

REATTACH THERAPY FOR IMPROVING SOCIAL SKILLS IN CHILDREN WITH DOWN SYNDROME

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Abstract

Background: Children suffering from Down syndrome generally progress and learn at a slower rate in comparison to the other children. A particular type of behavioural and cognitive pattern has been observed that is different from typical developing children. Children having Down syndrome are generally very sociable and friendly and they like to enjoy being with their peers. It is difficult for them to be socially active and interact with the surrounding people because of having a low mental ability. Therefore, ReAttach therapy can make a positive and strong connection with the parents or friend that can minimise their disabilities of social interaction.

Method: Realism research philosophy has been selected for conducting the study along with deductive research approach and descriptive research design. All the necessary information has been collected from secondary sources such as websites, books, journals and they are analysed by a thematic study. Therefore, a secondary qualitative method is the select data analysis method.

Result: Children's mental development improves with social skills therapy (SST), especially for those with developmental delays or Down syndrome. Individuals with Down syndrome who get early intervention and take part in SST are shown to have better mental skills. The cognitive and social growth of children with Down syndrome could be assisted by dolphin-assisted treatment (DAT). Children experiencing Down syndrome frequently develop delays in language and speech growth, and establishing speech and language therapy is a vital need for them. They could have difficulty speaking due to problems with phonological loops and oral-motor skills.

Conclusion: Studying the different therapies such as SST, DAT or speech and language therapy it can be possible to build a positive change among children having Down syndrome.

Keyword: Down syndrome, social skills, cognitive behaviour, speech and language therapy

Abbreviations: "Social Skills Therapy (SST)", "Dolphin-Assisted Treatment (DAT)", "Down Syndrome (DS)"

INTRODUCTION

Communication with any individual such as family, friends, neighbours or others is termed as social conversation. Nonverbal interactions such as taking rotations, utilizing body language, eye contact, and expressions of emotion, as well as verbal behaviours such as introducing others, maintaining on subject in the conversation by posing and responding to queries and social behaviours. People frequently claim that children with Down syndrome are exceptionally socially focused, meaning that they obtain a lot of happiness and sensation that they belong to when they engage with other individuals. Communication with others may be influenced by an increased incidence of autism among children with Down syndrome. Children with Down syndrome also have problems with learning, which leads them to grow up slowly in various capacities (Novak & Honan, 2019, p.270).

However, there are numerous different kinds associated with educational difficulties and not each aspect of a child's growth is affected in the same way. Better ways to provide instruction and treatment strategies can be guided by such developments. Reattachment therapy is one of the most important ways to provide them proper therapy for developing a normal life. Children with Down syndrome typically develop and learn at a rate that is slower than kids who are normally developing. However, various areas of advancement affect one another in the exact same way. Children with Down syndrome demonstrate an individual set of intelligence and behavioural features in comparison to both typically developing children along with those with intellectual challenges due to other medical conditions. A "developmental profile" is an overview of relative advantages and disadvantages with time. Observing how

children with Down syndrome grow and acquire information allows us to more successfully address their learning and therapeutic demands. In comparison with additional domains of growth and development, interpersonal communication is less imposed in young children and babies with Down syndrome (Light et al. 2019, p.40). Infants having Down syndrome usually become friendly, only trailing behind their normal siblings by a week or two in social developments like looking at individuals and laughing. The babbling sound and gestures are two nonverbal interaction techniques that children with Down syndrome take efficient utilization of while connecting with other individuals.

Despite significant retardation in the development of language and speech, a large proportion of kids and grownups with Down syndrome proceed to develop excellent interpersonal abilities along with appropriate behaviour in society. According to the evidence that is available, individuals with Down syndrome benefit from using visual resources in their studies. This result remains true for an extensive number of domains related to development, particularly language acquisition, motor competence, and literature learning. This suggests that the delivery of material with the assistance of pictures, movements, or materials will be more efficient in the learning environment. Numerous kids with Down syndrome have the ability to read on or above the level of their classmates, surprising professionals who had believed they were going to function at a less advanced cognitive and communicative level.

The act of reading helps children of all ages to expand their language and linguistic abilities but it might have a particular beneficial influence on children with Down syndrome. As a result of the particular difficulties, they encounter in these areas of development. Children with Down syndrome regularly lag behind those who are normally developing in the development of movement skills (Tsou et al. 2020, p.1550). Delays in motor advancement limit new-borns' chances of encountering diverse circumstances, which subsequently delays their cognitive development. Lack of oral motor development has been correlated with delayed development of language. Especially compared to their non-verbal capacities, children with Down syndrome are considerably slower when it comes to developing verbal communication skills. Almost without a single exception, children's spoken language expressiveness lags behind their proficiency in the language. The children face problems with both general difficulties with establishing clear pronunciation and with specific impairments when it comes to learning sentence construction and grammar.

Conversation may continue longer as kids get older and acquire the ability to ask questions, express insightful comments, while remaining on point. In an attempt to bridge a divide in communication, they may become innovative and use substitutes, suggestions, or only understand the very first syllable. Several adults with Down syndrome gain higher levels of independence with the use of technological devices that help with social activities. As an example, they might utilize mobile devices or schedules as supplements to addresses or take part in deeper discussions on issues of importance. The ability to recognize the differences between communication, language, and speech is essential. It is standard procedure to use the two of these expressions simultaneously. Communication is the method by which a particular individual conveys details to someone (Patel, 2020, p.102273). Communication may occur through speech, in the written word, or by any other means that are available. Taken in another context, it is simply speaking to other people. Language is the universally accepted means by which

humans relate to one another. Words are deployed in an orderly and predictable fashion, and it is possible to be expressed directly or in writing.

Children's disappointment concerning being unable to freely express what they are feeling and thinking is an important component in a few instances of challenging conduct. It additionally possesses an opportunity to contribute to an overestimate of the children's natural intelligence. As communication becomes internalized for thinking, recollecting, and organising themselves. Delays in language acquisition result as well in cognitive impairments. Especially compared to their capacity for reading, many kids with Down syndrome are approximately two years disadvantaged with regard to their mathematical literacy (TokatlyLatzer et al. 2021, p.1059). A further investigation on the reasons for this is essential where it is proved that maths teaching systems utilize a great deal of visual aids while teaching number suggestions are currently considered as the most effective action. It is also stated by researchers that because these methods focus on children's established abilities to learn. The immediate recollection system, or memory that is short-term, is important for any type of thinking and learning because it maintains information "in mind" for a relatively brief amount of time. The different components of it include each made to deal with either graphical or spoken information.

Children with Down syndrome have a lower level of ability to remember and consider information that is spoken than visual details. As a result of challenges with cognitive memory that is short-term, learning unfamiliar phrases and words can be particularly complicated. It additionally makes it tougher for students to comprehend what is being talked about in the lesson, which may result in an unfavourable effect on knowledge. Findings show that illustrations help immensely with the comprehension and memories of speech communicated content. Instructors now acknowledge the advantages of taking use of the significantly improved visual memory capabilities of children with Down syndrome by emphasising the utilization of visual supports such as photographs, signals, and writing in their classes (Kim et al. 2019, p.116). Nonverbal expression is frequently witnessed in the initial 12 months of a child's life that are suffering from Down syndrome. They might have a laugh, a cry, communicate, look to work, share their feelings by hand gestures. Although their turns can be less in duration, young kids with Down syndrome usually take the exact same number of times as normally growing young people.

Coordinated focus and attention motions generally arise between the ages of 1 and 2 among kids with Down syndrome. As two separate individuals provide the same amount of attention to the similar object, they are regarded to be devoting "joint attention". Combined focus in kids with Down syndrome has similarities to that found in normally developing children and it is more common in children with Down syndrome as opposed to children with other developmental delays or Autism. As their abilities to speak grow, numerous kids with Down syndrome continue to favour and depend upon movements, facial expressions, and body language as their main method of connection (Fuller & Kaiser, 2020, p.1687). In numerous instances, the capability of kids with Down syndrome to convey information to themselves using motions is an advantage.

Children with Down syndrome might employ motions including directing their attention, attaining, cheering, raising their hands up, or throwing items away in order to express themselves. Gestures help individuals with Down syndrome comprehend and express themselves, and they are connected to better

communication abilities. Launching more using pointing asking for what they want as well as reflecting on what children observe through gestures that may give rise to understanding indications is common among kids that have Down syndrome during the ages of 2 and 5 (Hukkelberg et al. 2019, p.10). They could attempt to be recognized by individuals using repetitions or explanations if they do not feel comprehended. As children become older, they might start employing communication for a greater number of interpersonal goals, such as remembering about previous events or asking and responding to questionable inquiries. Possibly they receive an advantage out of getting people laughing because of their humour.

METHODS AND SUBJECT

Research design: The goal of a descriptive research design aims to gather data in order to create an accurate depiction of an issue or collection of people. Additionally, it helps by focusing on the “when”, “where”, and “how”, instead of the “why”, of the study’s topic (Rott, 2021, p.130). For the present study this research design has been chosen. This research allows the researcher to gather necessary information about the social abilities and skills of the kids with DS. On the other hand, it observed several patterns and trends related to social skill development. Descriptive research design helps to describe the outcomes and experiences of different concepts of ReAttach therapy.

Research philosophy: Realism research philosophy has been selected by the researchers. Researchers who agree with the realism research philosophy search for “the reason” or processes that underpin occurrences. The hidden or “actual” area, where systems produce influences that result in the phenomena that researchers perceive, is fundamental to the realism and clarification of the world’s ontology (AlShatti et al. 2021, p.388). Through focussing on the causal mechanism, researchers also can give specific insights about why and how the effectiveness of ReAttach therapy can help in improving the social skills of the children suffering from DS. In addition, realism mainly emphasises on the significance of understanding any context. It helps the researcher to consider the factors that can influence social skill development in children with DS.

Research approach: According to the researcher, deductive research approaches can be fully appropriate for the study. Deductive research approaches conduct things in reverse from the manner in which researchers describe inductive investigators doing things. The present study is hypothesis-based study that presumes about the effectiveness of reattach theory in treating the social skills of down syndrome children. They begin with an appealing social theory and put its forecasts to the test using real-life proof. The researcher looks at the research of others, reads up on existing theories of the phenomenon being investigated, and puts forward hypotheses that reflect what they have learned (Fortea et al. 2020, p.1994). As the present study is a hypothesis-based investigation, by using this type of research approach researchers can formulate specific hypotheses based on specific theories. In addition, a cause-and-effect relationship can be established between the social skill outcomes and therapy.

Data collection: Data collection is all about gathering necessary information from valuable sources. There are two categories of data collection, “primary” and “secondary” data sources. Primary data is accessing first-hand information whereas secondary one is from collecting from already existing research. From two types of data collection, secondary data collection has been selected as suitable for it. All the required data for conducting the study has been collected from journals, articles,

websites, newspapers or books. It makes the study more information rich, costs effective and time specific.

Data analysis: Data analysis can be considered as the most important part of the entire conduction of the research. Quantitative data analysis deals with numerical data whereas qualitative deals with non-numerical data with real life factors. In the present case qualitative data analysis can be best suitable that has been done by thematic data analysis. It makes the study focus on various perspectives related to the diversity, complexity, interpretation and experiences in the context of the present case.

RESULT

Theme 1: Social skill therapy (SST) can facilitate cognitive functioning in children

Compared to children whose parents had been described by possessing repetitive narrative types such as mothers who took care to recollect information, children that had mothers who were identified as comprehensive in their narrative delivery noticed greater detail about their previous encounters (Howard & Gutworth, 2020, p.103707). Children with disabilities such as developmental delays have advantages from their surroundings in society when it comes to their mental growth. Children on the autistic spectrum could benefit from SST as demonstrated by at least a single research investigation that demonstrated a causal connection involving SST and improved abilities included facial expressions, cooperative focus, and imitating. Despite these promising results, there is currently minimal investigation into the matter of whether SST engagement, either as witnessed or described by caregivers, has been associated with improved intellectual performance among kids with DS.

Measurements of IQ and cognitive abilities in general show that children who take part in early detection initiatives perform significantly better than matched children with DS who are not receiving early assistance, in accordance with longitudinal study results. It is essential to take into account that the beneficial outcomes of earlier intervention are not simply immediate, but endure well into adulthood (Frey et al. 2019, p.12089). SST has additionally been associated with and found that it enhances cognitive performance in investigations that involve kids with numerous kinds of developmental problems.



Figure 1: Social skills

(Source: Frey et al. 2019, p.12089)

Theme 2: Dolphin-assisted therapy (DAT) for social and cognitive development of children suffer from down syndrome

Individuals with Down syndrome may gain benefit from DAT, an instance of animal-assisted therapy, by communicating with the animals. The child, the dolphin, and the therapist constitute a therapeutic triangle in DAT, with the ultimate objective to encourage the kids to reply effectively to the therapist’s

instruction using dolphin-facilitated communication. Trainers and therapists of dolphins both play an essential part in facilitating the transfer of expertise. Though the dolphin's trainers need training with and comprehension of dolphins, the task of the therapist is to ensure the security of the kid and teach them how to interact with the species (Milojevich et al. 2020, p.598). The trainer of a dolphin employed in DAT must be alert to the dolphin's emotional and psychological health at all occasions. This is advantageous for both children and the psychotherapist in the sense of getting the tasks accomplished. Special needs children frequently confront challenges with respect to the areas of cognition and interacting with others and dolphins may be capable of providing assistance.

DAT is an example of animal-assisted implementation in which dolphins have been employed to aid the cognitive growth of children with special needs. The therapy's primary objective is to enhance the ability of children for continuous concentration. DAT is implemented to help children who might reap advantages from brain function physical in nature, and other behavioural interventions. The child's capacity to concentrate and pay attention gets better, which means that he or she is more probable to carry out the good behaviours that resulted in the reinforcement they received. This may possess an advantageous influence on the child's perception of feelings of worth (Beaumont et al. 2021, p.3649). Compared with different alternative healthcare services, DAT delivers an excellent evaluation of costs and benefits. It is conceivable that undertaking this DAT might enhance a person's communication abilities and feeling of self-worth as adults.

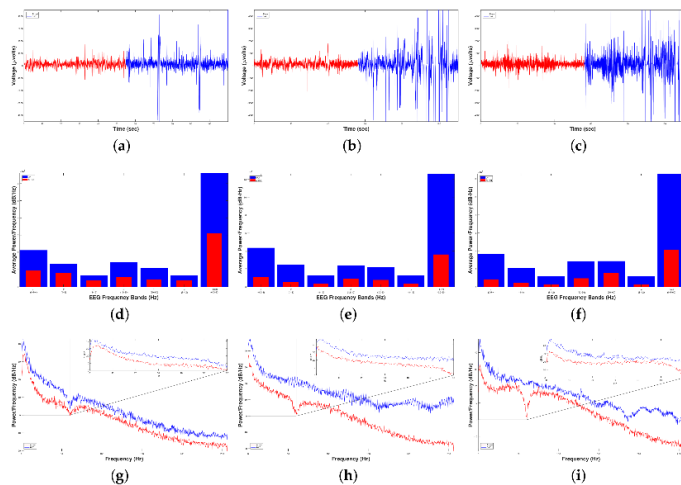


Figure 2: Rate of cognitive development in children
(Source: Beaumont et al. 2021, p.3649)

The primary objective of DAT's sessions with therapy is to enhance the incentive among kids with Down syndrome for finishing assignments by improving their capacities to pay focus as well as express appropriately. DAT could improve a person's trust through permitting them to establish relationships and do operations that are more effective with another.

Theme 3: Speech and language therapy for DS children

The social growth of kids relies significantly on how well they are able to use communication for navigating and controlling their social surroundings. Children, as soon as they learn to speak, possess the capacity to communicate their desires and requirements, talk about the ways they experience, describe what their friends have been up to, and communicate with classmates about their problems and pleasure (Soares et al. 2021, p.179).

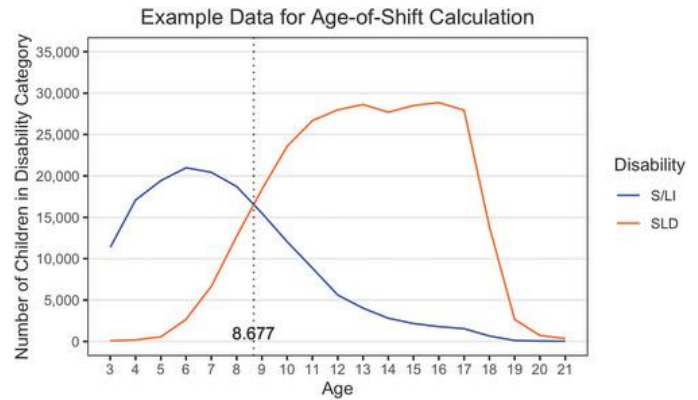


Figure 3: Shift of curriculum
(Source: Channell, 2020, p.770)

It is currently believed that the most common cause of delays in speech and language development experienced by kids with Down syndrome is a weakness in the phonological loop, which is a crucial that makes up their working memory as compared with the child's non-verbal abilities. The phonological loop is presumed to play an essential part in young people's learning of a language and there is evidence that it stores a sound sequence of the speech that enables the youngster to both correlate this with significance (Channell, 2020, p.770). After that it retrieves it in order to help the formation of words that are uttered.

Vocabulary and grammar-related retention are likely to be affected by loop phonological disorders. Compounding the phonological loop problems are the directional loss of hearing and hearing discrimination issues that impact at least 80%-90% of the kids with Down syndrome. However, it is believed that the issues with the phonological loop have no bearing on speech. Physiological variables may be contributing to challenges with communication, sound, and language creation. These have been linked to the oral-motor issues shown as early as the very beginning of life, that have an influence on the ways in which the individual with Down syndrome consumes and eats (Hong et al. 2022, p.780). Estimating a child's initial sentences from the sounds of speech that they may generate in murmuring is achievable in all children, a child's articulation and phonology abilities have a more significant effect on their beginning spoken language than the reverse way through.

DISCUSSION

There have been restorative interactions amongst human beings and animals for more than twelve thousand years. Cats, pets such as guinea pigs, cockatoos, African greys, horses, hens, goats, and donkeys have all been proposed as animals that have been utilized for medical treatments, however dogs continue to be the most commonly encountered (Marino & Lilienfeld, 1278). Though the application of animals in therapy has been increasing dramatically in the last few decades, the physical body of scientific research underpinning the method has fallen considerably. Researchers have spent their time in understanding the medicinal benefits of animals to assist individuals with neurological illnesses.

Therapists as well as scientists are researching the therapeutic advantages of working with dolphins as a result of their stunning appearance, cognitive ability, and response to humanity. However, this desire to learn has advanced too far, which resulted in the establishment of something called DAT. Newspapers and television stations including documentary and news broadcasts are the primary source of promotion for dolphin therapy. According to a few research studies, DAT has an

efficiency of ninety percent in generating beneficial modifications in mental as well as physical wellness (Matamoros et al. 2022, p.1527). It has been stated by different researchers that the field of psychiatry has shown remarkable accomplishments of the therapy and improvements in relation with traditional ways of carrying out therapies such as prescribed medications, human medical treatment, and several others. DAT's acceptance remains substantial but information confirming it is, for the most part.

Children with Down Syndrome may benefit from the guidance of occupational therapists due to the fact that they are able to discover how to engage in actions by separating them apart into their individual elements. Occupational therapists may additionally supply useful instruments and adaptations for making tasks easier for patients to complete. Due to a diminished muscle tone or hypotonia that affects the majority of people with Down Syndrome, it is crucial that the correct posture be affirmed. It might entail recommendations on the installation during specific tasks, such as employing specially modified chairs for seating in the classroom (Baburamani et al. 2019, p.875). Occupational therapists will work hand in hand with the student's family and education in order to provide these individuals with the resources that they require in order to help the student achieve in regular activities. Occupational therapists are going to work collaboratively with the other disciplines of the interprofessional health team in order to assist those who have Down syndrome achieve optimal independence in daily activities regardless of their age.

CONCLUSION

From the entire study it can be concluded that, the researchers who conducted the research aim to discover more regarding the social skills and abilities of children with Down syndrome (DS) and to evaluate how effectively ReAttach therapy benefits these young people.

Children with Down syndrome who engage with social skill therapy (SST) have been shown to succeed intellectually. Teaching gestures, collaborative focus, and imitation are all instances of SST treatments that are shown to be beneficial for children with Down syndrome in the area of their cognitive and social development. Additionally, children with special requirements may benefit from dolphin engagement with dolphin-assisted therapy (DAT) that is an aspect of animal-assisted therapy. DAT is intended to improve a person's capacity to concentrate, believe, and express.

Children having Down syndrome who have an urgent need of speech and language therapy.

They also benefit significantly from language and speech therapy for social development. The phonological cycle, which is tasked with keeping and retrieving sound patterns during working memories, is believed to be undeveloped in these kids which results in language delays. Language and understanding of grammar can be also affected by phonological loop issues. Thus, ReAttach therapy can develop social skills among the DS children.

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