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The Effect of Teaching Positive Attributional Style Strategies on Self-Esteem and Reading Self-Concept in Children with Dyslexia

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Abstract

Aim: The aim of the present study was to determine the effectiveness of teaching positive attributional style on self-esteem and reading self-concept in students with dyslexia. This research was experimental and had a pretest-posttest design along with a control group. The statistical population consisted of all the students with dyslexia in Rasht who were studying in learning disability centers in the academic year 2019-2020. To select the samples, one center was randomly selected from the existing learning disability centers, and then 30 students with dyslexia were randomly selected and assigned to case and control groups of 15. Data were collected using the Reading and Dyslexia Test (Karmi Noori and Moradi, 2008) to diagnose dyslexia in the students, and using the Self-Esteem Scale (Pep et al., 1989) and the Reading Self-Concept Scale (Chapman & Tunmer, 1995) in both pretest-posttest stages in the two groups. The case group received an intervention consisting of 11 sessions of positive attribution retraining in 45-minute sessions held twice a week, and the control group received no intervention. Finally, the data were analyzed in SPSS version 26 using the univariate analysis of covariance and independent t-test. Based on the results obtained from the data analysis, positive attribution retraining led to a significant increase in self-esteem and reading self-concept in students with dyslexia in the case group compared to the controls. It can therefore be concluded that, by changing individuals' maladaptive beliefs and thought habits at the time of failure, positive attributional styles can improve self-esteem and reading self-concept.

Keywords: Attributional style, Self-Esteem, Self-Concept, Dyslexia

Introduction

Children often start learning to read and write directly from books. With minimal instruction, they become good readers. Meanwhile, around 5 to 15 percent of the learning population finds reading difficult (Primasari & Supena, 2021). Children who have trouble learning to read are known as children with dyslexia. This group of children often does not get the necessary educational support in their regular schools and notice the difference between their own performance and that of their classmates, and this poorer performance begins to exert its effects on them as compromised self-esteem and reading self-concept (Nalavany et al., 2011, p. 7). Children with dyslexia take on a negative attributional style due to their repeated failures; that is, they attribute their failures to ability, effort, task difficulty, and chance (Masoumi et al., 2013). As Gibi-Lursuc et al. (2021, p. 15) showed in their research, individuals with literacy difficulties or dyslexia may be at a greater risk of developing a negative self-perception as learners and might feel a lack of overall self-worth. Therefore, it can be argued that negative attributions cause them to develop a set of beliefs that have detrimental consequences for their

future achievements. Thus, treating this disorder requires helping these students establish a connection between their efforts and successes, which will help increase their motivation (Woodcock and Jiang, 2018). Seligman's positive attribution retraining is one of the approaches used to counter learned helplessness and attributional errors (Seligman et al., 2005, p. 9). In one study, Martan et al. (2023, p.2) showed that positive attribution retraining is one of the most effective and useful approaches in this regard, as it helps change pessimistic attributions to optimistic ones. Fostering a positive attitude toward learning disabilities motivates these students to read their lessons. In other words, the origin of attribution retraining is the way one thinks about causes. Undoubtedly, a positive attitude is one of the main mechanisms of learning; individuals with this attitude consider themselves in possession of the necessary cognitive structures. Instead of attributing failures to uncontrollable factors, this group of individuals relates them to insufficient efforts or inappropriate strategies. That is, in the face of adverse life situations and events, they believe that they have the competence to solve all problems (Eskandari et al., 2020). Thus, given the relationship between attributional styles and psychological indices and their importance in the academic advancement of students with learning disabilities, this study examines the following hypotheses: Can teaching positive attributional style strategies raise self-esteem in children with dyslexia? And can teaching positive attributional style strategies improve reading self-concept in them as well?

Methodology

After obtaining an introduction letter from Guilan University and presenting it to Guilan Provincial Department of Education, permission was granted by the Exceptional Education Department to visit the learning disability centers in Rasht. Since the statistical population in this study consisted of all students with dyslexia in Rasht who were studying in learning disability centers in the academic year 2019-2020, to select the samples, one center was randomly selected from the three existing public learning disability centers. Then, to select the samples and go through the diagnostic stages (diagnosis at the LD test center called Zadbakhsh Learning Disability Center), 30 students with dyslexia were randomly selected. Then, after obtaining consent from the parents for their children's participation in the research, the children were randomly assigned to two groups of 15, including the case (ten boys, five girls) and control (nine boys, six girls) groups. The case group received 11 sessions of an educational program consisting of positive attribution retraining in 45-minute sessions held twice a week at Zadbakhsh Learning Disability Center, and the control group only received the usual training provided by the center. It should be noted that at the end of the study, a summary of the intervention program was also given to the control group in a few sessions to comply with the ethics of carrying out experimental research. SPSS-26 software was utilized to analyze the data using the univariate ANCOVA and the independent t-test.

Results

To determine the effectiveness of teaching positive attributional style strategies on self-esteem in children with dyslexia, the univariate ANCOVA was used. To examine the results yielded by this test, the assumptions of homogeneity of variances and homogeneity of regression slope were investigated. Given the insignificant results yielded by Levene's test ($F_{(1,26)}=0.015$, $P=0.903$) and the regression slope ($F_{(2,25)}=1.859$, $P=0.140$), the use of the univariate ANCOVA was deemed permissible. According to Table 1, the F statistic for self-esteem was 4.637 in the post-test, which is considered significant at the 0.05 level.

Table 1. The results of the univariate ANCOVA to investigate the difference between the case and control groups of children with dyslexia in terms of self-esteem

Source	SS	df	MS	F	P	Effect size
Modified pattern	803.846	2	401.923	14.966	0.000	0.312
Pretest	436.699	1	426.699	15.888	0.001	
Group	124.523	1	124.523	4.637	0.001	
Error	671.404	25	26.856			

The independent t-test was used to determine the effectiveness of teaching positive attributional style strategies on reading self-concept in children with dyslexia. The results of Levene's test to examine the homogeneity of variances showed that the variance of reading self-concept (P=0.580, Levene=0.313) was equal. According to Table 2, the mean score of reading self-concept was significantly higher in the positive attributional style training group than the mean obtained in the control group (P<0.001). Therefore, this part of the hypothesis suggesting a significant difference between the case and control groups of children with dyslexia in terms of reading self-concept is confirmed.

Table 2. The independent t-test results to investigate the difference between the case and control groups of children with dyslexia in the differential score of self-esteem

Group	M	SD	Difference in means	Test result	Effect size
Case	22.15	4.14	18.62	T (36) = 12.796 P<0.001	**6.132**
Control	3.83	1.56			

Discussion and conclusion

The aim of this study was to determine the effectiveness of teaching positive attributional style strategies on self-esteem and reading self-concept in students with dyslexia. The results showed that teaching positive attributional style strategies improves self-esteem and reading self-concept in this group of children. It can be argued that attributing positive outcomes to oneself and believing in the recurrence of positive outcomes can have a positive impact on general life domains, as shown in the study by Gibby Lursuc et al. (2021), whereas children with dyslexia are at a greater risk of having a negative self-perception. Nonetheless, those with a positive and adaptive attributional style tend to have good social relationships and generally feel happier in life, and have a positive outlook on the different successes they have achieved in life. That is, in the face of adverse life situations and events, they believe that they have the competence to solve all problems. Based on these studies, it can be inferred that high self-esteem leads to increased hopefulness in life. Having hope in life can serve as a predictor for school and academic achievement, because it increases efforts and perseverance, ultimately leading to success in receiving high scores. Therefore, an intervention consisting of positive attribution retraining encourages adaptive and controllable traits that impact academic success. This finding is consistent with other studies, such as the one by Martan et al. (2023, p.2), who found that children with dyslexia do not have a strong, stable attributional style with an internal locus and tend to attribute their achievements to external factors. Due to their connection with self-concept and academic performance, maladaptive attributions lead to a reduction in students' abilities. In such instances, students need support and intervention. Effective interventions include changing pessimistic attributions to optimistic ones, which is essential for achieving success. According to the discussed studies, it seems that focusing on strengths and creating positive beliefs in these students can lead to increased motivation for learning and higher academic achievement, subsequently improving reading self-concept.

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