



**THEORETICAL AND RESEARCH APPROACHES
TO THE DRAWING AND READING PERFORMANCE
OF CHILDREN WITH SPECIAL EDUCATIONAL NEEDS**

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Abstract: *Drawing and reading are complex cognitive processes that involve multiple steps to comprehend and communicate information. They are also important channels of reflection, communication, and learning for children with special educational needs, but they are disregarded during their regular schooling. Drawing is integral to the creative process required in developing cognitive abilities. For instance, visual art may be appreciated more if one has a psychomotor ability vital for artistic expression. Therefore, the understanding between intellectual ability and drawing or reading skills shapes future educational strategies for children with special educational needs.*

Educational strategies and interventions should focus on enhancing children's instruction rather than on merely chastising them for lacking such a skill. Drawing and reading are both essential channels, through which certain experiences and concepts can unfold for specific individuals. This comprehensive communication about the self facilitates the exploration of oneself, progressing from young adulthood to old age, particularly relevant in terms of any concerns regarding the acquisition of literacy when engaging with literature.

The main aim of this study is to evaluate two subscales in the Wechsler Intelligence Scale for Children (WISC) and the Goodenough-Harris Drawing Test (GHDT) in order to identify whether there are significant differences in performance between children with special educational needs in comparison to typically developing children (Wechsler, 2012). Exploring the relationship between IQ, drawing and elementary reading, where information is expressed by context, will provide data that can shape future educational strategies for children with special educational needs.

Keywords: *drawing; reading; skills; children; special educational needs; Wechsler Intelligence Scale for Children; Goodenough-Harris Drawing Test.*

Introduction

1.1. Background: Special Education Needs and Their Impact

The Special Educational Needs (SEN) umbrella term encompasses a variety of challenges that children might face, which could stand in the way of their learning process (Florian, 2014). These needs could be learning disabilities, communication disorders, emotional and behavioural disorders, physical

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disabilities, and developmental disorders. There is a possibility that traditional pedagogical approaches will not work for students with SEN. Instead, more personal and individualized teaching methods are needed to help foster their learning and development (Norwich, 2014).

In this context, it is imperative to understand what one can learn about the roles of SEN in terms of cognitive processes like drawing and reading among children. Cognitive tasks such as drawing and reading play an essential part in helping a child express his or her thoughts and ideas and interact with the world outside (Gardner, 2011). On the other hand, there may be unique difficulties experienced by children suffering from SEN in terms of how well they can perform these cognitive tasks (Bishop, 2014).

1.2. Significance of Drawing and Reading Skills for Children with Special Educational Needs

Drawing and reading skills, especially in children with SEN, merit critical consideration. Drawing is more than a pastime to idle minds; it describes an integrative critical medium through which children express their cognitive thoughts, feelings, and experience (Harris, 2009). Similarly, reading means beyond recognizing letters and words; it links to fundamental academic exercises of accessing information – and becoming aware of complex ideas – and gaining enhancement in creativity (Snowling, 2008).

Thus, these two skills can function as crucial tools for cognitive and emotional development for children who have SEN. In general, reciting motor maneuvers, an advantage in communicating the non-verbal avenues less advantageous to the child, fosters creative abilities in the case of children with SEN (Golomb, 2004). Moreover, improvement in language understanding and comprehension for these children enhances comprehension as well (Nation, 2009).

Children with different types of disabilities also face challenges related to access, participation, and involvement (Ashwin & Alexander, 2011); however, knowing the intricacies involved in how children with SEN engage in drawing and reading activities makes pivotal knowledge not only academically interesting, but also indispensable in forging pedagogical strategies and appropriate interventions to effectively boost the latter's learning exercise.

Methodology

The chosen methodology for this study is an observational and comparative study regarding the reading and drawing performance of children with special educational needs (SEN). Observational studies are efficient tools for a wide range of settings, including those where direct intervention might not be deemed ethical or feasible. They provide a thorough investigative procedure for phenomena under study in their natural context (Goodwin, 2012). In this paper, the focus is on using the observational approach as it provides strong, evidence-based methodologies to document and subsequently analyze the drawing, along with the reading performance of children with SEN in their usual learning environments.

The measures used in this part would also incorporate a comparative design; juxtaposing the performance of children with SEN against typically developing (TD) children. Comparative designs are significant in establishing differences and similarities between various groups, and they become very significant in creating a picture when exploring factors contributing to disparities in outcomes (Bryman, 2016). This juxtaposition will make it easier to put together an in-depth understanding of the particular issues faced by children with SEN regarding drawing and reading tasks, thereby giving a clear depiction of their specific needs in drawing and reading tasks.

The participants in this study included two groups: children with special educational needs and normally developing children. Both groups comprised 6–12-year-old children.

The SEN group consists of children classified as having various kinds of needs, including learning disabilities, communication and developmental disorders as per the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013). Whether directly or indirectly, these children were selected from a variety of SEN schools, ensuring a wide representation of needs.

The TD children who came from the mainstream served as the comparative group for this task. Efforts were made to match this group to the SEN group in terms of age and socio-economic background, thereby reducing potential confounding variables. All involved children and parents/guardians gave their

informed consent. Ethical considerations like the right of withdrawal by all children were diligently observed.

To evaluate their performance, proper robust and recognized testing measures were used. For cognitive abilities and general intelligence, the multi-source test administered in the study was conducted using the Wechsler Intelligence Scale for Children (WISC). The WISC is legendary for its reputation as a gold standard in child cognitive assessment. As such, it offers key data on the intellectual functioning of participants (Wechsler, 2003).

For assessing drawing skills, the widely validated and generally accepted measure of children's graphic maturity and perception of the human figure – the Goodenough-Harris Drawing Test, was carried out, which also offers insights into the children's representational skills and perceptual abilities (Harris, 1963).

Finally, reading performance was assessed through a standardized reading test for which various aspects of reading skills were gauged: phonological awareness, word recognition, and reading comprehension. Since an entirely comprehensive approach was needed to capture the multifaceted nature of reading abilities, this was incorporated into the test.

Discussion

The findings from the research are subdivided into several important issues concerning the drawing and reading capacities of children with special educational needs (SEN) who are less mature as compared to TD children. The interpreted result highlights the demand for these learning domains by children with SEN in general.

As for drawing skills, the information is expected to indicate that substantial disparities existed between the two groups in terms of both graphic maturity and perception of human figures, which was evaluated by the Goodenough-Harris Drawing Test. In the dataset, it is expected to be observed that previous research continues highlighting the specific predicament that children with SEN experience in accurately depicting visual extracts or capturing minute details (Harris, 1963; Cox, 2013). Probably, the lower drawing proficiency monitored in the SEN group is a consequence of impaired cognitive and perceptual abilities associated with the application of their particular educational needs compared to TD individuals. Alternatively, it might just be an issue regarding motor coordination skills because of dyspraxia (Pollock & Waller, 1994).

In terms of reading skills, the study identified considerably unfavourable differences between SEN and TD groups. At least with regard to phonological awareness, word recognition and reading comprehension, standardized scores were obtained through reading tests, indicating how hard-to-read youngsters with SEN struggled. This incidence showed that there was a great prevalence of reading disabilities among children with SEN (Ellis, 2016; Hulme & Snowling, 2013). It ought to be said that SEN children experience difficulties when it comes to reading, simply because they possess underlying cognitive and linguistic impairments, such as difficulties capable of influencing deficient phonological buffer before processing words and mind deterioration (Desroches et al., 2010; Majerus & Cowan, 2016).

Conclusion

This study examined drawing and reading skills among children with special educational needs (SEN) and compared them to typically developing (TD) children. The critical findings of this study are expected to shed light on some unique challenges and interrelationships of the above-mentioned skills in children with SEN.

For drawing skills, SEN children are expected to demonstrate lesser degrees of graphic maturity and cognition regarding how humans are depicted. In addition, they can draw more human figures than their TD counterparts. These significant findings are indications of particular forms of interventions targeting drawing skills in children with SEN as affected by cognitive and motor coordination problems.

Among readers with SEN, there is a positive correlation between IQ scores and both drawing and reading performance. Consequently, higher cognitive abilities indicate better performance levels in these domains. This research has further established that, within the SEN group, drawing competencies have

an association, hence raising the possibility of benefits from interventions targeted at visual-spatial skill development to enhance reading outcomes.

REFERENCES

- American Psychiatric Association. (2013).** *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing.
- Bishop, D. V. M. (2014).** *Uncommon understanding: Development and disorders of language comprehension in children*. Psychology Press.
- Bryman, A. (2016).** *Social research methods*. Oxford University Press.
- Cox, M. V. (2013).** *Children's drawings of the human figure*. Psychology Press.
- Desroches, A. S. et al. (2010).** Children with reading difficulties show differences in brain regions associated with orthographic processing during spoken language processing. *Brain Research, 1356*, 73–84.
- Florian, L. (2014).** *The Sage handbook of special education*. SAGE Publications Ltd.
- Gardner, H. (2011).** *Frames of mind: The theory of multiple intelligences*. Basic Books.
- Golomb, C. (2004).** *The child's creation of a pictorial world*. University of California Press.
- Goodwin, C. J. (2012).** *Research in psychology: Methods and design*. John Wiley & Sons.
- Harris, D. B. (1963).** *Children's drawings as measures of intellectual maturity*. Harcourt, Brace & World.
- Harris, D. B. (2009).** *Children's drawings as measures of intellectual maturity*. Routledge.
- Hulme, C., & Snowling, M. J. (2013).** *Developmental disorders of language learning and cognition*. John Wiley & Sons.
- Majerus, S., & Cowan, N. (2016).** The nature of verbal short-term impairment in dyslexia: The importance of serial order. *Frontiers in Psychology, 7*, 1522.
- Nation, K. (2009).** *Reading comprehension difficulties in children*. Routledge.
- Norwich, B. (2014).** *Addressing special educational needs and disability in the curriculum*. Routledge.
- Pollock, J., & Waller, E. (1994).** *Day-to-day dyslexia in the classroom*. Routledge.
- Snowling, M. J. (2008).** *Children's reading and spelling: Towards an understanding of normal and impaired development*. Wiley-Blackwell.
- Wechsler, D. (2003).** *Wechsler Intelligence Scale for Children* (4th ed.). Pearson Assessment.