnerability. Down syndrome accelerates aspects of aging, including diminished DNA repair and premature mortality. Therefore, it may be concluded from the studies that IQ scores decrease with age in people with Down syndrome. Some evidence suggests that intellectual dysfunction affects children with Down syndrome more severely and occurs more frequently than in typically developing youngsters. Children with Down syndrome frequently experience delays in intellectual and cognitive development, impacting learning, communication, and problem-solving. Key concerns include intellectual disability, learning difficulties, memory issues, attention problems, and language barriers.

b. Affective or Emotional Aspect

Individuals with Down syndrome experience more varied emotions. Some are generally considered happy and cheerful, but depression and anxiety can start as early as young adulthood for some people. Characteristics that can index affective aspects and accurately describe individuals with Down syndrome are the level of persistence in carrying out a task or in dealing with problems. According to research by Yarrow, Morgan, Jennings, Harmon, and Gaiter, a child's ability to stick with a task in each learning technique is tied to competence and emotional maturity.

Older children and people with intellectual impairments score low on perseverance, attributed to fear of failure and decreased expectations of achievement. Children with Down syndrome are categorized by temperament, reflecting their emotional state. Gunn and Berry's research compares

conditions in Down syndrome children with their peers, revealing that persistence significantly differs. Children with Down syndrome are less persistent, adapt late, and struggle with negative moods. The stereotype of them being solely 'friendly' does not capture the full emotional complexity of individuals with Down syndrome.³⁶

c. Psychomotor or Physical Behavior Aspect

Many of the psychomotor milestones that typically occur around the ages of five and eight months are often reached around the ages of 21 and 22 years old in children with Down syndrome. This condition can be classified as Psychomotor Retardation, which according to the Diagnostic and Statistical Manual for mental disorders or DSM, defines psychomotor retardation as "A general slowing that is seen in physical reactions, movements, and speech." Furthermore, the DSM emphasizes the need for objective measurement by suggesting that psychomotor retardation must be "observable by others, not just a subjective feeling."³⁸

People with Down syndrome typically have a firmer grasp of the language than their capacity to express themselves verbally.³⁹ From 10% to 45% of people with Down syndrome are found to have stutters or quickly and tend to be disorganized, so they will be challenging to understand. In some cases, after reaching 30 years old, people with Down syndrome will lose the ability to speak fully or partially. In addition to communication skills, children with Down syndrome are often recognized for their relatively strong social skills. The related physical or psychomotor behavioral issues are typically not as severe as they are in other syndromes of intellectual disability.⁴³

C. Learning Method of Down Syndrome

Individuals with Down syndrome benefit from visually oriented instruction, as emphasized by child psychology branches. Drawing has been shown to enhance linguistic and lexical abilities. Despite struggles with voice clarity and sentence structure, research by Pat Gunn indicates a reliance on visual exploration. Dennison and Bricker propose three learning methods—On Task Behavior, Imitation, Discriminative Use of Objects, and Word Recognition—aligned with mental retardation classifications in children with Down syndrome.⁴⁴

1. On- Task method behavior

In a learning setting, on-task behavior involves directing a child's attention appropriately, adhering to classroom rules, and engaging in activities as instructed by the teacher. It includes actions like working at one's desk, participating in group activities, responding to questions, and contributing to class discussions. The best assessment is through direct observation, allowing for a thorough understanding of the context and accurately evaluating the child's engagement in assigned tasks.⁴⁵

Visual demonstrations are more effective when using the On Task method for children with Down syndrome than relying solely on verbal instructions—visual cues, such as charts with pictures, aid in understanding tasks and activities. Children can better comprehend and engage in desired behavior by presenting information visually. Teachers can create charts with pictures, set straightforward goals, and provide positive reinforcement. If difficulties arise, the teacher can assist initially, but they should gradually introduce more challenging activities. Consistency in using a basic chart enhances the learning experience and encourages participation.⁴⁸

2. Imitation Method

Acquiring new behaviors through observing and emulating others is called imitative or social learning. Imitation is essential for proper sensorimotor development and social functioning as it facilitates communication, social engagement, and the capacity to regulate one's emotions to account for those of others. Both humans and non-human animals can imitate the actions of another party. Comparatively, observational learning can occur when the student witnesses an unpleasant activity with its subsequent repercussions and, as a result, learns to avoid that behavior. On the other hand, imitative learning requires imitation of the behavior exhibited by the technique. When faced with communication challenges, children, including those with Down syndrome, may exhibit undesirable behavior. Instructors or parents can employ teaching methods, such as imitation and repetition, to address these situations. For instance, if a child tends to kick out of frustration, the teacher can model the desired behavior. Educational institutions often provide support, and introducing replacement behaviors can help children avoid inappropriate conduct.⁴⁹

The imitation method, including music, aids language acquisition in individuals with Down syndrome. Amplification tools, like hearing aids, enhance communication for the deaf. Speech treatment is recommended from around nine months of age. Due to proficient hand-eye coordination, sign language can also be an option. Pointing and drawing are among the tools that aid in the language development of children with Down syndrome.⁵⁰

3. Discriminative Use of Methods Objects

Discriminative use of methods object is critical discriminatory learning as learning by providing instructions or assignments in "similar" conditions. Learning takes place by asking students to distinguish between similar images; differences in details and perceptions will be coded more elaboratively. On the other hand, under "different" conditions, the distinction between images requires conceptual/semantic information rather than perceptual detail. In the "same" condition, learners must compare every detail to ensure they are in the same picture, similar to the "similar" condition.⁵¹

When formulating educational plans for children with Down syndrome, it is crucial to consider the research findings presented by Gibsons and Fields, which indicate deficiencies in the motivation of these children. Then, a study by Andrews proposed focusing on only one of the child's feedback systems, such as the proprioceptive-vestibular-kinesthetic loop, which has been shown to help train children with Down syndrome. Andrews discovered that children with Down syndrome were more precise when sketching a form after tracing it with their fingertips than when they looked at it straight on. Henderson concludes that this strategy works because physical direction forces an order on information extraction, and when the child's attention is brought to the source of information and tuned to it, it becomes controllable.⁵⁴

4. Word Recognition Method

Word recognition is the ability to recognize written words correctly and with almost no effort. It is sometimes referred to as isolated word recognition because it involves the ability of the reader to recognize individual words from a list without needing similar words for contextual assistance. Word recognition is a way of reading based on the direct perception of words represented by a familiar grouping of letters. The teacher can use pictures and verbal descriptions (via sound) in this method to provide word recognition exercises. In addition, it can also be done by providing instructional tasks, including, for example, spelling and identifying words using increasingly complex actual and

nonsensical words. Once phonemic awareness and word analysis have been established, reading in linked texts is introduced. Adult learners who use this approach seem to improve their ability to recognize words with regular and irregular spelling.⁵⁵

To read with understanding, a child must be familiar with the text's vocabulary, grammar, and syntax. Thus, it is crucial to start introducing reading activities at each child's level. Language development in children with Down syndrome is often slower than in typically developing children. So, it is vital to start teaching a new language using words and phrases they are familiar with and using simple, direct language. Reading is a powerful technique for teaching new vocabulary and grammar to children with Down syndrome as they progress and acquire comfort in reading simple books using familiar language. Reading activities can begin once a youngster can understand between 50 and 100 words and choose an appropriate picture for each one. The same methods in this activity would be used to teach words with a visual theme, for example, by matching pictures. Then, the child can name words using cues or words spoken according to the pictures provided.⁵⁶

D. Islamic Learning Methods for Down Syndrome Children

Several types of Islamic learning methods can be applied to children with Down syndrome. The examples of the learning methods can be seen in Table 1.

Table 1. Islamic Learning Methods for Down Syndrome Children

No.	Methods	Authors	Description
1.	Talaqqi wa Musyafahah	Norhisham bin Muhamad, Azmil bin Hashim, Wahyu Hidayat Bin Abdullah, Muhammad Akramin Bin Kamarul Zaman, and Fatin Ardani Binti Zamri (2019)	Talaqqi and Musyafahah are traditional Islamic methods for Quranic learning, emphasizing repetition, memorization, and interactive activities. Adapting for children with Down syndrome involves simplifying language, using visuals, and providing individualized attention.
		Rony Sandra Zebua and Arief Setiawan (2020)	
2.	Al-Quran Therapy Method	Zulkafli (2020)	Al-Quran Therapy utilizes Quranic verses for therapeutic benefits in children with mental disabilities like Down syndrome. Adaptations involve simplifying language, using visuals, repetition, positive reinforcement, and creating an inclusive learning environment.
3.	Islamic Full Communication	Hamdi Ishak, Ezzat Farqan, and Ashraf Ismail (2020)	The Islamic Full Communication Method integrates Islamic values, emphasizing positive communication, inclusivity, non-verbal cues, Quranic language, and role-playing. It supports children with Down syndrome in developing communication skills, self-esteem, and community participation.
		Zulkafli (2020)	

Comprehending learning methods is a crucial prerequisite for attaining the aims and objectives of teaching. It holds the potential to be a valuable and meaningful experience for children with Down syndrome, similar to its impact on all children. However, it is crucial to consider their unique learning needs and provide appropriate support to help them engage with Islamic teachings. Finding learning methods for Down syndrome children should aim to make it easier, both from the side of teachers and students. This principle is in accordance with the hadith of the Prophet Muhammad SAW., in Sahih Bukhari, he said:

حَدَّثَنَا آدَمُ حَدَّثَنَا شُعْبَةُ عَنْ أَبِي التَّيَّاحِ قَالَ سَمِعْتُ أَنَسَ بْنَ مَالِكٍ رَضِيَ اللَّهُ عَنْهُ قَالَ قَالَ النَّبِيُّ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ يَسِّرُوا وَلَا تُعَسِّرُوا وَسَكِّنُوا وَلَا تُنْفِرُوا

"Adam had told us about Syu'bah from Abu At Tayyah, and he echoed what Abu At Tayyah had said: "Make things easy and do not make them difficult." This is something I heard Anas bin Malik Radhiallahu'anhu say the Prophet SAW had stated. Get them to relax, and do not make life too hard for them. in motion."⁵⁷

As in the explanation of the previous method, the teacher should include tools and visual aids, such as pictures or as well as using props that contain diagrams and exciting visuals, bearing in mind that they are more sensitive to visuals than audio. Always use soft and essential words in giving instructions and directions during learning. In addition, assuming that the Al-Quran is a cure for all diseases, all types of Islamic learning methods for children with Down syndrome will be centered and derived from the Al-Quran itself. Recalling that the Al-Quran is the primary source of the philosophy of life for a Muslim, all aspects of a Muslim's life must originate from the Al-Quran. It is essential to provide individualized support and guidance to children with Down syndrome as they engage with Islamic teachings. By using appropriate Islamic learning methods, children with Down syndrome can develop their Islamic knowledge and understanding, build their self-esteem, and strengthen their connection with Allah SWT.

Some Islamic learning methods that can be applied to educate children with Down syndrome are the Talaqqi wa Musyafahah, the Al-Quran Therapy Method, and the Islamic Full Communications Method.

1. Talaqqi wa Musyafahah Method

Talaqqi means reading before the teacher, while musyafahah means the teacher reads first, and then the students follow. The Talaqqi and Musyafahah methods hold significant importance in Islamic learning. The Talaqqi method refers to the traditional practice of acquiring knowledge by directly reciting and repeating the teachings under the guidance of a knowledgeable instructor. This method emphasizes oral transmission and memorization of Islamic texts, such as the Qur'an and Hadiths. Through Talaqqi, students develop a strong foundation in understanding and retaining Islamic knowledge.

On the other hand, the Musyafahah method focuses on fostering a sense of brotherhood and unity among learners. It involves interactive and cooperative activities, such as mutual greetings, handshakes, and embracing, which promote bonding and create an atmosphere of love and respect within the learning environment. The Musyafahah method aims to cultivate positive social and emotional skills while instilling Islamic values of compassion, empathy, and harmony. Both the Talaqqi and Musyafahah methods play crucial roles in Islamic education, allowing students to engage actively with the teachings of Islam and develop a deep connection with their faith.⁵⁸

In order to improve the understanding, reading, and retention of the teachings of the Qur'an for pupils with Down syndrome, it is essential to integrate inventive and captivating methods specifically designed to cater to their distinct requirements and capabilities. Abdulaziz suggested incorporating colorful diagrams and posters can effectively engage children with disabilities like Down syndrome during Qur'an teaching sessions. By using visually appealing materials, teachers can capture the attention and interest of these students, making the learning experience more enjoyable and interactive. One practical activity that can be employed is using a projector to display letters and images. This visual aid not only reinforces the material being taught but also caters to the visual learning preferences of students with Down syndrome, enhancing their understanding and retention of the content. Integrating visually stimulating elements in Qur'an education can significantly benefit students with Down syndrome, making learning more engaging and effective.

Additionally, teachers can utilize videos as a learning tool, specifically focusing on word pronunciation and accurate lip movements. This approach aligns with the teachings of the Qur'an, particularly Surah Al-Baqarah (2), verse 151:

كَمَا أَرْسَلْنَا فِيكُمْ رَسُولًا مِّنكُمْ يَتْلُوا عَلَيْكُمْ ءَايَاتِنَا وَيُزَكِّيكُمْ وَيُعَلِّمُكُمُ الْكِتَابَ وَالْحِكْمَةَ وَيُعَلِّمُكُم
مَا لَمْ تَكُونُوا تَعْلَمُونَ

"As (We have perfected Our favor to you) We have sent you a Messenger among you who recites Our verses to you, purifies you, teaches you the Book and Al-Hikmah, and teaches you what you do not know."

Surah Al-Baqarah (2), verse 151, contains several concepts related to learning methods that align with the abovementioned approaches, particularly in reading methods. The verse emphasizes the importance of recitation and reading, as it states the "following" word of *يَتْلُوا* (to follow or read or tell), and the exact meaning of this word in the verse is "reading." Furthermore, the word "reading" implied in this verse refers to the action of reading the verses of Allah or Qauliyah, which are described from the words *أَلْكِتَابِ* (Al-Kitaba) and the verses in the form of all creations of Allah or Kauniyah *أَلْحِكْمَةَ* (Al-Hikmah). Then, the teaching method, which is specifically described in the word *عَلَّمَكُمْ* (to teach), is to teach those who need knowledge by providing sound guidance.⁶¹

Thus, it can be concluded that Talaqqi wa Musyafahah is a traditional Islamic method of learning and teaching the Quran. The method involves a teacher reciting the Quranic verses while the student listens and repeats after the teacher. The teacher then corrects the student's recitation, guiding them to perfect their pronunciation and intonation. Talaqqi wa Musyafahah involves a one-on-one or small group learning environment where the teacher provides individualized attention to each student. The method allows for a personalized learning experience, where the teacher can tailor their teaching approach to the specific needs of each student.

In Talaqqi wa Musyafahah, the teacher not only corrects the student's pronunciation but also guides the proper recitation rules, such as the rules of Tajweed. The method emphasizes the importance of understanding and reflecting on the Quranic verses and encourages students to develop a personal connection with the Quran. Talaqqi wa Musyafahah is a beneficial method of learning the Quran for children with Down syndrome. The method provides a structured and personalized learning environment where they can receive individualized attention and guidance from a teacher. The method also emphasizes the importance of understanding and reflecting on the Quranic verses, which can help to build their Islamic knowledge and understanding.

2. Al-Quran Therapy Method

In Islamic learning, teachers can simplify teaching for children with Down syndrome using colorful aids and incorporating Qur'an recitation. Research suggests that reading the Holy Qur'an to these children reduces behavioral problems and promotes emotional well-being, creating a sense of tranquility. Integrating Qur'an reading into therapy programs can improve behavioral challenges and foster a more harmonious emotional state.⁶²

The Al-Qur'an therapy method is in accordance with the concept described in Surah Yunus (10), verse 57, which emphasizes the healing and therapeutic nature of the Qur'an for those who listen to it. The verse states:

يَأْتِيهَا النَّاسُ قَدْ جَاءَتْكُمْ مَوْعِظَةٌ مِّن رَّبِّكُمْ وَشِفَاءٌ لِّمَا فِي الصُّدُورِ وَهُدًى وَرَحْمَةٌ لِّلْمُؤْمِنِينَ

"O people, verily there has come to you a lesson from your Lord and a cure for the diseases (which are) in the chest and guidance and mercy for those who believe."

This verse highlights the Qur'an's dual role as a guide and a remedy for spiritual ailments. Active listening to the Qur'an, using techniques such as tahfidz with audio-visual media, can promote healing and facilitate the development of one's spiritual and emotional well-being. This practice can be particularly beneficial for individuals, especially those with Down syndrome, in the context of Islamic education. Al-Quran Therapy is an Islamic approach that uses the Quranic verses and teachings as a means of therapy for various psychological and emotional issues. The method involves reciting, reflecting, and contemplating specific Quranic verses to address psychological or emotional challenges. Al-Quran Therapy can be beneficial for children with Down syndrome who may experience emotional and behavioral challenges. Several adaptations can be made to facilitate the support of children with Down syndrome through Al-Quran Therapy, such as:⁶³

- a). Simplified Language: Al-Quran Therapy simplifies verses for better accessibility, aiding children with Down syndrome in engaging with and understanding Quranic teachings.
- b). Visual Aids: Incorporating pictures, diagrams, and videos enhances comprehension of Quranic verses, making Al-Quran Therapy more effective for children with Down syndrome.
- c). Repetition and Reinforcement: Al-Quran Therapy reinforces learning through repeated verses and regular reviews, catering to the specific learning needs of children with Down syndrome.
- d). Positive Reinforcement: Offering positive reinforcement and encouragement in Al-Quran
- e). Therapy motivates and supports children with Down syndrome, boosting self-esteem and overcoming challenges.
- f). Inclusive Environment: Creating inclusive learning environments ensures children with Down syndrome feel welcomed and supported in Al-Quran Therapy, fostering a sense of belonging.

Al-Quran Therapy can provide a holistic approach to supporting children with Down syndrome, addressing not only their cognitive and intellectual aspects but also their emotional and psychological needs. By adapting the therapy to meet their unique needs, children with Down syndrome can benefit from the spiritual and emotional support provided by Al-Quran Therapy.

3. Islamic Full Communication Method

Children with Down syndrome desire communication benefits from support and simplified language. Encouraging their unique learning styles, the Islamic Full Communication Method integrates Islamic values into strategies, emphasizing effective communication for positive relationships and harmony within the community. Various communication media, including sign

language, assist these children in conveying their thoughts and information effectively.⁶⁴

The full Islamic communications method was previously exemplified by the Prophet Muhammad SAW. in the hadith of Abu Daud (Sahih according to Muhammad Nashiruddin Al-Abani):

*"Tells us Muhammad bin Al 'Ala said had informed us Muhammad bin Bisyr from Mis'ar, he said, "I heard a shaykh in the mosque say, "I heard Jabir bin Abdullah say, That the words of Rasulallah SAW. Tartil (clear)."*⁶⁵

Then clarified in the same hadith (Hasan according to Muhammad Nashiruddin Al- Abani"), which mentions tartil or clear with the definition as follows:

*"Had told us Uthman and Abu Bakr -both sons of Abu Syaibah- both said, had told us Waki ' from Sufyan from Abu Usamah from Az Zuhri from Urwah from 'Aisyah -may Allah have mercy on him- he said, "The words of Rasulallah ﷺ are clear so that it can be understood by anyone who hears it."*⁶⁶

These two hadiths show how the Prophet Muhammad SAW., teaches his people always to speak clearly so those who listen can understand it. Avoid speaking too long and loudly, which can cause listeners to misinterpret the message. Furthermore, long-winded communication will saturate the conversation and make the listener uncomfortable. Continuous engagement in dialogue can eventually undermine the sincerity of the listener, mainly when the listener is a child with Down syndrome.

According to Ishak et al., the Islamic Full Communication Method (IFCM) can be customized to enhance the communication skills of children with Down syndrome. Several specific approaches that can be employed within the IFCM to provide support for children with Down syndrome are:⁶⁷

- a). Positive Communication: IFCM promotes using polite language, active listening, and clear expression to build better relationships, boost confidence, and empower children with Down syndrome.
- b). Inclusive Communication: IFCM recognizes diversity, and inclusive communication ensures children with Down syndrome feel welcomed and part of their community, enhancing their sense of belonging.
- c). Non-Verbal Communication: IFCM stresses the importance of appropriate non-verbal cues like facial expressions and body language for conveying emotions and ideas, aiding children with Down syndrome in expression and understanding.
- d). Quranic Language: Incorporating Quranic language, IFCM teaches children with Down syndrome verses emphasizing effective communication, kindness, empathy, and forgiveness.
- e). Role-Playing: A valuable tool for practicing communication skills, role-playing in IFCM involves simulating real-life scenarios helping children with Down syndrome with asking for help, making requests, and expressing emotions.

The IFCM has the potential to be an effective method for helping kids with Down syndrome learn how to communicate. Children with Down syndrome can benefit from the incorporation of Islamic beliefs and teachings into communication tactics in the areas of socialization, self-esteem building, and community participation.

Conclusion

Children with Down syndrome benefit visually from approaches that consider their three distinct psychological needs. The act of drawing has been shown to improve linguistic, phonological, and lexical abilities. Following the classification of mental retardation level that appears in children with Down syndrome, there are at least four learning methods or methods that can be applied, such as On Task Behavior, Imitation, Discriminative Use of Objects, and Word Recognition methods. Islamic learning methods suitable for children with Down syndrome encompass the Talaqqi wa Musyafahah method, Al-Quran therapy, and Islamic Full Communication.

In conclusion, children with Down syndrome can benefit from various Islamic learning methods that integrate Islamic values and teachings into their education and therapy. The Talaqqi wa Musyafahah method, along with the Al-Quran Therapy approach, can be modified and utilized to effectively support children with Down syndrome in enhancing their cognitive, intellectual, emotional, and psychological capabilities. These methods can be tailored to meet children with Down syndrome's specific needs and learning styles, helping them develop and strengthen their overall well-being. By incorporating elements from these approaches, educators and therapists can create a supportive and enriching environment that fosters the growth and development of children with Down syndrome.

The Talaqqi wa Musyafahah method, rooted in oral transmission and memorization, provides a structured and personalized learning environment that can benefit children with Down syndrome. However, adaptations, such as simplifying language and using visual aids, are necessary to meet their specific needs effectively. Al-Quran Therapy is shown to have therapeutic benefits for children with mental disabilities, including those with Down syndrome, by promoting emotional well-being. Its adaptability is essential, incorporating simplified language, visual aids, and positive reinforcement to enhance its effectiveness.

The Islamic Full Communication Method (IFCM) can be implemented to assist children with Down syndrome to enhance their communication abilities. This method focuses on various aspects of communication, such as positive communication, inclusive communication, non-verbal communication, Quranic language, and role-playing. By incorporating IFCM, educators, and therapists can effectively support children with Down syndrome in developing their communication skills within an Islamic context. These methods can provide a holistic approach to supporting the development and well-being of children with Down syndrome, enabling them to thrive and reach their full potential within their community and further. The Islamic Full Communication Method (IFCM) integrates Islamic values into communication strategies, emphasizing practical communication skills. By customizing IFCM for children with Down syndrome, incorporating positive communication, inclusive communication, non-verbal communication, Quranic language, and role-playing, these children can develop communication skills, socialize effectively, and boost their self-esteem.

This research highlights the potential for these methods to support inclusive Islamic education for children with Down syndrome while underscoring the importance of adaptability and further research in this area. Bridging the gap between traditional teaching methods and the unique requirements of these children within the context of Islamic education is a critical step toward creating an inclusive and empowering learning environment.

ENDNOTES

- ¹ Yusmini Md Yusoff and Azura Awang, "Kepentingan Nilai-Nilai Islam Dalam Pembangunan Diri Orang Kelainan Upaya (OKU) Kategori Bermasalah Pembelajaran," *Jurnal Usuluddin* 47, no. 1 (2019): 105–18, <https://doi.org/10.22452/usuluddin.sp2019no1.5>.
- ² Izuli Dzulkifli et al., "Teacher Communication in Teaching Al-Quran to Special Needs Pupils with Hearing Disabilities," *Universal Journal of Educational Research* 8, no. 1A (2020): 36–43, <https://doi.org/10.13189/ujer.2020.081306>.
- ³ Jerome F. Strauss and Robert L. Barbieri, *Yen and Jaffe's Reproductive Endocrinology: Physiology, Pathophysiology, and Clinical Management*, 6th ed. (Philadelphia: Elsevier, 2009), 791.
- ⁴ S B Wibowo and J A Muin, "Inclusive Education in Indonesia: Equality Education Access for Disabilities," in *KnE Social Sciences*, vol. 3, 2018, 484–93, <https://doi.org/10.18502/kss.v3i5.2351>.
- ⁵ David Mitchell, ed., *Contextualizing Inclusive Education: Evaluating Old and New International Paradigms* (Oxfordshire: Routledge, 2005), 5.
- ⁶ A. M. Juhri and S. B. Wibowo, "Pengembangan Model Lesson Study Untuk Sekolah Inklusi SMP Negeri Di Kota Metro" 1, no. 1 (2016): 1–15, <https://doi.org/10.24127/jlplppm.v1i1.80>.
- ⁷ M. Basyiruddin Usman, *Metodologi Pembelajaran Agama Islam*, 3rd ed. (Jakarta: Ciputat Press, 2005).
- ⁸ Rebecca Armstrong et al., "Cochrane Update. 'Scoping the Scope' of a Cochrane Review," *Journal of Public Health* 33, no. 1 (2011): 147–50, <https://doi.org/10.1093/pubmed/fdr015>.
- ⁹ Ramayulis, *Metode Pendidikan Agama Islam* (Jakarta: Kalam Mulia, 2005), 22.
- ¹⁰ Taufik Abdullah and Sharon Shidqie, *Tradisi Dan Kebangkitan Islam Di Asia Tenggara*, trans. Rochman Ahwan (Jakarta: LP3ES, 1989), 409.
- ¹¹ Ahmad D. Marimba, *Pengantar Filsafat Pendidikan Islam* (Bandung: Al-Ma'arif, 1980), 19.
- ¹² Kemas Abdul Hai, "The Islamic Education Methods in Al-Quran," *Ta'dib: Journal of Islamic Education* 22, no. 1 (2017): 48–57, <https://doi.org/10.19109/td.v22i1.1621>.
- ¹³ Usman, *Metodologi Pembelajaran Agama Islam*, 33.
- ¹⁴ Abdurrahman An-Nahlawi, *Pendidikan Islam Di Rumah Sekolah Dan Masyarakat* (Jakarta: Gema Insani, 1995), 204.
- ¹⁵ Muhammad Quraish Shihab, *Tafsir Al-Mishbah: Pesan, Kesan Dan Keserasian Al-Quran*, 5th ed. (Jakarta: Lentera Hati, 2005), 31.
- ¹⁶ Caroline Mansfield, Suellen Hopfer, and Theresa M. Marteau, "Termination Rates after Prenatal Diagnosis of Down Syndrome, Spina Bifida, Anencephaly, and Turner and Klinefelter Syndromes: A Systematic Literature Review," *Prenatal Diagnosis* 19, no. 9 (September 1999): 808–12, [https://doi.org/10.1002/\(SICI\)1097-0223\(199909\)19:9<808::AID-PD637>3.0.CO;2-B](https://doi.org/10.1002/(SICI)1097-0223(199909)19:9<808::AID-PD637>3.0.CO;2-B); Jaime L. Natoli et al., "Prenatal Diagnosis of Down Syndrome: A Systematic Review of Termination Rates (1995-2011): Prenatal Diagnosis of down Syndrome: Systematic Review," *Prenatal Diagnosis* 32, no. 2 (February 2012): 142–53, <https://doi.org/10.1002/pd.2910>; Valerie Seror et al., "Women's Attitudes Toward Invasive and Noninvasive Testing When Facing a High Risk of Fetal Down Syndrome," *JAMA Network Open* 2, no. 3 (March 29, 2019): e191062, <https://doi.org/10.1001/jamanetworkopen.2019.1062>.
- ¹⁷ *APA Dictionary of Psychology*, 2nd ed. (Washington: American Psychological Association, 2015), 334.
- ¹⁸ Eva Albertsen Malt et al., "Helse og sykdom hos voksne med Downs syndrom," *Tidsskrift for Den norske legeförening* 133, no. 3 (2013): 290–94, <https://doi.org/10.4045/tidsskr.12.0390>.
- ¹⁹ Liyuan Chen et al., "Global, Regional, and National Burden and Trends of Down Syndrome From 1990 to 2019," *Frontiers in Genetics* 13 (July 15, 2022): 908482, <https://doi.org/10.3389/fgene.2022.908482>.
- ²⁰ Michel E. Weijerman and J. Peter de Winter, "Clinical Practice: The Care of Children with Down Syndrome," *European Journal of Pediatrics* 169, no. 12 (December 2010): 1445–52, <https://doi.org/10.1007/s00431-010-1253-0>.
- ²¹ Theo Vos et al., "Global, Regional, and National Incidence, Prevalence, and Years Lived with Disability for 310 Diseases and Injuries, 1990–2015: A Systematic Analysis for the Global Burden of Disease Study 2015," *The Lancet* 388, no. 10053 (October 2016): 1545–1602, [https://doi.org/10.1016/S0140-6736\(16\)31678-6](https://doi.org/10.1016/S0140-6736(16)31678-6).
- ²² United Nations, "Down Syndrome," World Down Syndrome Day 21 March, March 21, 2022, <https://www.un.org/en/observances/down-syndrome-day>.
- ²³ Rhonda Faragher and Barbara Clarke, eds., *Educating Learners with Down Syndrome: Research, Theory, and Practice with Children and Adolescents* (New York: Routledge, 2014), 5.
- ²⁴ Malt et al., "Helse og sykdom hos voksne med Downs syndrom."
- ²⁵ Gary D. Hammer, "Pathophysiology of Selected Genetic Diseases," in *Pathophysiology of Disease: An Introduction to Clinical Medicine*, 6 (New York: McGraw-Hill Medical, 2010).

- ²⁶Fran Hickey, Erin Hickey, and Karen L. Summar, "Medical Update for Children With Down Syndrome for the Pediatrician and Family Practitioner," *Advances in Pediatrics* 59, no. 1 (January 2012): 137–57, <https://doi.org/10.1016/j.yapd.2012.04.006>.
- ²⁷Hammer, "Pathophysiology of Selected Genetic Diseases."
- ²⁸Linda Nelson et al., "Learning and Memory as a Function of Age in Down Syndrome: A Study Using Animal-Based Tasks," *Progress in Neuro-Psychopharmacology and Biological Psychiatry* 29, no. 3 (March 2005): 443–53, <https://doi.org/10.1016/j.pnpbp.2004.12.009>.
- ²⁹Debbie Clark and Golder N. Wilson, "Behavioral Assessment of Children with Down Syndrome Using the Reiss Psychopathology Scale," *American Journal of Medical Genetics* 118A, no. 3 (April 30, 2003): 210–16, <https://doi.org/10.1002/ajmg.a.20007>.
- ³⁰Mark Batshaw, ed., *Children with Disabilities*, 5 (Baltimore: Brookes, 2005), 308.
- ³¹A. H. Bittles et al., "The Four Ages of Down Syndrome," *The European Journal of Public Health* 17, no. 2 (February 13, 2007): 221–25, <https://doi.org/10.1093/eurpub/ckl103>.
- ³²T. Patterson, C. M. Rapsey, and P. Glue, "Systematic Review of Cognitive Development across Childhood in Down Syndrome: Implications for Treatment Interventions: Cognitive Development in Down Syndrome," *Journal of Intellectual Disability Research* 57, no. 4 (April 2013): 306–18, <https://doi.org/10.1111/j.1365-2788.2012.01536.x>; C. Reilly, "Behavioural Phenotypes and Special Educational Needs: Is Aetiology Important in the Classroom?: Aetiology in the Classroom," *Journal of Intellectual Disability Research* 56, no. 10 (October 2012): 929–46, <https://doi.org/10.1111/j.1365-2788.2012.01542.x>.
- ³³Dennis McGuire and Brian Chicoine, *Mental Wellness in Adults with Down Syndrome* (Bethesda: Woodbine House, 2006), 49.
- ³⁴Malt et al., "Helse og sykdom hos voksne med Downs syndrom."
- ³⁵"Infants' Persistence at Tasks: Relationships to Cognitive Functioning and Early Experience," *Infant Behavior and Development* 5, no. 2–4 (January 1982): 131–41, [https://doi.org/10.1016/S0163-6383\(82\)80023-4](https://doi.org/10.1016/S0163-6383(82)80023-4).
- ³⁶"The Temperament Of Down's Syndrome Toddlers and Their Siblings," *Journal of Child Psychology and Psychiatry* 26, no. 6 (November 1985): 973–79, <https://doi.org/10.1111/j.1469-7610.1985.tb00610.x>.
- ³⁷Jean-Adolphe Rondal and Alberto Rasore Quartino, eds., *Therapies and Rehabilitation in Down Syndrome* (Chichester: John Wiley & Sons, 2007), 116.
- ³⁸*Diagnostic and Statistical Manual of Mental Disorders*, 3rd ed. (Washington: APA, 1980), 222.
- ³⁹Hickey, Hickey, and Summar, "Medical Update for Children With Down Syndrome for the Pediatrician and Family Practitioner"; Reilly, "Behavioural Phenotypes and Special Educational Needs."
- ⁴⁰Ray D. Kent and Hourii K. Vorperian, "Speech Impairment in Down Syndrome: A Review," *Journal of Speech, Language, and Hearing Research* 56, no. 1 (February 2013): 178–210, [https://doi.org/10.1044/1092-4388\(2012/12-0148\)](https://doi.org/10.1044/1092-4388(2012/12-0148)).
- ⁴¹Malt et al., "Helse og sykdom hos voksne med Downs syndrom."
- ⁴²Hickey, Hickey, and Summar, "Medical Update for Children With Down Syndrome for the Pediatrician and Family Practitioner."
- ⁴³Reilly, "Behavioural Phenotypes and Special Educational Needs."
- ⁴⁴"Education of Infants with down Syndrome," *European Journal of Psychology of Education* 4, no. 2 (June 1989): 235–46, <https://doi.org/10.1007/BF03172606>.
- ⁴⁵Matthew T. Mahar, "Classroom-Based Physical Activity and On-Task Behavior," *Translational Journal of the ACSM* 4, no. 17 (2019): 148–54, <https://doi.org/10.1249/TJX.0000000000000099>.
- ⁴⁶David Stein, *Behavior and Down Syndrome: A Practical Guide for Parents* (Boston: Developmental Medicine Center Children's Hospital, 2011), 7.
- ⁴⁷Christos Ganos et al., "The Pathophysiology of Echopraxia/Echolalia: Relevance to Gilles De La Tourette Syndrome," *Movement Disorders* 27, no. 10 (September 1, 2012): 1222–29, <https://doi.org/10.1002/mds.25103>.
- ⁴⁸Cecilia Heyes, "Grist and Mills: On the Cultural Origins of Cultural Learning," *Philosophical Transactions of the Royal Society B: Biological Sciences* 367, no. 1599 (August 5, 2012): 2181–91, <https://doi.org/10.1098/rstb.2012.0120>.
- ⁴⁹Stein, *Behavior and Down Syndrome: A Practical Guide for Parents*, 11.
- ⁵⁰Joanne E. Roberts, Johanna Price, and Cheryl Malkin, "Language and Communication Development in down Syndrome," *Mental Retardation and Developmental Disabilities Research Reviews* 13, no. 1 (2007): 26–35, <https://doi.org/10.1002/mrdd.20136>.
- ⁵¹Wenxi Zhou, Haoyu Chen, and Jiongiong Yang, "Discriminative Learning of Similar Objects Enhances Memory for the Objects and Contexts," *Learning & Memory* 25, no. 12 (December 2018): 601–10, <https://doi.org/10.1101/lm.047514.118>.

- ⁵²David Gibson and Donald L. Fields, "Early Infant Stimulation Programs for Children with Down Syndrome: A Review of Effectiveness," *Advances in Developmental & Behavioral Pediatrics* 5 (1984): 331–71.
- ⁵³P. Gunn, P. Berry, and R. J. Andrews, "The Affective Response of Down's Syndrome Infants to a Repeated Event," *Child Development* 52, no. 2 (1981): 745–48.
- ⁵⁴S. E. Henderson, "Motor Skill Development," in *Current Approaches to Down's Syndrome* (London: Holt, Rinehart and Winston, 1985), 210.
- ⁵⁵John Krudeiner, *Research-Based Principles for Adult Basic Education Reading Instruction* (New Hampshire: RMC Research Corporation, 2002), 45–46.
- ⁵⁶Julie Hughes, "Teaching Reading Skills to Children with Down Syndrome," *Down Syndrome News and Update* 6, no. 2 (2006): 62–65.
- ⁵⁷Muhammad ibn Isma'il al-Bukhari, *The Translation of the Meanings of Sahih Al-Bukhari: Arabic-English*, trans. Muhammad Muhsin Khan, vol. 8 (Riyadh: Maktaba Dar-us-Salam, 1997), no. 6125.
- ⁵⁸N. B. Muhamad et al., "Kaedah Talaqqi Musyafahah Dalam Pengajaran Al Quran Wa Al-Hifz Kurikulum Dini SABK Di Perak," *International Journal of Education* 4, no. 32 (2019): 273–83, <https://doi.org/10.35631/IJEPC.4320025>.
- ⁵⁹Muhammad Zulazizi Mohd Nawawi, Mohd Rashidi Omar, and Norhisham Muhammad, "Pembacaan Al-Quran dalam Pendidikan Masa Kini: Satu Tinjauan Umum" 6, no. 1 (2021).
- ⁶⁰A. M. Abdulaziz, A. K. Mohamad, and M. M. Zarif, *Panduan & Bimbingan Guru Al-Quran: Keperibadian, Pengetahuan Dan Pengajaran* (Putrajaya: Yayasan Dakwah Islamiah Malaysia, 2006).
- ⁶¹Rony Sandra Zebua and Arief Setiawan, *Tafsir Ayat-Ayat Al-Quran Tentang Konsep Metode Pembelajaran (Panduan Pengembangan Metode Pembelajaran)* (Bandung: Universitas Islam Bandung, 2020).
- ⁶²N. S. Zulkafli, "Kesan Terapi Bunyi Melalui Bacaan Surah Al-Rahman Terhadap Tingkahlaku Kanak-Kanak Autisme Di Persatuan Kanak-Kanak Istimewa Bangi (PKIB)" (Thesis, Selangor, Universiti Kebangsaan Malaysia, 2020).
- ⁶³Ibid.
- ⁶⁴Ibid.
- ⁶⁵Abu Dawud al-Sijistani, *English Translation of Sunan Abu Dawud*, ed. Hâfiz Abu Tâhir Zubair 'All Za'I and Huda Khattab, trans. Nasiruddin Al-Khattab, vol. 5 (Riyadh: Maktaba Dar-us-Salam, 2008), no. 4838.
- ⁶⁶Ibid., vol. 5, no. 4389.
- ⁶⁷Hamdi Ishak, Ezzat Farqan, and Ashraf Ismail, "Issues and Challenges of Teaching The Quran to Children with Down Syndrome," *International Journal of Academic Research in Business and Social Sciences* 12, no. 5 (May 4, 2022): Pages 157-171, <https://doi.org/10.6007/IJARBS/v12-i5/13126>.

REFERENCES

- Abdulaziz, A. M., A. K. Mohamad, and M. M. Zarif. *Panduan & Bimbingan Guru Al-Quran: Keperibadian, Pengetahuan Dan Pengajaran*. Putrajaya: Yayasan Dakwah Islamiah Malaysia, 2006.
- Abdullah, Taufik, and Sharon Shidqie. *Tradisi Dan Kebangkitan Islam Di Asia Tenggara*. Translated by Rochman Ahwan. Jakarta: LP3ES, 1989.
- Abu Dawud al-Sijistani. *English Translation of Sunan Abu Dawud*. Edited by Hâfiz Abu Tâhir Zubair 'All Za'I and Huda Khattab. Translated by Nasiruddin Al-Khattab. Vol. 5. Riyadh: Maktaba Dar-us-Salam, 2008.
- American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 3rd ed. Washington: APA, 1980.
- An-Nahlawi, Abdurrahman. *Pendidikan Islam Di Rumah Sekolah Dan Masyarakat*. Jakarta: Gema Insani, 1995.
- Armstrong, Rebecca, Belinda J. Hall, Jodie Doyle, and Elizabeth Waters. "Cochrane Update. 'Scoping the Scope' of a Cochrane Review." *Journal of Public Health* 33, no. 1 (2011): 147–50. <https://doi.org/10.1093/pubmed/fdr015>.
- Batshaw, Mark, ed. *Children with Disabilities*. 5. Baltimore: Brookes, 2005.
- Bittles, A. H., C. Bower, R. Hussain, and E. J. Glasson. "The Four Ages of Down Syndrome." *The European Journal of Public Health* 17, no. 2 (February 13, 2007): 221–25. <https://doi.org/10.1093/eurpub/ckl103>.
- Chen, Liyuan, Lifei Wang, Yi Wang, Haishan Hu, Yuan Zhan, Zhilin Zeng, and Lidan Liu. "Global, Regional, and National Burden and Trends of Down Syndrome From 1990 to 2019." *Frontiers in Genetics* 13 (July 15, 2022): 908482. <https://doi.org/10.3389/fgene.2022.908482>.

- Clark, Debbie, and Golder N. Wilson. "Behavioral Assessment of Children with Down Syndrome Using the Reiss Psychopathology Scale." *American Journal of Medical Genetics* 118A, no. 3 (April 30, 2003): 210–16. <https://doi.org/10.1002/ajmg.a.20007>.
- Dzulkifli, Izuli, Asmawati Suhid, Mohd Fakhruddin Fakhruddin, and Nor Aniza Ahmad. "Teacher Communication in Teaching Al-Quran to Special Needs Pupils with Hearing Disabilities." *Universal Journal of Educational Research* 8, no. 1A (2020): 36–43. <https://doi.org/10.13189/ujer.2020.081306>.
- Faragher, Rhonda, and Barbara Clarke, eds. *Educating Learners with Down Syndrome: Research, Theory, and Practice with Children and Adolescents*. New York: Routledge, 2014.
- Ganos, Christos, Timo Ogrzal, Alfons Schnitzler, and Alexander Münchau. "The Pathophysiology of Echopraxia/Echolalia: Relevance to Gilles De La Tourette Syndrome." *Movement Disorders* 27, no. 10 (September 1, 2012): 1222–29. <https://doi.org/10.1002/mds.25103>.
- Gibson, David, and Donald L. Fields. "Early Infant Stimulation Programs for Children with Down Syndrome: A Review of Effectiveness." *Advances in Developmental & Behavioral Pediatrics* 5 (1984): 331–71.
- Gunn, P., and P. Berry. "The Temperament Of Down's Syndrome Toddlers and Their Siblings." *Journal of Child Psychology and Psychiatry* 26, no. 6 (November 1985): 973–79. <https://doi.org/10.1111/j.1469-7610.1985.tb00610.x>.
- Gunn, P., P. Berry, and R. J. Andrews. "The Affective Response of Down's Syndrome Infants to a Repeated Event." *Child Development* 52, no. 2 (1981): 745–48.
- Gunn, Pat, and Paul Berry. "Education of Infants with down Syndrome." *European Journal of Psychology of Education* 4, no. 2 (June 1989): 235–46. <https://doi.org/10.1007/BF03172606>.
- Hai, Kemas Abdul. "The Islamic Education Methods in Al-Quran." *Ta'dib: Journal of Islamic Education* 22, no. 1 (2017): 48–57. <https://doi.org/10.19109/td.v22i1.1621>.
- Hammer, Gary D. "Pathophysiology of Selected Genetic Diseases." In *Pathophysiology of Disease: An Introduction to Clinical Medicine*. 6. New York: McGraw-Hill Medical, 2010.
- Henderson, S. E. "Motor Skill Development." In *Current Approaches to Down's Syndrome*. London: Holt, Rinehart and Winston, 1985.
- Heyes, Cecilia. "Grist and Mills: On the Cultural Origins of Cultural Learning." *Philosophical Transactions of the Royal Society B: Biological Sciences* 367, no. 1599 (August 5, 2012): 2181–91. <https://doi.org/10.1098/rstb.2012.0120>.
- Hickey, Fran, Erin Hickey, and Karen L. Summar. "Medical Update for Children With Down Syndrome for the Pediatrician and Family Practitioner." *Advances in Pediatrics* 59, no. 1 (January 2012): 137–57. <https://doi.org/10.1016/j.yapd.2012.04.006>.
- Hughes, Julie. "Teaching Reading Skills to Children with Down Syndrome." *Down Syndrome News and Update* 6, no. 2 (2006): 62–65.
- Ishak, Hamdi, Ezzat Farqan, and Ashraf Ismail. "Issues and Challenges of Teaching The Quran to Children with Down Syndrome." *International Journal of Academic Research in Business and Social Sciences* 12, no. 5 (May 4, 2022): Pages 157-171. <https://doi.org/10.6007/IJARBSS/v12-i5/13126>.
- Juhri, A. M., and S. B. Wibowo. "Pengembangan Model Lesson Study Untuk Sekolah Inklusi SMP Negeri Di Kota Metro" 1, no. 1 (2016): 1–15. <https://doi.org/10.24127/jlplppm.v1i1.80>.
- Kent, Ray D., and Hourii K. Vorperian. "Speech Impairment in Down Syndrome: A Review." *Journal of Speech, Language, and Hearing Research* 56, no. 1 (February 2013): 178–210. [https://doi.org/10.1044/1092-4388\(2012/12-0148\)](https://doi.org/10.1044/1092-4388(2012/12-0148)).
- Krudeiner, John. *Reserach-Based Principles for Adult Basic Education Reading Instruction*. New Hampshire: RMC Research Corporation, 2002.
- Mahar, Matthew T. "Classroom-Based Physical Activity and On-Task Behavior." *Translational Journal of the ACSM* 4, no. 17 (2019): 148–54. <https://doi.org/10.1249/TJX.0000000000000099>.
- McGuire, Dennis, and Brian Chicoine. *Mental Wellness in Adults with Down Syndrome*. Bethesda: Woodbine House, 2006.

- Mitchell, David, ed. *Contextualizing Inclusive Education: Evaluating Old and New International Paradigms*. Oxfordshire: Routledge, 2005.
- Muhamad, N. B., A. B. Hashim, W. H. Abdullah, M. A. Zaman, and F. A. Zamri. "Kaedah Talaqqi Musyafahah Dalam Pengajaran Al Quran Wa Al-Hifz Kurikulum Dini SABK Di Perak." *International Journal of Education* 4, no. 32 (2019): 273-83. <https://doi.org/10.35631/IJEPC.4320025>.
- Muhammad ibn Isma'il al-Bukhari. *The Translation of the Meanings of Sahih Al-Bukhari: Arabic- English*. Translated by Muhammad Muhsin Khan. Vol. 8. Riyadh: Maktaba Dar-us-Salam, 1997.
- Natoli, Jaime L., Deborah L. Ackerman, Suzanne McDermott, and Janice G. Edwards. "Prenatal Diagnosis of Down Syndrome: A Systematic Review of Termination Rates (1995-2011): Prenatal Diagnosis of down Syndrome: Systematic Review." *Prenatal Diagnosis* 32, no. 2 (February 2012): 142-53. <https://doi.org/10.1002/pd.2910>.
- Nawi, Muhammad Zulazizi Mohd, Mohd Rashidi Omar, and Norhisham Muhamad. "Pembacaan Al-Quran dalam Pendidikan Masa Kini: Satu Tinjauan Umum" 6, no. 1 (2021).
- Nelson, Linda, Julene K. Johnson, Morris Freedman, Ira Lott, Jantje Groot, Marisa Chang, Norton William Milgram, and Elizabeth Head. "Learning and Memory as a Function of Age in Down Syndrome: A Study Using Animal-Based Tasks." *Progress in Neuro-Psychopharmacology and Biological Psychiatry* 29, no. 3 (March 2005): 443-53. <https://doi.org/10.1016/j.pnpbp.2004.12.009>.
- Patterson, T., C. M. Rapsey, and P. Glue. "Systematic Review of Cognitive Development across Childhood in Down Syndrome: Implications for Treatment Interventions: Cognitive Development in Down Syndrome." *Journal of Intellectual Disability Research* 57, no. 4 (April 2013): 306-18. <https://doi.org/10.1111/j.1365-2788.2012.01536.x>.
- Ramayulis. *Metode Pendidikan Agama Islam*. Jakarta: Kalam Mulia, 2005.
- Reilly, C. "Behavioural Phenotypes and Special Educational Needs: Is Aetiology Important in the Classroom?: Aetiology in the Classroom." *Journal of Intellectual Disability Research* 56, no. 10 (October 2012): 929-46. <https://doi.org/10.1111/j.1365-2788.2012.01542.x>.
- Roberts, Joanne E., Johanna Price, and Cheryl Malkin. "Language and Communication Development in down Syndrome." *Mental Retardation and Developmental Disabilities Research Reviews* 13, no. 1 (2007): 26-35. <https://doi.org/10.1002/mrdd.20136>.
- Rondal, Jean-Adolphe, and Alberto Rasore Quartino, eds. *Therapies and Rehabilitation in Down Syndrome*. Chichester: John Wiley & Sons, 2007.
- Seror, Valerie, Olivier L'Haridon, Laurence Bussi eres, Val erie Malan, Nicolas Fries, Michel Vekemans, Laurent J. Salomon, Yves Ville, and for the SAFE 21 Study Group. "Women's Attitudes Toward Invasive and Noninvasive Testing When Facing a High Risk of Fetal Down Syndrome." *JAMA Network Open* 2, no. 3 (March 29, 2019): e191062. <https://doi.org/10.1001/jamanetworkopen.2019.1062>.
- Shihab, Muhammad Quraisih. *Tafsir Al-Mishbah: Pesan, Kesan Dan Keserasian Al-Quran*. 5th ed. Jakarta: Lentera Hati, 2005.
- Stein, David. *Behavior and Down Syndrome: A Practical Guide for Parents*. Boston: Developmental Medicine Center Children's Hospital, 2011.
- Strauss, Jerome F., and Robert L. Barbieri. *Yen and Jaffe's Reproductive Endocrinology: Physiology, Pathophysiology, and Clinical Management*. 6th ed. Philadelphia: Elsevier, 2009.
- United Nations. "Down Syndrome." World Down Syndrome Day 21 March, March 21, 2022. <https://www.un.org/en/observances/down-syndrome-day>.
- Usman, M. Basyiruddin. *Metodologi Pembelajaran Agama Islam*. 3rd ed. Jakarta: Ciputat Press, 2005.
- Vandenbos, Gary R., ed. *APA Dictionary of Psychology*. 2nd ed. Washington: American Psychological Association, 2015.
- Vos, Theo, Christine Allen, Megha Arora, Ryan M Barber, Zulfiqar A Bhutta, Alexandria Brown, Austin Carter, et al. "Global, Regional, and National Incidence, Prevalence, and Years Lived with Disability for 310 Diseases and Injuries, 1990-2015: A Systematic Analysis for the Global Burden of Disease Study 2015." *The Lancet* 388, no. 10053 (October 2016): 1545-1602. [https://doi.org/10.1016/S0140-6736\(16\)31678-6](https://doi.org/10.1016/S0140-6736(16)31678-6).

- Weijerman, Michel E., and J. Peter de Winter. "Clinical Practice: The Care of Children with Down Syndrome." *European Journal of Pediatrics* 169, no. 12 (December 2010): 1445-52. <https://doi.org/10.1007/s00431-010-1253-0>.
- Wibowo, S B, and J A Muin. "Inclusive Education in Indonesia: Equality Education Access for Disabilities." In *KnE Social Sciences*, 3:484-93, 2018. <https://doi.org/10.18502/kss.v3i5.2351>.
- Yarrow, Leon J., George A. Morgan, Kay D. Jennings, Robert J. Harmon, and Juarlyn L. Gaiter. "Infants' Persistence at Tasks: Relationships to Cognitive Functioning and Early Experience." *Infant Behavior and Development* 5, no. 2-4 (January 1982): 131-41. [https://doi.org/10.1016/S0163-6383\(82\)80023-4](https://doi.org/10.1016/S0163-6383(82)80023-4).
- Yusoff, Yusmini Md, and Azura Awang. "Kepentingan Nilai-Nilai Islam Dalam Pembangunan Diri Orang Kelainan Upaya (OKU) Kategori Bermasalah Pembelajaran." *Jurnal Usuluddin* 47, no. 1 (2019): 105-18. <https://doi.org/10.22452/usuluddin.sp2019no1.5>.
- Zebua, Rony Sandra, and Arief Setiawan. *Tafsir Ayat-Ayat Al-Quran Tentang Konsep Metode Pembelajaran (Panduan Pengembangan Metode Pembelajaran)*. Bandung: Universitas Islam Bandung, 2020.
- Zhou, Wenxi, Haoyu Chen, and Jiongjiong Yang. "Discriminative Learning of Similar Objects Enhances Memory for the Objects and Contexts." *Learning & Memory* 25, no. 12 (December 2018): 601-10. <https://doi.org/10.1101/lm.047514.118>.
- Zulkafli, N. S. "Kesan Terapi Bunyi Melalui Bacaan Surah Al-Rahman Terhadap Tingkahlaku Kanak-Kanak Autisme Di Persatuan Kanak-Kanak Istimewa Bangi (PKIB)." Thesis, Universiti Kebangsaan Malaysia, 2020.