

The Impact of Learning Disability on the Self-Image of Children in Primary Education

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ABSTRACT

Children with learning disabilities face academic challenges, and their difficulty to learn can be accompanied by rejection from their peers, and social isolation. Learning disabilities in children are a group of disorders, affecting the learning abilities of the children to acquire some or all of the capabilities needed for reading, writing, speaking, listening, reasoning or mathematics. Limited research has been conducted about the impact of learning disability on the self-image of children as they struggle to learn. Self-image is a subjective perception of oneself. This personal view consists of impressions built up over time of the image one has of oneself. Among the methods used in research to examine the self-image of children with learning disabilities are self-image questionnaires and personal construct elicitation methods. Research conducted examining the self-image of children, from the perspective of parents and teachers and that of the children themselves, using these methods, is described in this theory review. The findings from research have shown that many different factors may affect the self-image

RESUMEN

El impacto de los problemas de aprendizaje en la autoimagen de los niños de educación primaria

Los niños con dificultades de aprendizaje se enfrentan a retos académicos, y su dificultad para aprender puede ir acompañada del rechazo de sus compañeros y del aislamiento social. Las dificultades de aprendizaje en los niños son un grupo de trastornos que afectan a sus capacidades para adquirir las habilidades necesarias para leer, escribir, hablar, escuchar, razonar o hacer cálculos matemáticos. Se han realizado pocas investigaciones sobre el impacto de los problemas de aprendizaje en la autoimagen de los niños mientras luchan por aprender. La autoimagen es una percepción subjetiva de uno mismo. Esta visión personal consiste en impresiones construidas a lo largo del tiempo sobre la imagen que uno tiene de sí mismo. Entre los métodos utilizados en la investigación para examinar la autoimagen de los niños con dificultades de aprendizaje se encuentran los cuestionarios de autoimagen y los métodos de elicitación de constructos personales. En esta revisión teórica se describen las investigaciones realizadas para examinar la autoimagen

of children with learning disabilities. One of the factors is the influence of different methods of placing children with learning disabilities into an educational framework in various countries across the world. The benefits of including children with learning disabilities into regular schooling are explained and comparisons between the self-image of children with learning disabilities in special education frameworks and regular education are provided. The teaching methods used in the classroom was another factor that was found to affect the self-image of children with learning disabilities. A deeper understanding of the factors that impact the self-image of these children can facilitate the efforts to fulfill the special needs of children with learning disabilities and may lead to the development of a more positive self-image, despite the learning challenges that the children face.

Keywords: Learning disabilities, self-image, primary education, special education, personal construct theory.

de los niños, desde la perspectiva de los padres y profesores y la de los propios niños, utilizando estos métodos. Los resultados de la investigación han demostrado que muchos factores diferentes pueden afectar a la autoimagen de los niños con dificultades de aprendizaje. Uno de estos factores es la influencia de los diferentes métodos de inclusión de los niños con dificultades de aprendizaje en un marco educativo en varios países de todo el mundo. Se explican las ventajas de incluir a los niños con dificultades de aprendizaje en la escolarización ordinaria y se establecen comparaciones entre la autoimagen de los niños con dificultades de aprendizaje en marcos de educación especial y de educación ordinaria. Otro factor que influye en la autoimagen de los niños con dificultades de aprendizaje son los métodos pedagógicos utilizados en el aula. Una comprensión más profunda de los factores que afectan a la autoimagen de estos niños puede facilitar los esfuerzos para satisfacer las necesidades especiales de los niños con problemas de aprendizaje y puede conducir al desarrollo de una autoimagen más positiva, a pesar de los retos de aprendizaje a los que se enfrentan los niños.

Palabras Clave: Dificultades de aprendizaje, autoimagen, educación primaria, educación especial, teoría del constructo personal.

1. INTRODUCTION

A learning disability is a brain-based disorder that is not well understood, despite involving neurological differences in the brain structure of the individuals suffering from learning disabilities. The learning difficulty affects the individual's ability to absorb, process, communicate, store and retrieve information to which the individual is exposed (Cortiella, & Horowitz, 2014).

These learning disabilities affect the educational possibilities of the children with learning disabilities. With ongoing changes to the requirements for providing educational frameworks for children with disabilities, the need arose for a systematic methodology for identifying and assessing these children. In the latter part of the 20th century, the National Joint Committee on Learning Disabilities (NJCLD) formulated a definition for learning disabilities, which has been updated over the years and defines learning disability as a "heterogeneous group of disorders

manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the life span. Problems in self-regulatory behaviors, social perception, and social interaction may exist with learning disabilities but do not by themselves constitute a learning disability. Although learning disabilities may occur concomitantly with other disabilities (for example, sensory impairment, intellectual disabilities, emotional disturbance), or with extrinsic influences (such as cultural or linguistic differences, insufficient or inappropriate instruction), they are not the result of those conditions or influences” (National Joint Committee on Learning Disabilities, 1991).

An additional educational perspective on learning disabilities can be found in the definition included in the US federal special education law, Individuals with Disabilities Education Act (IDEA). A specific learning disability is defined as “a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. This term includes conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Specific learning disabilities are not primarily the result of visual, hearing, motor disabilities, mental retardation, emotional disturbance, or of environmental, cultural, or economic disadvantage” (Section 1401 (30) Individuals with Disabilities Education Act (IDEA), US Department of Education (DOE), (1995). Specific learning disabilities are associated with neurobiological dysfunctions which affect the processes of acquiring reading, writing and mathematical skills, but are also linked to environmental factors, which can affect the individual’s adaptation (Commodari, La Rosa, Sagone, & Indiana, 2022).

The effects of having a learning disability are expected to influence all facets of the individual’s life. The children with learning difficulties “are more vulnerable to not appreciating their qualities and feeling less proud of themselves, which could decrease their self-esteem” (Caqueo-Urizar, Mena-Chamorro, Atencio-Quevedo, Flores, & Urzua, 2021, p. 1). Thus, psychoeducational interventions for children with learning disabilities are being designed to increase the self-esteem of the children (Caqueo-Urizar, Mena-Chamorro, Atencio-Quevedo, Flores, & Urzua, 2021). Furthermore, the education frameworks for children with learning disabilities strive to ensure that children with learning disabilities are socially integrated (Denny, Denieffe, & Pajnkihar (2017). Moreover, the attitudes and perceptions of parents, peers, and educators are influential in assisting the child to achieve social inclusion and integration. Children learn from experience by observing the way in which the social environment reacts to their behavior and adapt their behavior accordingly (Gonen, & Grinberg, 2016).

Self-image is a subjective perception. It relates to the individual's perception about himself, built on his successful and failed experiences and to the individual's belief in how others view him. The concept of self-image was addressed by Morris Rosenberg in *Society and the Adolescent Self-Image* (Rosenberg, 1965). Self-image is a facet of the personality and is based on a personal belief structure. The individual acts in accordance with the expectations of the society, views himself as others view him, and perceives himself as he would like to be (Gonen, & Grinberg, 2016). In addition, self-image is a multidimensional construct, involving the individual's perception of the level of functioning of the social, psychological, familial, sexual and coping self. The individual may have mastered some of these facets, while struggling with others (Mäkinen, Marttunen, Komulainen, et al., 2015). In addition, students' learning outcomes are influenced by the student's self-image, motivation and engagement, with engagement facilitating motivation, which positively impacts the students' self-image (Lakkala, Uusiautti, Kyrö-Ämmälä, & Grönfors, 2020).

2. DEVELOPMENT OF THE THEORETICAL REVIEW

The objective of this theory review is to provide an overview of the research topic relating to self-image of children with learning disabilities and an outline of available literature relating to the impact that learning disabilities have on the self-image of children and the ways that self-image can be affected. The theory review provided an overview of the complex, multi-disciplinary studies published on the topic. A search was carried out of the studies published relating to self-image in children and adolescents with learning disabilities. The inclusion criteria of the studies were determined using an iterative process to ascertain that the inclusion criteria focused on the specific topic addressed in the theory review.

To effectively examine the impacts of self-image, the self-image of the child needs to be assessed. Several assessment tools have been used to provide a deeper understanding of self-image of the child and adolescent. The self-image of adolescents with learning disabilities has been examined in a research study using items from the Katz-Zigler Self Image Questionnaire (Katz, & Zigler, 1967), which is a scale that can be used to compare the real and ideal self-image of the adolescents. A comparison was made between the self-image of the institutionalized and non-institutionalized students with learning disabilities. The institutionalized students reported lower self-image, which was not associated with their cognitive abilities (Zigler, Balla, & Watson, 1972).

Another self-image questionnaire is The Offer Self-Image Questionnaire, Revised, (OSIQ-R) which has been used to assess the individual's perception of their own psychological world. Based on the conception that self-image is a multidimensional construct, the OSIQ-R address-

es 12 dimensions of the individual's functioning using 12 component scales. The 129 items included in the questionnaire cover the individual's functioning across the 12 component scales. The first scale in the OSIQ-R Component Scales, includes the scale examining the Emotional Tone, consisting of 10 items, assessing "the degree of affective harmony within the structure". The Impulse Control scale has 9 items and measures the extent to which the ego of the adolescent can withstand pressure, without resorting to actions that are deemed unacceptable. The Mental Health scale consists of 13 items used to assess the individual's Emotional health as it relates to "the relative absence of psychopathological thought processes". To assess Social Functioning, 9 items are included, each measuring patterns of interpersonal relationships and friendships. The influence of family is measured using the 19 items of the Family Functioning scale which relate to the individual's feelings and relationships associated with his parents. The Vocational Attitudes scales uses 10 items measure "the degree of confidentiality an adolescent feels in learning about and planning for a vocation". Another scale, the Self-Confidence scale consists of 10 items relating to the individual's capacity for adjusting to the immediate environment. Self-Reliance is another facet of the individual's self-image reflecting his ability for coping, measured through 14 items. Body image which relates to the adjustment of the individual to his body includes 9 items for assessment. The Sexuality scale measures the individual's attitudes, feelings and behavior towards the opposite sex using 10 items. Ethical values also affect self-image and reflect the level of development of the conscience through 10 items. Idealism is the final scale including 6 items relating to ideals and willingness to help others (Mäkinen, Marttunen, Komulainen, et al., 2015, p. 4).

In addition, 10 component scales from the OSIQ-R are used to measure the total self-image scale. The sexuality and idealism scales of the OSIQ-R were found to have low correlation with the other 10 scales. Thus, these 2 component scales are not included in the measurement of the total self-image scale, which is calculated using scores across the remaining 10 of the component scales. The scales are rated using a six-point Likert scale, where the value of 1 is chosen for an item that "describes me very well", while a value of 6 is chosen for an item that "does not describe me at all". As a result, an overall low total score indicates an individual who is positively adjusted, while an overall high score is attained by an individual with poor adjustment and a negative self-image (Mäkinen, Marttunen, Komulainen, et al., 2015).

While several aspects relating to the self-image of children with learning disabilities have been examined using the self-image questionnaire, limited research has focused on attempts to examine self-image through the lens of the child. The construct of self has been known to play an important role in a young individual's psychological well-being and therefore, the use of personal construct elicitation methods may be used as a means to understand the self-con-

structs in children with learning disabilities. The elicitation methods assist the children in sharing and communicating their self-constructs and provides an outlet for their voice. Using personal construct methods in adolescents with learning disabilities enables the adolescents' exploration of self across the various dimensions of self. These methods allow the adolescents an expression of their views that may have been misunderstood or misinterpreted (Thomas, Butler, Hare, & Green, 2011).

Earlier studies showed the effectiveness of applying personal construct theory to children and thus, a study was conducted in the United Kingdom which involved four personal construct elicitation methods that were used for facilitating the examination of the self-image of adolescents with learning disabilities. Fifty-nine adolescents in the United Kingdom, aged 11-19 years old, participated in the study by providing their constructs of self-image. The personal construct elicitation methods included two verbal components. In the first, the student was asked to describe themselves. The prompts included a request for the student to describe themselves in three ways, to provide the opposite of one of the descriptions and to suggest that if they could not be described using one of the descriptions, then what they would be. In the second verbal component, the student is required to describe themselves from someone else's perspective. Initially, the student is asked to name someone that knows them very well. Then, the student is asked to describe what that person would say about them and to explain that if they were not as the other person described, what they imagine that they would be. In addition, to the two verbal components, there were two visual components. The first involved ambiguous drawings, where the student was shown a drawing and asked to describe the scene. The student was required to address what was happening in the scene, and what the characters were thinking and feeling. The final visual component was for the student to draw a self-portrait. While relating to the self-portrait, the student was to describe the sort of person appearing in the self-portrait and what that person would be like (Ravanette, 1997; in Thomas, Butler, Hare & Green, 2011).

The findings from the study showed that the adolescents were able to rank their self-image using 201 unique psychological constructs based on nine dimensions of self. They addressed factors that they considered important to their sense of self. The answers that the adolescents provided represented the constructs they had of their environment and these views sometimes differed from what they perceived to be the views of their parents or teacher about the adolescent. Forty-seven percent of the adolescents perceived that their self-image was different than that by which society views them. This study supported the use of personal construct theory techniques to enable children with learning disabilities to share their views of themselves and their environment (Thomas, Butler, Hare & Green, 2011).

3. RESULTS

Different learning frameworks have been at the focus of studies examining the self-image of children and adolescents with learning difficulties. Some of these frameworks have included integrating the child with learning disabilities in the regular educational environment or alternatively establishing special frameworks to provide for the specific needs of the child with learning difficulties. However, despite these efforts to cater to the educational needs of the children, the perception of disability remains “an important construct affecting not only the well-being of individuals with disabilities, but also the moral compass of the society” (Babik, & Gardner, 2021). As a result, the importance of developing a positive self-image and understanding the impact of the environment on the development of self-image in children and adolescents with learning disabilities are important aspects in effectively ensuring the healthy psychological wellbeing of the children and adolescents with learning difficulties.

To gain a greater understanding of the differences in self-image that may exist between students with learning disabilities to that of the students without learning disabilities, one study conducted in the US investigated the impact of learning disabilities on the self-image of children, explored the self-image of 10th grade high school students and compared the self-image of students with learning disabilities to that of the students without learning disabilities. The study used self-image as the dependent variable, while factors likely to impact self-image were used as the independent variables. Three of these factors were found to impact all students in the studied population. These factors were gender, school setting and the parent’s attitude to the student. No unique factors were only found to impact the self-image of the students with learning disabilities. Regarding the students without learning disabilities, their race and the time they participated in extracurricular activities were found to impact their self-image. No significant impact on self-image was found for academic achievement amongst both studied populations (Cohen, 2000).

In another study conducted to compare the self-image of students with learning disabilities to that of students without learning disabilities, Raviv and Stone (1991) examined the differences in the self-image of adolescents with learning disabilities to their peer group. The Offer Self-Image Questionnaire (OSIQ) was used to compare the self-image of adolescents with learning disabilities to their peer group of adolescents without learning disabilities. Forty-nine adolescents with learning disabilities, in the 9th through 12th grades and 49 adolescents without learning disabilities participated in the study. In 4 of the 10 OSIQ scales, the adolescents with the learning disabilities had significantly lower scores than the adolescents without learning disabilities. Adolescents who were diagnosed at a later stage with learning

disabilities had higher scores on two of the scales than the other adolescents who were diagnosed at an earlier stage. The severity of the learning disability was not a factor that affected the self-image scores (Raviv, & Stone, 1991).

Besides differences that may exist in the factors that impact self-image in students with learning disabilities and students without learning disabilities, the effect of different approaches in teaching on the self-image of the students have also been examined. Active teaching has been introduced into the classrooms by teachers as an alternative approach to traditional teaching. In active teaching, the students are active participants in their learning process and are encouraged to engage in collaborative learning. To examine the effect of the use of active teaching for the learning of math in special education classes, forty pupils with learning disabilities were exposed during class either to traditional teaching or the active teaching of math. When the active teaching was used to teach math to the students with learning disabilities, the self-image of the students was higher than in the classes where traditional teaching was the chosen method (Bishara, 2018).

Another factor that could be expected to impact the self-image of children with learning disabilities is their being in a framework of regular schooling or special education. The impact of low achievement on the self-image of children in regular education with the impact on the self-image of children in special education has been compared. Three groups of low-achieving students participated in a study conducted in the Netherlands. Some of the low-achieving students were in regular education and some in special education. Their well-being was assessed according to their peer acceptance and their self-image, which was measured using a self-image scale which included 39 items. The self-image of the low-achieving students in regular education who were receiving remedial support was similar to that of students in regular education who were not receiving remedial support. However, the students in special education displayed slightly higher levels of self-image than the students in general education settings. Furthermore, the self-image of children with learning disabilities that are in regular education is lower than their peers in regular education (Bakker, & Bosman, 2003).

Since the self-image of children with learning disabilities appears to be lower than the self-image of their peers, different programs have been initiated and examined to explore possibilities for facilitating the improvement of self-image of children with learning disabilities. Participation in social intervention programs have been shown to influence the self-image of children with learning disabilities. In one instance, social intervention programs were introduced and used on five junior high school students with learning disabilities that were attending school in Israel. The programs lasted 14 weeks. The intervention program was carried out in the

students' homeroom. Improvement in the level of self-image of all the children with learning disabilities was observed, in addition to changes in their academic achievement following participation in the social intervention program in their homeroom at school (Mafra, 2015).

The learning disabilities experienced by the children can also be differentiated and thus, the effect of the learning disability on the children's self-image may also be dependent on the type of learning disability displayed by the children. A study that involved students in elementary schools in the Netherlands differentiated the children with learning disabilities into two groups. The first group were children with specific learning disabilities and the second group included children with general learning disabilities. The differentiation was based on IQ scores, with the children with specific learning disabilities having normal IQ (above 85), while the children with general learning disabilities had below-normal IQ. In addition, children with specific learning disabilities usually were lagging behind in only one of the subjects, such as reading, arithmetic or spelling. By comparison, the children with general learning disabilities had poor academic performance in more than one of the subjects. Moreover, of the 1,300 children that participated in the study, 439 were attending special education schools, which further differentiated between the groups. The findings from the study showed that children with general learning disabilities had a lower self-image than children with specific learning disabilities. Furthermore, children with general learning disabilities were more often rejected than children with specific learning disabilities. The findings were especially applicable to children with general learning disabilities in general education and for the girls (Bakker, Denessen, Bosman, Krijger, & Bouts, 2007). A negative effect of learning disabilities on the self-image of girls, in particular, has been found. This effect may be explained by the influence of learning disabilities on the girls' feelings of competence, which is one component of self-image. Regarding feelings of competence, girls with learning disabilities lag behind boys with learning disabilities, regardless of whether they are in general education or special education. One explanation for these findings has been the awareness of girls of societal standards from a younger age than for the boys, associated with the importance placed on physical appearance (Bakker, Denessen, Bosman, Krijger, & Bouts, 2007).

The differentiation of the learning disabilities experienced by the children also affected the children's relationships with their classmates in different manners. In the study's assessment of the children with learning disabilities' relationships with classmates, it was shown that children with general learning disabilities had lower mean self-image scores than the mean of all other groups. However, the mean self-image score of the children with specific learning disabilities was not significantly different than the mean of all other groups regarding relationships with classmates (Bakker, Denessen, Bosman, Krijger, & Bouts, 2007).

4. CONCLUSIONS

The understanding about the development of self-image in children with different psychological and social needs and in those children with learning disabilities is limited. Since learning disabilities impact the self-image of children in many ways, efforts are being invested in supporting children with learning disabilities to develop a positive self-image.

Different views exist about the educational frameworks that should be offered to children with learning disabilities in the various countries in Europe and the US. In the US, the tendency has been to integrate children with learning disabilities into regular schools, which provide them with a framework for special education within the school. In the Netherlands, for example, most of the children with learning disabilities were being educated in special schools. Despite several studies that have examined the effect on children with learning disabilities attending either regular schools or special education schools, the impact of the school framework on the self-image of children with learning disabilities remains inconclusive (Bakker, Denessen, Bosman, Krijger, & Bouts, 2007).

It has been suggested that the children with learning disabilities attending regular schools in the US have the opportunity to compare themselves to other children with learning disabilities, as well as with their typically achieving peers. With the greater segregation of children with learning disabilities in the Netherlands and the UK, children with learning disabilities in regular education lack opportunities for comparison with similarly achieving peers. This led to the low self-image of the children with learning disabilities in regular education in the Netherlands and the UK. Furthermore, the special class for the children with learning disabilities in the US educational framework seems to provide opportunities for these children to create friendships within the class, improving their self-image (Bakker, Denessen, Bosman, Krijger, & Bouts, 2007).

In a study conducted on elementary, middle and high school students from several schools in Israel, the impact of social support as a mediator of the effects of loneliness and self-efficacy on the wellbeing of students with learning disabilities and those without learning disabilities was examined. Policies enacted by the Israeli Ministry of Education enable students diagnosed with learning disabilities to be granted special assistance during the school day. This assistance focuses on the special needs of the students with learning disabilities. Of the students participating in the study, 29.6% had been diagnosed with learning difficulties. The findings from the study showed that the socio-emotional profile of students with learning difficulties differs from that of their peers and is found to affect their well-being. The importance

of effective, practical educational programs plays a vital role in ensuring the wellbeing of the students (Heiman, & Olenik-Shemesh, 2020).

Programs introduced in schools to leverage improvements to the self-image of children with learning disabilities have positively affected the self-image of the children. These social intervention programs introduced in the homeroom of the school have also led to improvements in academic achievement in the children with learning disabilities (Mafra, 2015).

Overall, the theory review outlined some of the factors that have been associated with the impact that learning disabilities have on the self-image of children. The practical implications of the findings from the theory review are connected to both the way the education system and other individuals relate to children with learning disabilities and the way in which the children themselves, develop their self-image. The education system should continue to examine ways in which inclusion of the children in educational frameworks could contribute to building the self-esteem of the children with learning disabilities, while focusing on the aspects that have been found to strengthen self-esteem.

A deeper understanding of the aspects associated with learning disabilities that impact the children's self-image may be gained through future research on children with learning disabilities that focuses on the children's view of their own self-image to examine factors that are influential in the development of the self-image of children with learning disabilities.

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