

Extended Abstract

Journal of Behavior Modification Studies (JBMS), 2(2), 2025



Vol. , No. , Autumn 2025

Submitted Date: 2024-01-14 Accepted Date: 2024-04-30

https://jbms.guilan.ac.ir/article_8347.html?lang=en

Research paper

The Effect of Emotional Social Training on, Self-Concept in Dyslexic Students

Ali Amoozadeh Lichahi

M.A., Department of Psychology and Education of Exceptional Children, Faculty of Psychology and Education, University of Tehran, Tehran, Iran. Corresponding Author:

amozadeh.ali@gmail.com

Roghayeh Karimi Lichahi

PhD in Psychology, Farhagian University, Bento Al-Hoda sadr, rasht, Iran.

Maedeh Mansoorpoor

M.A., Department of Psychology and Education of Exceptional Children, Faculty of Psychology and Education, University of Guilan, Rasht, Iran.

Introduction

Dyslexia is one of the most common forms of learning disabilities and is often used synonymously with reading difficulties (Daniel et al., 2025). Students with dyslexia frequently experience problems with decoding and reading fluency, which typically lead to poor reading comprehension (Ellis, 2016). According to the American Psychiatric Association, dyslexia is described as a suggested term referring to a pattern of learning difficulties characterized by problems with accurate or fluent word recognition, poor decoding, and weak spelling abilities (American Psychiatric Association, 2013). This disorder is not associated with low intelligence, inadequate sensory stimulation, emotional or cultural disturbances, or unfavorable socioeconomic status (Miller & Kupferman, 2009). Unfortunately, the number of students identified as dyslexic has increased in recent years. It is estimated that 70–80% of individuals with literacy difficulties experience dyslexia, corresponding to approximately 5–10% of the general population (Witzel & Miles, 2018).

Previous research evidence has shown that students with reading difficulties are at risk of developing low self-concept (Tom & Hawkins, 2012; Yahyazadeh, Karimi, & Hasannia Joushari, 2016). Such risk may be related to these individuals' experiences of poor academic performance, feelings of discrimination or rejection by significant others (such as peers and teachers), or the labeling of dyslexia (Zacata & Quinney, 2025). The term self-concept is a broad construct referring to how individuals think about, evaluate, and perceive themselves (Pandy, 2017). Furthermore, the label of learning disability, along with these children's low academic abilities, may influence

parents' and teachers' beliefs about the children's self-concept, which in turn may further affect the children's own self-perceptions (Montgomery, 1994).

A review of the research literature indicates that despite the relative attention given to educational and academic interventions for these children, there remains a significant research gap regarding the effectiveness of social-emotional learning (SEL) programs on their emotional and social difficulties, including deficits in self-concept. Moreover, the findings of such studies can offer valuable practical implications for therapeutic, counseling, and educational settings, and can serve as a foundation for designing more effective interventions and conducting future research. Therefore, considering the aforementioned necessities and the innovative nature of the research topic, the present study was conducted with the aim of examining the impact of a social-emotional learning training program on the self-concept of children with dyslexia.

Method

The present study was applied in purpose and employed an experimental method with a pretest-posttest design and a control group. In this design, both the experimental and control groups were first assessed during the pretest phase. The experimental group then received the social-emotional learning (SEL) training intervention, while the control group did not receive any intervention. Finally, a posttest was administered to both groups, and the differences between them were examined while controlling for the effect of the pretest. The statistical population consisted of all third- to sixth-grade elementary students with dyslexia in the city of Rasht during the 2018–2019 academic year, whose diagnosis had been confirmed based on specialist evaluations conducted in educational and therapeutic centers. From this population, 20 students with dyslexia were selected through convenience sampling. The participants were then randomly and evenly assigned to the experimental and control groups (10 students in each group) to minimize the influence of extraneous variables.

The inclusion criteria were: a confirmed diagnosis of developmental dyslexia based on the results of a dyslexia assessment and expert judgment; enrollment in grades three to six of elementary school; an intelligence quotient within the normal range according to the Wechsler Intelligence Scale for Children; absence of neurological or sensory impairments (such as severe visual or hearing problems) or intellectual disability; not receiving any similar psychological interventions during the study; and having informed parental consent along with the child's willingness to participate. The exclusion criteria included: absence from more than two intervention sessions, lack of effective cooperation in completing the activities, the occurrence of severe physical or psychological problems during the study, and withdrawal of the student or parents from participation. All ethical considerations were observed. Informed consent was obtained from parents, confidentiality of data was assured, participation was completely voluntary, and participants had the right to withdraw at any stage without consequences. Additionally, to ensure ethical fairness, the educational content of the social-emotional learning program was made available to the control group upon request after the completion of the study.

For data analysis, descriptive statistics including means and standard deviations were first used to describe the characteristics of the sample. Then, to test the research hypotheses and compare the posttest mean scores of the two groups while controlling for the pretest, analysis of covariance (ANCOVA) was conducted. Prior to performing the analysis, the required assumptions—including normality of data distribution, homogeneity of variances, and homogeneity of regression slopes—were examined and confirmed. The significance level was set at 0.05.

Results

Multivariate analysis of covariance (MANCOVA) was used to examine the effect of the social–emotional learning training program on each component of self-concept among students with dyslexia. The results of the test for the homogeneity of regression slopes between the pretest and posttest scores of the self-concept components in the experimental and control groups indicated that the regression slopes were equal across the two groups ($F = 0.69$, $p = 0.86$). The results of Levene’s test for examining the homogeneity of variances of the dependent variables across groups showed that the variances of self-concept components were equal between the groups at the general level ($F(1,28) = 0.043$, $p = 0.839$), the school-related self-concept level ($F(1,28) = 3.138$, $p = 0.106$), and the non-school self-concept level ($F(1,28) = 0.103$, $p = 0.752$).

The results of Box’s M test for examining the equality of covariance matrices of the dependent variables between the experimental and control groups also indicated that the covariance matrices were equal across the two groups (Box’s M = 14.355, $F = 1.954$, $p = 0.069$). The results of Bartlett’s chi-square test for sphericity showed that the relationships among the self-concept components were significant ($\chi^2 = 38.98$, $df = 5$, $p < 0.01$). After examining the assumptions of multivariate analysis of covariance, the results indicated that there was a significant difference between the two groups in the components of self-concept (Wilks’ Lambda = 0.07, $F(3,23) = 51.49$, $p < 0.001$).

The F statistic for the self-concept components at the general level ($F = 648.955$), school-related self-concept ($F = 369.579$), and non-school self-concept ($F = 123.298$) was significant at the 0.001 level. These findings indicate that there are significant differences between the groups in these components. The results of the mean comparisons presented in the above table show that the mean scores of the experimental group in the components of general self-concept (17.835), school-related self-concept (28.058), and non-school self-concept (7.122) were higher than those of the control group, whose mean scores were 7.365, 13.542, and 3.078, respectively. Based on these findings, it can be concluded that the social–emotional learning training program improves the components of self-concept at the general, school-related, and non-school levels among students with dyslexia.

Discussion and Conclusion

The present study was conducted to examine the effect of a social–emotional learning training program on the self-concept of children with dyslexia. The results showed that social–emotional learning training was effective in improving the self-concept of children with dyslexia. This finding is consistent with the results reported by Seyednoori et al. (2014) and Afrouz et al. (2014). In explaining this finding, it can be argued that students with learning disabilities may not have adequate awareness of their positive and negative emotions, which may prevent them from

expressing their feelings appropriately in everyday life. Therefore, teaching emotion regulation to these students helps them become more aware of their emotions, accept them, and express them properly. This process can enhance their psychological well-being and adjustment (Ashkani & Heyri, 2014).

Students with dyslexia, due to difficulties in reasoning, often experience problems in social interactions with classmates and others. Emotion regulation training enables them to better monitor their behaviors and reactions toward others and to make more appropriate judgments in interpersonal situations. By controlling negative emotions and expressing their perceptions about others—while also questioning the accuracy of those perceptions—these students can establish better relationships and receive more positive feedback from others. This process can increase their self-esteem and social acceptance (Khoshrosh et al., 2015). The acquisition of social skills also helps these students experience fewer concerns about potential failure in the future and encourages them to rely on their abilities, expect success, and plan for it. As a result, their positive mental images contribute to their empowerment in life (Abdolalian & Farhangi, 2016). Appropriate social skills may also serve as a protective factor against rejection, isolation, and academic difficulties among children with dyslexia. As research evidence has shown, although the poor academic performance of these children may lower their social status, they are often rejected not because of their academic problems but because they lack the necessary skills for interacting with others (Vaughn, 1985).

This study also faced several limitations. One limitation was the absence of a follow-up period, which could have helped determine the long-term stability of the intervention. Another limitation was the lack of control over the socioeconomic status of families and geographical conditions, due to the study being conducted only in the city of Rasht. It is recommended that future studies consider these factors. From an applied perspective, it is suggested that the therapeutic protocol used in this study be applied to other children with specific learning disabilities and to children with special needs.

Ethical Considerations

Ethical Code

This study was conducted in accordance with ethical principles, and informed consent was obtained from the participants prior to data collection.

Financial Support

This study did not receive any financial support.

Authors' Contributions

All authors contributed to the design of the study, data collection, analysis of the results, and manuscript preparation, and approved the final version of the manuscript.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding this study.

Acknowledgments

All authors contributed to the design of the study, data collection, analysis of the results, and manuscript preparation, and approved the final version of the manuscript.

References

- Bollig, B., Coverdale, G., Bayliss, D., McArthur, G., & Badcock, N. A. (2026). What Parents, Teachers and Clinicians Know About the Features of Developmental Dyslexia and Its Intervention: A Scoping Review. *Dyslexia*, 32(1), e70017. [\[Link\]](#)
- Daniel, J., Clucas, L., & Wang, H. H. (2025). Identifying students with dyslexia: exploration of current assessment methods. *Annals of Dyslexia*, 75(1), 19-41. [\[Link\]](#)
- Deng, L., Daverpanah, N., & Izadpanah, S. (2023). The effect of educational computer games on the academic resilience, academic self-regulation, and academic achievement of EFL students. *Frontiers in Psychology*, 13, 947577. [\[Link\]](#)
- Diagnostic and Statistical Manual of Mental Disorders: Dsm-5. Amer Psychiatric Pub Incorporated; 2013, pp: 67 [\[Link\]](#)
- Edwards, J. (1994). *The scars of dyslexia*. London: Cassell. [\[Link\]](#)
- Ellis, A. W. (2016). *Reading, writing, and dyslexia: a cognitive analysis (Classic edition)*. London, UK: Routledge, Taylor & Francis Group. [\[Link\]](#)
- Miller, R., & Kupfermann, A. (2009). The role of visual and phonological representations in the processing of Written words by readers with diagnosed dyslexia: Evidence from a markings memory task. *Dyslexia*, 59, 12-33. [\[Link\]](#)
- Montgomery, S. (1994). Self-Concept and Children with Learning Disabilities: Observer-Child Concordance Across Six Context-Dependent Domains. *Journal of Learning Disabilities*, 27, 254-262. [\[Link\]](#)
- Montoya, M. F., Tornero, B., Palacios Farias, D., & Morrison, F. J. (2025). Linking Self-Regulation Scaffolding to Early Math Achievement: Evidence from Chilean Preschools. *Education Sciences*, 15(11), 1426. [\[Link\]](#)
- Pandey, P. (2017). Assessing Self Concept and School Adjustment Level of Children with Learning Disability. *The International Journal of Indian Psychology*, 4,96-104. [\[Link\]](#)
- Tam, H., Hawkins, R. (2012) Self-concept and depression levels of students with dyslexia in Singapore. In: ATINER'S Conference Paper Series: No: PSY2012-0355, pp. 1-14. [\[Link\]](#)
- Vaughn, S. (1985). Why teach social skills to learning disabled students? *Journal of learning disability*, 18, 588-591. [\[Link\]](#)
- Witzel, B., Mize, M. (2018). Meeting the Needs of Students with Dyslexia and Dyscalculia. *SRATE Journal*. 27(1), 31-39. [\[Link\]](#)
- Wong, A.S.K, Li-Tsang, C.W.P, Siu, A.M.H. (2014). Effect of a Social Emotional Learning Programme for Primary School Students. *Hong Kong Journal of Occupational Therapy*, 24, 56e63. [\[Link\]](#)
- Zagata, E., & Coyne, M. D. (2025). State-level dyslexia laws: a systematic review. *Annals of Dyslexia*, 75(3), 423-450. [\[Link\]](#)