



## Understanding the Self-Reported Reading Habits of Middle School Students with Dyslexia in Inclusive Classrooms in Türkiye

*Original research article*

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### Abstract

*This study explored the reading habits of middle school students with dyslexia who participate in inclusive education in Türkiye. The sample included 77 students in grades 6–8 from diverse socioeconomic backgrounds. Data were collected using a demographic form and an adapted version of the Reading Habit Scale. Descriptive statistics, t-tests, and ANOVA were used for analysis. Results indicated that students generally reported moderate to high levels of reading habits. Significant differences were found based on gender, academic achievement, and participation in supplementary support education programs. No significant differences were observed for other demographic variables. Findings highlight the importance of individualized supports in inclusive settings to promote reading engagement in students with dyslexia.*

**Keywords:** Reading disability, reading fluency, reading attitude, reading experience, inclusive education

Developing reading habits during childhood is essential for fostering academic success, critical thinking, and lifelong learning. Reading habit is generally defined as the regular, voluntary, and sustained

engagement in reading activities, driven by intrinsic motivation and personal interest. It refers not only to the frequency of reading (e.g., reading daily or weekly) but also to the consistency, duration, and affective

experience associated with reading over time (McKenna et al., 2012; Tanju, 2010). Tanju (2010) further emphasizes the lifelong and structured nature of reading as a sustained behavior. While related to reading attitude and motivation, reading habit is primarily a behavioral construct—manifested in how often, how regularly, and how willingly individuals read for pleasure or information (Pürsün, 2024). Therefore, students with strong reading habits are typically those who read consistently (e.g., every day or several times a week), allocate time for reading outside of academic obligations, demonstrating sustained engagement.

According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), the early acquisition of reading habits can serve as a foundation for educational equity and inclusive participation in society. The formative years between ages 8 and 13 have been described as the “golden age of reading” due to the developmental sensitivity to literacy engagement (Bamberger, 1990). During this period, parental modeling, shared reading routines, and teacher-led motivation strategies are critical for habit formation (Cunningham & Zibulsky, 2011; Zhu, 2024). In particular, the home environment, availability of reading materials, and family literacy practices have been shown to influence children’s sustained reading behaviors more than school-based practices (Greaney, 1986; Yılmaz, 2009). However, students with specific learning disabilities, such as dyslexia, often face barriers to developing consistent reading habits. Dyslexia is defined in the DSM-5 as a specific learning disorder characterized by difficulties with accurate or fluent word recognition, poor decoding, and spelling (APA, 2013). These challenges can lead to frustration, reduced motivation, and avoidance of reading activities (Snowling & Hulme, 2012). Although dyslexia primarily affects reading accuracy and fluency, its impact extends to reading attitudes and engagement (McGeown et al., 2016). Yet, a growing body of research suggests that with appropriate support, students with dyslexia can develop reading habits comparable to their typically developing peers (Fink, 1995; Vargas et al., 2024).

Inclusive education in Türkiye refers to the placement of students with

special educational needs into mainstream classrooms, with or without additional support services. One such service is *support education*, which typically involves small-group or individualized instructional interventions delivered through resource rooms or rehabilitation centers outside regular classroom hours (Aslan, 2019; Güven, 2021). In Türkiye, these services are designed to address academic, behavioral, and social needs in a more targeted manner. While support education has been shown to benefit students’ academic and social outcomes (Kalkan & Eroğlu, 2017), its role in shaping reading habits has not been systematically examined.

Although several international studies have explored the reading behaviors of students with dyslexia (Grant et al., 2007; Ptáčková et al., 2022; Sumardi et al., 2019), there is a notable gap in the Turkish context. Moreover, much of the existing literature lacks a detailed examination of how demographic factors, academic performance, and access to support education intersect with reading habits in inclusive settings.

### ***Current Study***

In Türkiye, students with dyslexia who participate in inclusive classrooms often benefit from support education services. While such services are intended to enhance academic, social, and behavioral development (Kalkan & Eroğlu, 2017), several implementation challenges have been reported, including inconsistencies in program quality and limited access across schools (Aslan, 2019). Despite their intended role in individualizing education and promoting equity, the impact of these support services on students’ actual reading behaviors—particularly their reading habits—has not been systematically investigated. This gap limits our understanding of how structural supports intersect with student-level outcomes.

Furthermore, although reading habits have been linked to reading comprehension and general academic success, few studies in Türkiye have examined how these habits relate to academic achievement, especially among students with specific learning disabilities. Existing research tends to focus on typically developing or gifted students, with limited attention to those receiving inclusive education. Additionally, the

literature rarely addresses how demographic factors—such as gender, socioeconomic status, and parental education—might influence the development of reading habits in students with dyslexia. Addressing these gaps is essential for guiding inclusive education policies and evidence-based intervention planning.

### ***Purpose of the Study***

The primary aim of this study is to examine the self-reported reading habits of middle school students with dyslexia who participate in inclusive education settings in Türkiye. Specifically, the study explores how these habits relate to students' demographic characteristics (e.g., gender, grade level, class size, parental education, and socioeconomic status), general academic achievement, and participation in supplementary support education services. To achieve this purpose, the study sought to answer the following research questions: (1) What are the self-reported reading habits of middle school students (grades 6–8) with dyslexia who participate in inclusive education? (2) Do these reading habits significantly differ based on students' general academic achievement, participation in supplementary support education services, or demographic characteristics, including gender, grade level, class size, parental education levels, and socioeconomic status?

## **Method**

### ***Research Design***

This study employed a descriptive survey design to investigate the reading habits of middle school students with dyslexia (grades 6–8) enrolled in inclusive

classrooms. In addition, it explored how students' academic achievement, participation in support education services, and demographic characteristics influenced their reading habits. The descriptive survey model is a non-experimental research approach used to examine and describe existing conditions, behaviors, or relationships as they naturally occur, without any manipulation or intervention. It allows the researcher to collect data either directly through observation and measurement or indirectly through existing records and reports. The goal is to systematically define and analyze the characteristics of a specific population or phenomenon (Karasar, 2011; Privitera, 2023; Yıldırım & Şimşek, 2008).

### ***Population and Sample***

The population of this study consisted of 6th, 7th, and 8th-grade students formally diagnosed with dyslexia and enrolled in inclusive education programs in Türkiye during the 2022–2023 academic year. Diagnoses were verified through students' individual development files maintained by their schools. To ensure diverse representation, maximum variation sampling, a purposive sampling strategy, was employed (Büyüköztürk et al., 2021). The sample included students from public middle schools in Bolu, Düzce, and Sakarya provinces, representing upper, middle, and lower socioeconomic regions. A total of 77 students with dyslexia participated in the study. Table 1 presents their demographic characteristics, including grade level, gender, age, academic achievement, class size, participation in support education, family income level, and parental education level.

**Table 1.**  
*Characteristics of the Participating Students*

Variable		<i>n</i>	%	Variable		<i>n</i>	%
Grade	6 <sup>th</sup> grade	47	61.0	Gender	Female	42	54.5
	7 <sup>th</sup> grade	11	14.3		Male	35	45.5
	8 <sup>th</sup> grade	19	24.7	Academic Achievement Grade	0-43	33	42.9
Age	11 years	46	59.7		44-62	17	22.1
	12 years	13	16.9		63-80	23	29.9
	13 years	18	23.4		81-94	4	5.2
Support Education	Yes	48	62.3		Family's Economic Status	Low	7
	No	29	37.7	Medium		62	80.5
Class Size	≤ 24	7	9.1	Paternal Education Level		High	8
	25-29	6	7.8		Primary School	26	33.8
	30-34	37	48.1		Middle School	19	24.7
	35-40	27	35.1		High School	24	31.2
Maternal Education Level	Primary School	32	41.6	University	8	10.4	
	Middle School	15	19.5	Total			
	High School	25	32.5				
	University	5	6.5				
Total		77	100		Total		77

As shown in Table 1, the sample was relatively balanced in terms of gender (54.5% female, 45.5% male), with the majority being 6th-grade students (61.0%) and aged 11 years (59.7%). Most of the students (62.3%) were receiving support education services, including individualized or small-group instruction provided either in support education rooms within schools or through external special education and rehabilitation centers. Class sizes were mostly between 30 – 40 students.

In terms of academic achievement, a significant portion (42.9%) had grades below 44, while only 5.2% had scores above 81. Socio-economic diversity was also reflected in family income levels, with 80.5% of families categorized as middle-income. Regarding parental education, most mothers (41.6%) and fathers (33.8%) were primary school graduates, with relatively low rates of university education among parents.

## Materials

This study utilized two instruments, the Student Demographic Form and the Reading Habit Scale adapted for students with dyslexia (RHS-RD).

### Student Demographic Form

This form was developed to collect basic background information about the participants, including their academic achievement grade, gender, age, grade level, class size, and whether they attended any extracurricular courses or received support education services.

### Reading Habit Scale (RHS)

Originally developed by Esen-Aygün (2019), the Reading Habit Scale aims to assess the reading habits of typically developing students. The original scale consisted of 21 items across four sub-dimensions, each rated on a five-point

Likert scale (1 = strongly disagree, 5 = strongly agree). Its psychometric validation involved exploratory factor analysis (EFA) and confirmatory factor analysis (CFA), yielding satisfactory reliability and construct validity. The total variance explained was 50%, and goodness-of-fit indices indicated an acceptable to excellent model fit (e.g.,  $\chi^2/df \leq 2$ ,  $RMSEA \leq 0.05$ ,  $NFI \geq 0.90$ ,  $CFI \geq 0.95$ ) (Hu & Bentler, 1999; Kline, 2013; Schumacker & Lomax, 2010; Tabachnick & Fidell, 2001).

However, the original scale was developed for typically developing students and did not consider the accessibility needs or cognitive-linguistic profiles of students with dyslexia. During preliminary piloting, it was observed that some items were too abstract or linguistically complex for this population. Therefore, an adaptation process was undertaken with two main objectives: (1) to ensure accessibility and comprehension for students with dyslexia, and (2) to preserve the core construct of reading habits while improving psychometric suitability for the target group. Items that were either too ambiguous, redundant, or showed low factor loadings in the dyslexia sample were excluded. As a result, the adapted version retained 8 items across two sub-dimensions—Individual Attitude and Reading Experience—which collectively accounted for a higher proportion of explained variance (64.684%) compared to the original. While this narrowing may

limit the breadth of the construct, it was a psychometrically driven decision based on clarity, relevance, and internal consistency within the new sample.

Given that the original scale was not developed for students with learning disabilities, it was adapted and revalidated for use with middle school students diagnosed with dyslexia in inclusive settings.

### ***Exploratory Factor Analysis (EFA)***

To ensure the suitability of the Reading Habit Scale for the target population, both exploratory and confirmatory factor analyses were conducted on the data collected from middle school students with dyslexia. Prior to conducting EFA, preliminary assumptions were tested. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was calculated as 0.835, indicating that the sample size was sufficient for factor analysis (Tavşancıl, 2010). Bartlett's test of sphericity was also significant ( $\chi^2 = 248.506$ ,  $p < .001$ ), confirming that the data matrix was factorable (Çokluk et al., 2010). The EFA results revealed a two-factor structure with eigenvalues greater than 1, explaining a total of 64.684% of the variance. Specifically, the first factor accounted for 51.112% and the second factor for 13.572% of the total variance. Items with factor loadings below the 0.40 threshold were excluded from the final scale. Table 2 presents the results.

**Table 2.**

*Exploratory Factor Analysis Results for the Reading Fluency Scale for Students with Dyslexia*

Items	Common Factor Variance	Factor Loading Values	
		Factor 1	Factor 2
1 (readx2)	.80	.79	
2 (readx3)	.83	.75	
3 (readx4)	.80	.73	
4 (readx1)	.78	.73	
5 (readx5)	.84	.71	
6 (indat3)	.80		.84
7 (indat2)	.80		.79
8 (indat1)	.83		.74

*Note.* \*Values below  $\pm 0.40$  are not shown.

The revised version of the scale for students with dyslexia consisted of 8 items grouped into two sub-dimensions: The adapted RHS-RD consists of 8 items across two subscales: Individual Attitude (3 items; possible score range: 3–15) and Reading Experience (5 items; possible score range: 5–25), with total scores ranging from 8 to 40. Higher scores reflect more positive attitudes and richer reading experiences.

### ***Confirmatory Factor Analysis (CFA)***

Given that the original Reading Habit Scale was developed for typically developing

students, CFA was conducted to validate the modified two-factor structure in a dyslexia-specific context. The analysis was carried out using AMOS 24 to assess the model fit of the adapted Reading Habit Scale for Students with Dyslexia (RHS-RD). The CFA yielded the following fit indices:  $\chi^2 = 26.682$ ,  $df = 19$ ,  $\chi^2/df = 1.404$ ,  $RMSEA = .053$ ,  $NFI = .90$ ,  $NNFI = .95$ ,  $CFI = .97$ ,  $GFI = .92$ ,  $AGFI = .86$ , and  $IFI = .97$ . Table 3 lists the fit indices of the Reading Habit Scale Adapted for Students with Dyslexia (RHS-RD) obtained from the confirmatory factor analysis.

**Table 3.**  
*RHS-RD Fit Indices*

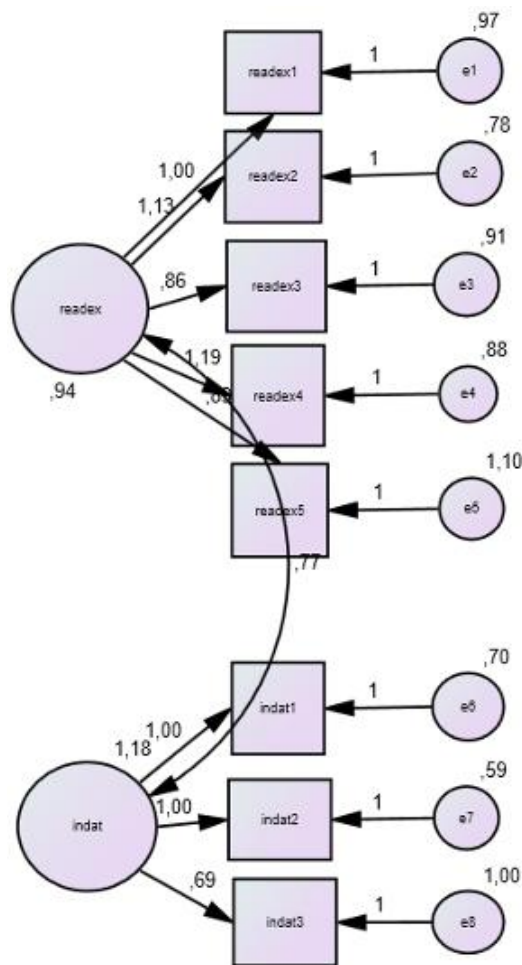
Index	Reference Values	Level of Fit
$\chi^2$		26.682
$\chi^2 / df$	$\chi^2 / df \leq 2$ perfect fit	1.404
RMSEA	$RMSEA \leq 0.5$ perfect fit	.073
NFI	$NFI \geq 0.90$ good fit	.90
NNFI	$NNFI \geq 0.95$	.95
GFI	$GFI \geq 0.90$ good fit	.92
AGFI	$AGFI \geq 0.90$ good fit	.86
CFI	$CFI \geq 0.95$ perfect fit	.97

As summarized in Table 3, these results demonstrate that the adapted scale exhibits a good to excellent model fit. Specifically, the chi-square to degrees of freedom ratio ( $\chi^2/df$ ) was below 2, indicating a perfect fit. The RMSEA value was below .06, suggesting a close approximation to the population model. Both the NFI and GFI values exceeded the .90 threshold, reflecting good model fit. Additionally, the CFI, IFI,

and NNFI values were all at or above .95, signifying a perfect fit. The AGFI value was above .80, which is considered acceptable. These findings support the factorial validity of the shortened and adapted scale, which was refined to enhance accessibility, linguistic clarity, and developmental appropriateness for middle school students with dyslexia. Figure 1 presents the results of the path analysis conducted for the RHS-RD.

**Figure 1.**

*Path Analysis of the Reading Habit Scale Adapted for Students with Dyslexia*



The first sub-factor of the adapted Reading Habit Scale was named *Individual Attitude* and included three items that reflect affective and motivational components of reading:

- “I like reading books very much.”
- “I feel sad when I cannot read books.”
- “I feel very happy when I receive a book as a gift.”

The second sub-factor, *Reading Experience*, consisted of five items that focus on students’ actual reading behaviors and reading culture in the family environment:

- “I read stories and tales.”
- “I read explanations and instructions.”
- “I read newspapers and magazines.”
- “My mother reads a lot of books.”
- “My father reads a lot of books.”

These items were retained from the original version of the scale based on their

factor loadings and relevance to students with dyslexia. Presenting these sample items helps illustrate the construct focus and content balance of the adapted two-factor structure. Notably, the Reading Experience sub-factor includes two items—‘My mother reads a lot of books’ and ‘My father reads a lot of books’—that directly capture the influence of parental reading behavior on students’ reading habits. These items serve as a proxy for assessing the home literacy environment and parental attitudes toward reading.

**Data Collection**

To collect the study data, the Student Personal Information Form and the adapted Reading Habit Scale for Students with Dyslexia (RHS-RD) were prepared in digital format using Google Forms. Necessary permissions were obtained from

the Provincial Directorates of National Education, and public middle schools providing inclusive education for students with learning disabilities were identified. Following institutional approval, school principals and classroom teachers were contacted to facilitate access to eligible participants, and students with dyslexia were identified based on official documentation from their Individualized Education Plans (IEPs) or personal development files. One-on-one meetings were conducted with the students during appropriate school breaks, and data were collected either on paper or via Google Forms using a tablet. While students completed the forms independently, additional guidance was provided when necessary to ensure accurate responses. For those who completed the scale on paper, the researcher manually entered their responses into Google Forms immediately after the data collection session, ensuring consistency in digital data storage and subsequent analysis.

#### Data Analysis

All statistical analyses were performed using IBM SPSS Statistics version 27. Descriptive statistics—frequencies and percentages for categorical variables and means and standard deviations for continuous variables—were used to summarize the reading habits of middle school students with dyslexia.

To determine the suitability of the data for parametric analyses, the skewness and kurtosis values of the total and subscale scores of the RHS-RD were examined. The skewness values were  $-0.159$  for the *Individual Attitude* subscale,  $0.141$  for the *Reading Experience* subscale, and  $0.151$  for the total RHS-RD score. The corresponding kurtosis values were  $-1.014$ ,  $-1.130$ , and  $-1.117$ , respectively. These results indicated

that the distributions were approximately symmetrical and relatively flat, suggesting that the data were close to normal and not heavily influenced by outliers.

Levene's test was conducted to evaluate the assumption of homogeneity of variances. The results indicated that this assumption was met for the *Reading Experience* subscale ( $p = .112$ ), the *Individual Attitude* subscale ( $p = .858$ ), and the total RHS-RD score ( $p = .540$ ). Given these results, independent samples t-tests and one-way analyses of variance (ANOVA) were conducted to examine whether students' reading habits differed based on academic achievement, support education status, and demographic variables. A significance level of  $p < .05$  was adopted for all inferential tests.

#### Findings

##### *Descriptive Findings Regarding the Scores of the Reading Habit Scale Adapted for Students with Dyslexia (RHS-RD)*

Table 4 presents the descriptive statistics for the total and subscale scores of the Reading Habit Scale adapted for students with dyslexia (RHS-RD). The total scale scores ranged from 8 to 38, with a mean of 22.10 ( $SD = 7.81$ ), suggesting moderate levels of reading habits overall. The *Individual Attitude* subscale scores ranged from 3 to 15 ( $M = 9.45$ ,  $SD = 3.32$ ), and the *Reading Experience* subscale scores ranged from 5 to 24 ( $M = 12.64$ ,  $SD = 5.40$ ). Skewness and kurtosis values indicated normal distribution for all variables. These results suggest that students with dyslexia demonstrated moderately positive attitudes toward reading and engaged in a variety of reading activities, though with noticeable variation across individuals.

**Table 4.**

*Descriptive Statistics for Reading Habits and Academic Achievement Scores (N = 77)*

	Min	Max	X	SD	Skewness	Kurtosis
Individual Attitude	3.00	15.00	9.45	3.32	-.25	-.09
Reading Experience	5.0	24.0	12.64	5.40	-.39	.78
RHS-RD Total	8.0	38.00	22.10	7.807	-.681	-.322

**Descriptive Findings on Academic Achievement**

Table 5 displays the descriptive statistics for the academic achievement scores of students with dyslexia. Scores ranged from 10 to 94, with a mean of 53.83

(SD = 20.68). The distribution of scores was approximately normal, with skewness =  $-0.142$  and kurtosis =  $-1.175$ . For interpretive clarity, Table 6 summarizes the categorical distribution of students' academic scores.

**Table 5.**

*Descriptive Findings Regarding the Academic Achievement Scores of Students with Dyslexia*

	N	Min	Max	X	SD	Skewness	Kurtosis
Academic Achievement Score	77	10	94.00	53.83	20.68	-.142	-1.175

Table 6 presents the distribution of academic achievement scores of middle school students with dyslexia. Most participants (42.9%) scored between 0 and 43 points, while only a small group (5.2%)

scored above 80. This distribution indicates that although some students achieved relatively high levels of performance, a significant portion demonstrated low to moderate academic achievement.

**Table 6.**

*Distribution of the Academic Achievement Scores of Middle School Students with RD*

Academic Achievement Scores	f	%	Valid %	Cumulative %
0-43	33	42.9	42.9	42.9
44-62	17	22.1	22.1	64.9
63-80	23	29.9	22.9	94.9
81-99	4	5.2	5.2	100.0
Total	77	100.0	100.0	

**Group Comparisons by Gender and Support Education Status**

Independent samples *t*-tests were conducted to examine whether the reading habits of students with dyslexia differed

based on their gender and their status of receiving support education services. Table 7 presents the *t*-test results comparing reading habit scores across these two grouping variables.

**Table 7.**

*Independent Samples t-Test Results for Reading Habit Scores by Gender and Support Education Status (N = 77)*

Grouping Variable	Subscale	Group	n	M	SD	t	p
Gender	Individual Attitude	Female	42	10.02	3.20	-1.664	.100
		Male	35	8.77	3.43		
	Reading Experience	Female	42	13.90	5.21	-2.294	<b>.024</b>
		Male	35	11.14	5.44		
	RHS-RD Total Score	Female	42	23.92	7.38	-2.310	<b>.023</b>
		Male	35	19.91	8.11		
Support Education	Individual Attitude	Received	48	10.10	3.17	-2.019	<b>.047</b>
		Not Received	29	8.50	3.36		
	Reading Experience	Received	48	14.40	5.89	-2.353	<b>.021</b>
		Not Received	29	11.53	5.36		
	RHS-RD Total Score	Received	48	24.50	8.42	-2.448	<b>.017</b>
		Not Received	29	20.04	7.77		

*Note.* M = Mean, SD = Standard Deviation. *p* values < .05 are in bold.

As shown in Table 7, significant differences emerged in the reading habits of students with dyslexia based on both gender and support education status. Female students had higher mean scores across all three domains: Individual Attitude ( $M = 10.02$  vs.  $8.77$ ), Reading Experience ( $M = 13.90$  vs.  $11.14$ ), and Total Reading Habits (RHS-RD Total;  $M = 23.92$  vs.  $19.91$ ). While the difference in Individual Attitude did not reach statistical significance ( $p = .10$ ), the differences in Reading Experience ( $t = -2.294, p = .02$ ) and Total RHS-RD scores ( $t = -2.310, p = .02$ ) were statistically significant, indicating that female students with dyslexia not only reported more frequent reading behaviors but also exhibited more favorable reading habits overall compared to their male peers.

Similarly, students who received support education (e.g., special education services, additional instruction through rehabilitation centers) scored significantly higher than their peers who did not receive such support. Mean scores were consistently higher in all domains: Individual Attitude ( $M = 10.10$  vs.  $8.50$ ), Reading Experience ( $M = 14.40$  vs.  $11.53$ ), and Total RHS-RD ( $M = 24.50$  vs.  $20.04$ ). These differences were statistically significant ( $p < .01$  for all), underscoring the beneficial impact of support education on the development of positive

reading habits in students with dyslexia.

**Group Comparisons by Academic Achievement and Background Variables**

As shown in Table 8, a one-way analysis of variance (ANOVA) was conducted to examine whether students' reading habits differed by academic achievement level. The results indicated no significant difference in the *Individual Attitude* subscale ( $F = 1.514, p = .218$ ). However, significant differences were found in both the *Reading Experience* subscale ( $F = 3.523, p = .019$ ) and the *Total RHS-RD* score ( $F = 3.103, p = .032$ ). Post hoc Tukey's tests revealed that students with achievement scores between 81–99 scored significantly higher than those in the 0–43 range in both domains ( $p = .010$ ). This finding suggests that students with higher academic performance tend to have richer reading experiences and stronger overall reading habits. In contrast, the ANOVA results revealed no statistically significant differences in reading habit scores across other background variables, including grade level, class size, maternal and paternal education levels, and socioeconomic status ( $p > .05$  for all comparisons). These findings suggest that reading habits among students with dyslexia in inclusive settings are not strongly influenced by these demographic factors.

**Table 8.**  
*Revised Group Comparison of Reading Habits Based on Academic Achievement*

Variable	Subscale	F	p	Significant Difference
Academic Achievement	Individual Attitude	1.514	.218	No
	Reading Experience	3.523	.019	Yes (81–99 > 0–43)
	Total RHS-RD	3.103	.032	Yes (81–99 > 0–43)
Grade Level	All	<1	>.05	No
Class Size	All	<1.8	>.05	No
Maternal Education Level	All	<1	>.05	No
Paternal Education Level	All	<2.1	>.05	No
Socioeconomic Status	All	<1	>.05	No

### **Summary of Group Comparisons**

Taken together, the findings suggest that while students' reading habits did not significantly differ based on grade level, class size, parental education, or socioeconomic status, both gender and support education status played a more prominent role. Female students and those who received support education services reported significantly higher levels of reading experience and overall reading habits. Additionally, academic achievement was positively associated with reading experience and total reading habit scores, particularly among students in the highest achievement group. These results emphasize the importance of individualized support and highlight how targeted interventions may foster stronger reading engagement among students with dyslexia in inclusive settings.

### **Discussion**

The present study examined the reading habits of middle school students (6th, 7th, and 8th grades) with dyslexia who were educated in inclusive classrooms, and the relationship between these habits and various demographic characteristics. In Türkiye, inclusive education is implemented in general education settings, where students with special educational needs, including those with dyslexia, learn alongside their typically developing peers. These students may also receive supplementary support through part-time resource rooms or individualized instruction in support education services, as outlined in their Individualized Education Plans (IEPs).

The findings obtained from the 77 participating students indicate that their self-reported reading habits were generally above average ( $M = 22.10$ ), suggesting a relatively positive pattern in both individual attitude and reading experience subdomains. This result implies that students with dyslexia can cultivate more favorable attitudes toward reading and engage in reading activities when educated in supportive environments. Previous research has emphasized that a positive attitude toward reading enhances students' motivation and likelihood to participate in reading-related activities (Baker et al., 2012; Martínez et al., 2008). Moreover, prior studies have shown that reading frequency and the number of books

read are closely associated with attitudes toward reading (Bağcı, 2010; Logan & Johnston, 2010). Several researchers have also indicated that such attitudes are foundational in transforming reading from a skill into a habit (Akkaya & Özdemir, 2013; Başaran & Altuner, 2016; Chotitham & Wongwanich, 2014; Gür Erdoğan & Demir, 2016; Türkyılmaz, 2012).

This study also explored whether students' self-reported reading habits varied according to their general academic achievement. In the Turkish education system, academic achievement is typically reflected in cumulative grade point averages (GPAs) reported in school records, which encompass performance in a broad range of subjects including language, mathematics, and science. In this study, academic achievement was operationalized based on students' GPA scores obtained from school records, which ranged from 10 to 94 ( $M = 53.83$ ). These scores were normally distributed, as indicated by acceptable skewness and kurtosis values. Analysis revealed that students with higher academic achievement, particularly those in the 81–99 score range, had significantly higher scores in both the Reading Experience subscale and the total Reading Habit Scale (RHS-RD). These findings suggest that higher academic performers tend to engage more consistently in reading activities. Although academic achievement is influenced by multiple factors—including student motivation, instructional quality, and support services—it appears to align, at least in part, with students' engagement in reading practices.

This association is consistent with previous research. Karadağ (2022) found a positive correlation between reading habits and academic performance among middle school students, albeit at a low level. Similarly, Chotitham and Wongwanich (2014) reported that students with stronger reading attitudes performed better in English and Thai classes. Whitten et al. (2016) observed that high school students who read literary texts voluntarily achieved higher scores across multiple academic subjects. Van den Heuvel-Panhuizen et al. (2016) demonstrated that integrating picture books into mathematics instruction improved young children's math achievement. Moreover, Akın (2016) and Faramida et al. (2024) documented parallel findings that

reading engagement positively impacts academic success. Collectively, these studies underscore that fostering reading habits may support broader academic development—even among students with learning difficulties such as dyslexia.

The study also investigated the potential impact of receiving support education on the reading habits of students with dyslexia. The findings indicated that students who benefited from support education services had significantly higher scores in both the individual attitude and reading experience sub-dimensions, as well as the overall reading habits score. This suggests that structured support services—delivered in addition to inclusive classroom instruction—may contribute positively to fostering engagement with reading among students with dyslexia. Support education in the Turkish context typically includes individualized or small-group instruction targeting literacy skills within resource rooms, aligned with students' Individualized Education Plans (IEPs) (Minsitry of National Education [MoNE]), 2007). The observed positive effect of these services is consistent with findings from prior research that highlight the role of targeted interventions in improving academic outcomes for students with dyslexia (Aslan, 2019; Güven, 2021). These programs are thought to enhance students' reading attitudes by increasing their self-efficacy, providing compensatory strategies for decoding and fluency, and cultivating positive reading experiences through scaffolded practice. In this regard, the findings reaffirm the importance of support education services as a key component of inclusive educational models.

Regarding demographic factors, the only statistically significant difference observed was between female and male students in their reading experience and total reading habit scores, favoring female students. This result aligns with prior research indicating gender-based differences in reading motivation, frequency, and preference (Hu et al., 2024; Kauderer & Randler, 2013; Rees, 2017). These studies often attribute higher reading engagement among girls to socialization patterns, reading preferences, and classroom dynamics that reinforce verbal and affective expression. However, contrasting findings such as those by Gültekin (2023) suggest that gender may

not universally predict reading behavior, especially when controlling for other socio-cultural factors. No significant effects were found for students' grade level, class size, maternal or paternal education level, or family socio-economic status. While this may suggest that reading habits among students with dyslexia are shaped more strongly by individual and instructional factors than by broader demographics, the relatively small sample size may have limited the power to detect more subtle associations.

### **Limitations, Implications, and Future Directions**

This study contributes to the literature by focusing specifically on the reading habits of middle school students with dyslexia enrolled in inclusive education settings in Türkiye. It highlights the importance of support education services and academic achievement as potential predictors of stronger reading engagement. The diverse sample—drawn from different schools and socioeconomic backgrounds—adds breadth to the findings, and the use of a validated and adapted reading habit scale enhances measurement reliability.

However, several limitations must be acknowledged. First, the study relied on a modest sample size ( $n = 77$ ), which may limit the generalizability of the findings. Second, although all students were formally identified as having dyslexia through school documentation, variation in diagnostic procedures across schools and regions was not assessed. Future studies should clarify whether diagnoses align with national or international criteria (e.g., DSM-5), particularly for international readers unfamiliar with the Turkish diagnostic context. Third, all data on reading habits were collected through student self-report, which may introduce bias due to social desirability or inaccurate self-perceptions. Thus, the current findings should be interpreted as perceived reading habits rather than objective measures. Future research should incorporate multi-informant data and direct assessments to triangulate findings. Furthermore, school-level and instructional context variables were not systematically analyzed. Since inclusive practices and the availability of reading interventions may differ significantly across schools,

future studies should explore school- and teacher-level factors using hierarchical or mixed-method designs. Finally, because this study was cross-sectional, it does not capture changes in reading habits over time. Longitudinal studies would offer a deeper understanding of how reading engagement evolves and how interventions sustain or fade over time.

### Conclusion

In conclusion, the study underscores the importance of strengthening the reading habits of students with dyslexia through both inclusive classroom practices and supplementary support education services. To enhance outcomes for these students, educators and policymakers should prioritize comprehensive literacy interventions, ensure equitable access to specialized instruction, and promote reading-friendly school environments. By doing so, the academic achievement and overall well-being of students with dyslexia may be substantially improved. Overall, this study enriches the existing literature by demonstrating how inclusive and supplementary educational practices can jointly strengthen reading habits among students with dyslexia, while offering an empirical foundation for future research and policy initiatives aimed at integrating multi-tiered, evidence-based.

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