



ACTIVITIES OF DAILY LIVING IN CHILDREN WITH LEARNING DISABILITIES: PERFORMANCE, LEARNING, AND PARTICIPATION

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ABSTRACT

Background: Children with Learning Disability (LD) have been known to have motor deficits in daily functional activities, which is one of the indications to have Developmental Coordination Disorder.

Objective: The objective of this study was to investigate the activities of daily living based on predictive values in LD with DCD children.

Methodology: 36 parents of LD with DCD were selected and the DCDDaily-Q parental questionnaire and scoring were done accordingly.

Results: The results show the minimum and maximum mean values for all domains such as

Performance scores: Self-care and maintenance are 17.17, the fine motor is 11.92 and gross motor is 9.64.

Learning Score: 4.47, 2.31, 1.64,

Participation score: 15.33, 10.3, 8.83 respectively.

Conclusion: The study concluded that there is no significance with range scores and children with LD have a good score in performance and participation than the learning score.

Keywords: Learning Disability, Activities of Daily Living, Performance, Participation, Developmental coordination Disorder

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INTRODUCTION

50% of Learning Disability (LD) is considered to have Developmental Coordination Disorder (DCD) among school-going children.¹ The most commonly identified age group for DCD is 5-15 years. These children are identified with impairments in doing an activity such as timing, speed, and force control, and it's

indirectly related to the Activities of Daily Living.

Activities of Daily Living (ADL) are very essential for every child in doing daily functions, but children with DCD face more problems in doing activities than their peers⁴. Mobility, feeding, dressing, handwriting, and personal hygiene are some of the activities found with poor performance, delays in



learning, and less participation in ADL are widely suggested in the literature.²

There is a recent systemic review about children's specific difficulties in performance and participation in ADL whereas learning of ADL, no studies were performed³. As ADL is considered to be an essential part of life and it is the first activity to be noticed among the members of the family.

A parental questionnaire DCD Daily-Questionnaire is useful for screening the child in LD with DCD. It has 23 tasks related to ADL activities and has 3 major domains. The domains of ADL that are relevant to children are self-care and self-maintenance, productivity and school, leisure, and play. This comprehensive range of ADL is essential to find out the difficulties and to support in diagnosis, assessment, and intervention.

METHODOLOGY

85 children with known cases of LD were screened with DCD diagnostic criteria, where 40 children were considered to have a probable score of DCD, An informed consent was taken from the parents respectively after a detailed explanation. The selected children's parents were given with DCDDaily- Q and asked to score according to their child's activities.

Only 36 parents respond to the questionnaire properly rest 4 were rejected as they did not answer all questions. In the individual questionnaire, 4 out of 23 questions are acceptable to remain unanswered. The method of scoring was also given in the activity sheet. The questionnaire has 3 domains such as "self-care and self-maintenance", "fine- motor activities" and "gross motor activities". DCDDaily-Q was found to be a reliable and valid parental questionnaire for ADL.

Each domain has a range of scores, In **Performance scores:** self-care and maintenance have ranged from 10 (well) to 30 (not very well), fine motor scores have ranged from 7 to 21, and gross motor from 6 to 18, **Learning score:** self-care and maintenance

have ranged from 0 (not taking more time for activity) to 10 (takes time for activity), the fine motor score has ranged from 0 to 7, and gross motor from 0 to 6. **Participation score:** self-care and maintenance have ranged from 10 (regularly perform) to 40 (never performed), fine motor scores have ranged from 7 to 28, and gross motor from 6 to 24.

RESULTS AND DISCUSSION

The main aim of the study was to find out the difficulties in daily functioning in children with LD and DCD. Motor problems among DCD exist in adolescence age and lead to secondary problems related to mental health and educational problems, including less social competence, academic issues, and low self-esteem⁵⁻⁷. So this study suggests investigating early identification and intervention. In this study, the total percentage score for all domains for each child was calculated and statistical analysis was done using SPSS, and descriptive statistics.

Performance score: Self-care and maintenance ranges from 14-21 and means the value of 17.14, Fine motor ranges from 9-16, with a mean value of 11.92, Gross motor ranges from 8-12, with a mean value of 9.64.

Learning score: Self-care and maintenance score ranges from 1 to 7, with and mean value of 4.47, Fine motrangees 0-5, a mean value of 2.31, Gross motor angles 0-4, and a mean value of 1.64. **Participation:** Self-care and maintenance ranges 13-19, with a mean value of 15.33, Fine motor range 8-15, and mean value of 10.36, Gross motor range 7-10, and a mean value of 8.83. While comparing with the range score of all individual domains, this study did not show any significance, while some of the range scores were under the normal values.

Fig (1) shows the total percentage score for performance, learning, and participation, and fig (2) shows the performance score of each domain. Fig (3) shows the learning score of each domain. Fig (4) shows the participation score of each domain. The limitations of the



study were the normative value of all domains with age groups was not available, Age-distribution was not proper and each domain does not have an equal number of questions about the ADL activities. Recommendations of the study can experiment with a large sample size, and even a distribution ratio of age and gender can be done.

CONCLUSION

The study concluded there is no significance with range scores and shows that children with LD and DCD have a good score in performance and participation than the learning score.

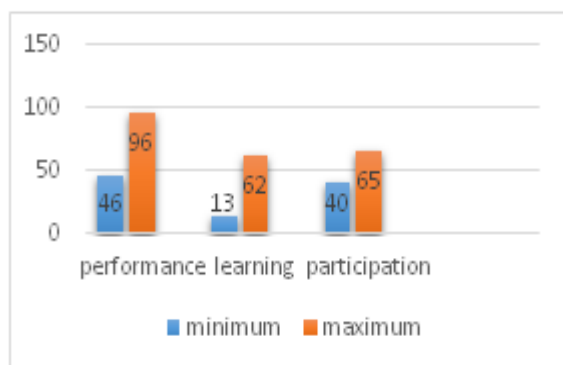


Figure 1

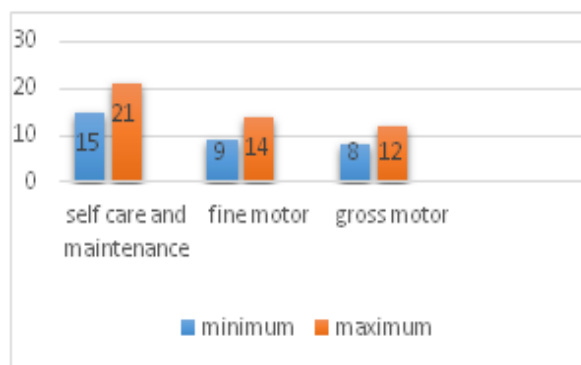


Figure 2

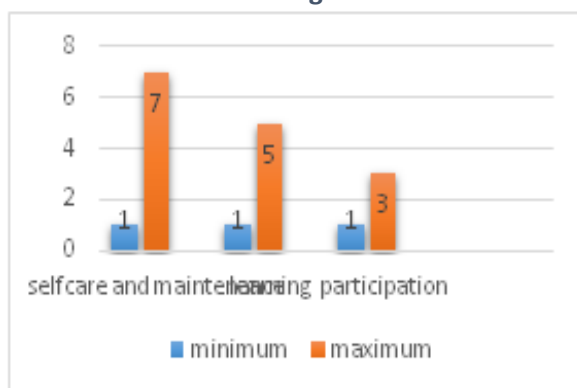


Figure 3

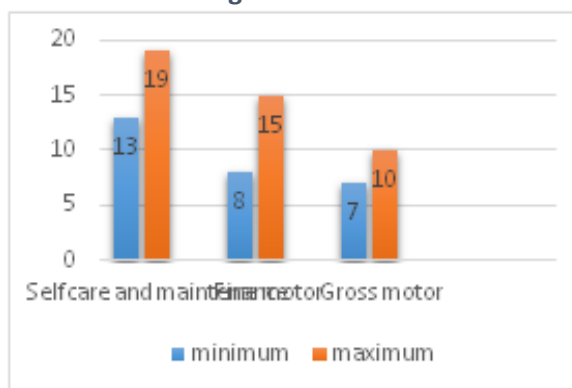


Figure 4

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