


UDC: 7203.01

LBC: 63.3(2)6-7; 65.497; 71; 71.1

MJ № 478

 10.33864/2617-751X.2026.v9.i2.358-380

**THE CONTRIBUTION OF LEARNING DISABILITIES AND
PSYCHOLOGICAL ADJUSTMENT DISORDERS TO PREDICTING
SCHOOL FAILURE: A FIELD STUDY USING A CLINICAL-
EDUCATIONAL APPROACH AMONG PRIMARY AND MIDDLE
SCHOOL STUDENTS IN SIDI BEL ABBÈS PROVINCE, ALGERIA**

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Abstract. This study aimed to identify the level of learning disabilities and school-related psychological adjustment disorders among academically underachieving students, to analyze the nature of the relationship between them, to examine the contribution of adjustment disorders in predicting school failure, and to investigate differences in school failure trajectories according to the severity of learning disabilities. The study adopted a descriptive correlational–predictive design and was conducted on a sample of 105 students from primary and middle schools in educational institutions in Sidi Bel Abbès Province. The Learning Disabilities Diagnostic Inventory (LDDI) developed by Hammill and Bryant and a scale of school psychological adjustment disorders were used. The results indicated that the overall level of learning disabilities among the sample was high, with reasoning difficulties recording the highest mean score, followed by mathematics and reading difficulties. The findings also revealed a high level of school psychological adjustment disorders, particularly in the dimensions of low self-esteem and school anxiety. Pearson correlation coefficients showed positive and statistically significant relationships between all dimensions of learning disabilities and psychological

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To cite this article: El Houda, R.N., & Ghirane, Kh. [2026]. THE CONTRIBUTION OF LEARNING DISABILITIES AND PSYCHOLOGICAL ADJUSTMENT DISORDERS TO PREDICTING SCHOOL FAILURE: A FIELD STUDY USING A CLINICAL–EDUCATIONAL APPROACH AMONG PRIMARY AND MIDDLE SCHOOL STUDENTS IN SIDI BEL ABBÈS PROVINCE, ALGERIA. "Metafizika" journal, 9(2), pp.358-380.

<https://doi.org/10.33864/2617-751X.2026.v9.i2.358-380>

Article history:

Received: 07.01.2026 **Revised:** 10.02.2026 **Accepted:** 20.04.2026 **Published:** 15.06.2026



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adjustment disorders, with the strongest correlation observed for reasoning difficulties. Simple linear regression analysis indicated that psychological adjustment disorders accounted for 32% of the variance in school failure. One-way analysis of variance further revealed statistically significant differences in the level of school failure according to the severity of learning disabilities, with school failure increasing as the severity of learning difficulties increased. The study concluded that school failure among students with learning disabilities results from a complex interaction between cognitive and psychological factors, highlighting the need for comprehensive diagnostic and intervention approaches that integrate psychological and educational dimensions within educational institutions.

Keywords: Learning disabilities; psychological adjustment disorders; school failure; LDDI; academically underachieving students

УДК: 7203.01

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МЖ № 478

 10.33864/2617-751X.2026.v9.i2.358-380

**ВКЛАД НАРУШЕНИЙ ОБУЧАЕМОСТИ И РАССТРОЙСТВ
ПСИХОЛОГИЧЕСКОЙ АДАПТАЦИИ В ПРОГНОЗИРОВАНИЕ
ШКОЛЬНОЙ НЕУСПЕВАЕМОСТИ: ПОЛЕВОЕ
ИССЛЕДОВАНИЕ С ИСПОЛЬЗОВАНИЕМ КЛИНИКО-
ПЕДАГОГИЧЕСКОГО ПОДХОДА СРЕДИ УЧАЩИХСЯ
НАЧАЛЬНОЙ И СРЕДНЕЙ ШКОЛЫ В ПРОВИНЦИИ СИДИ-
БЕЛЬ-АББЕС (АЛЖИР)**

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Абстракт. Это исследование было направлено на выявление уровня нарушений обучаемости и школьных расстройств психологической адаптации среди учащихся с низкой академической успеваемостью, анализ характера взаимосвязи между ними, оценку вклада расстройств адаптации в прогнозирование школьной неуспеваемости, а также изучение различий в проявлениях школьной неуспеваемости в зависимости от степени выраженности нарушений обучаемости. В исследовании использовался описательный корреляционно-прогностический дизайн. В нём приняли участие 105 учащихся начальной и средней школы из образовательных учреждений провинции Сиди-Бель-Аббес. Были применены диагностический опросник нарушений обучаемости (LDDI), разработанный Хэмиллом и Брайантом, а также шкала школьных расстройств психологической адаптации. Результаты показали, что общий уровень нарушений

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Цитировать статью: Эль-Худа, Р.Н., & Гиране, Х. [2026]. ВКЛАД НАРУШЕНИЙ ОБУЧАЕМОСТИ И РАССТРОЙСТВ ПСИХОЛОГИЧЕСКОЙ АДАПТАЦИИ В ПРОГНОЗИРОВАНИЕ ШКОЛЬНОЙ НЕУСПЕВАЕМОСТИ: ПОЛЕВОЕ ИССЛЕДОВАНИЕ С ИСПОЛЬЗОВАНИЕМ КЛИНИКО-ПЕДАГОГИЧЕСКОГО ПОДХОДА СРЕДИ УЧАЩИХСЯ НАЧАЛЬНОЙ И СРЕДНЕЙ ШКОЛЫ В ПРОВИНЦИИ СИДИ-БЕЛЬ-АББЕС (АЛЖИР). Журнал «Metafizika», 9(2), с.358-380.
<https://doi.org/10.33864/2617-751X.2026.v9.i2.358-380>

История статьи:

Поступила: 07.01.2026 Переработана: 20.02.2026 Принята: 20.04.2026 Опубликовано: 15.06.2026



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обучаемости в выборке был высоким: наибольшее среднее значение наблюдалось по трудностям рассуждения, за которыми следовали трудности в математике и чтении. Также был выявлен высокий уровень школьных расстройств психологической адаптации, особенно по таким параметрам, как низкая самооценка и школьная тревожность. Коэффициенты корреляции Пирсона продемонстрировали положительные и статистически значимые связи между всеми аспектами нарушений обучаемости и расстройствами психологической адаптации, при этом наиболее сильная связь была обнаружена для трудностей рассуждения. Анализ простой линейной регрессии показал, что расстройства психологической адаптации объясняют 32% вариативности школьной неуспеваемости. Однофакторный дисперсионный анализ также выявил статистически значимые различия в уровне школьной неуспеваемости в зависимости от степени выраженности нарушений обучаемости: по мере усиления трудностей обучения уровень неуспеваемости возрастал. В заключение сделан вывод о том, что школьная неуспеваемость у учащихся с нарушениями обучаемости является результатом сложного взаимодействия когнитивных и психологических факторов, что подчеркивает необходимость комплексных диагностических и коррекционных подходов, объединяющих психологические и педагогические компоненты в рамках образовательных учреждений.

Ключевые слова: Нарушения обучаемости; расстройства психологической адаптации; школьная неуспеваемость; LDDI; учащиеся с низкой академической успеваемостью

UOT: 7203.01

KBT: 63.3(2)6-7; 65.497; 71; 71.1

MJ № 478

 10.33864/2617-751X.2026.v9.i2.358-380

**ÖYRƏNMƏ ÇƏTİNLİKLƏRİ VƏ PSIXOLOJİ UYĞUNLAŞMA
POZUNTULARININ MƏKTƏB UĞURSUZLUĞUNUN
PROQNOZLAŞDIRILMASINA TÖHFƏSİ: ƏLCƏZƏİRİN SİDİ BEL-
ABBAS VİLAYƏTİNDƏ İBTİDAİ VƏ ORTA MƏKTƏB
ŞAGİRDƏRİ ARASINDA KLİNİK–PEDAQOJİ YANAŞMA
ƏSASINDA APARILMIŞ SAHƏ TƏDQIQATI**

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Abstrakt. Bu tədqiqatın məqsədi akademik göstəriciləri aşağı olan şagirdlər arasında öyrənmə çətinliklərinin və məktəblə bağlı psixoloji uyğunlaşma pozuntularının səviyyəsini müəyyənləşdirmək, onların arasındakı əlaqənin xarakterini təhlil etmək, uyğunlaşma pozuntularının məktəb uğursuzluğunu proqnozlaşdırmadakı rolunu araşdırmaq və öyrənmə çətinliklərinin şiddətinə görə məktəb uğursuzluğu trayektoriyalarındakı fərqləri öyrənmək olmuşdur. Tədqiqat təsviri, korrelyasiyaedici və proqnozlaşdırıcı dizayn əsasında aparılmış və Sidi Bel-Abbès vilayətində yerləşən təhsil müəssisələrinin ibtidai və orta məktəblərindən 105 şagirdi əhatə etmişdir. Tədqiqatda Hammill və Bryant tərəfindən hazırlanmış Öyrənmə Çətinliklərinin Diaqnostik İntervarı (LDDI) və məktəbdə psixoloji uyğunlaşma pozuntularını ölçən şkala istifadə olunmuşdur. Nəticələr göstərmişdir ki, seçmədə öyrənmə çətinliklərinin ümumi səviyyəsi yüksək olmuşdur; ən yüksək orta göstərici məntiqi mühakimə çətinliklərinə aid olmuş, ondan sonra riyaziyyat və oxu çətinlikləri gəlmişdir. Eyni zamanda, məktəbdə psixoloji uyğunlaşma pozuntularının səviyyəsi də yüksək olmuş, xüsusilə

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Məqaləyə istinad: Əl Houda., R.N., & Girana, X. [2026]. ÖYRƏNMƏ ÇƏTİNLİKLƏRİ VƏ PSIXOLOJİ UYĞUNLAŞMA POZUNTULARININ MƏKTƏB UĞURSUZLUĞUNUN PROQNOZLAŞDIRILMASINA TÖHFƏSİ: ƏLCƏZƏİRİN SİDİ BEL-ABBAS VİLAYƏTİNDƏ İBTİDAİ VƏ ORTA MƏKTƏB ŞAGİRDƏRİ ARASINDA KLİNİK–PEDAQOJİ YANAŞMA ƏSASINDA APARILMIŞ SAHƏ TƏDQIQATI. “Metafizika” jurnalı, 9(2), səh.358-380.

<https://doi.org/10.33864/2617-751X.2026.v9.i2.358-380>

Məqalənin tarixçəsi:

Daxil olub: 07.01.2026 **Yenidən baxılıb:** 20.02.2026 **Təsdiqlənib:** 20.04.2026 **Dərc olunub:** 15.06.2026



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aşağı özünəqiymətləndirmə və məktəb narahatlığı ölçüləri üzrə daha qabarıq şəkildə özünü göstərmişdir. Pearson korrelyasiya əmsalları öyrənmə çətinliklərinin bütün ölçüləri ilə psixoloji uyğunlaşma pozuntuları arasında müsbət və statistik baxımdan əhəmiyyətli əlaqələrin olduğunu göstərmiş, ən güclü əlaqə məntiqi mühakimə çətinlikləri ilə müşahidə edilmişdir. Sadə xətti reqressiya təhlili psixoloji uyğunlaşma pozuntularının məktəb uğursuzluğundakı variasiyanın 32%-ni izah etdiyini göstərmişdir. Biramilli dispersiya təhlili isə öyrənmə çətinliklərinin şiddətinə görə məktəb uğursuzluğu səviyyəsində statistik əhəmiyyətli fərqlərin olduğunu ortaya qoymuşdur; yəni öyrənmə çətinlikləri artdıqca məktəb uğursuzluğu da yüksəlir. Tədqiqatın nəticəsinə görə, öyrənmə çətinlikləri olan şagirdlərdə məktəb uğursuzluğu koqnitiv və psixoloji amillərin mürəkkəb qarşılıqlı təsirinin nəticəsidir. Bu isə təhsil müəssisələrində psixoloji və pedaqoji komponentləri birləşdirən kompleks diaqnostik və müdaxilə yanaşmalarına ehtiyac olduğunu vurğulayır.

Açar sözlər: Öyrənmə çətinlikləri; psixoloji uyğunlaşma pozuntuları; məktəb uğursuzluğu; LDDİ; akademik göstəriciləri aşağı olan şagirdlər

1. Introduction

School failure is considered one of the complex issues that concern researchers in both clinical psychology and educational sciences, due to its far-reaching psychological, social, and educational effects on the learner's personality and developmental trajectory. School failure is no longer interpreted merely as a result of low intelligence or academic negligence; rather, it is increasingly viewed as the outcome of a complex dynamic interaction among cognitive, psychological, emotional, and contextual factors within and outside the school environment [Ferreira & Félix, 2019].

Recent literature indicates that school may shift from being a space for learning and growth to a stressful environment that generates anxiety and frustration for some students, particularly those who suffer from undiagnosed or inadequately supported learning difficulties, whether pedagogically or psychologically. In such cases, school failure becomes a surface manifestation of deeper problems related to psychological and social adjustment [Ferreira & Félix, 2019].

Learning disabilities are among the developmental disorders most strongly associated with school failure. They are defined as neurologically based disorders that affect the basic psychological processes involved in understanding or using language, whether spoken or written. These difficulties are reflected in marked problems in reading, writing, spelling, or arithmetic, despite average intelligence and adequate educational opportunities [National Research Center for Learning Disabilities, 2007].

Arab field studies confirm that students with learning disabilities face not only academic failure but also accompanying psychological and emotional problems, such as low self-esteem, anxiety, feelings of inferiority, and repeated frustration. These difficulties increase the likelihood of maladaptive behavioral patterns within the school context [Bezrāwī, 2024]. This study showed that the absence of appropriate psychological and educational support in both inclusive and regular classrooms contributes to the deterioration of students' psychological conditions and reinforces trajectories of school failure rather than containing them.

In the same context, the study by Saadi and Saadi (2021) revealed a statistically significant negative correlation between academic achievement and the level of behavioral problems among students with learning disabilities. Lower achievement was associated with higher levels of aggressive behavior, social withdrawal, and attention deficits in the classroom. These findings highlight the importance of viewing school behavior as a clinical indicator of psychological maladjustment rather than merely as a violation of school rules.

From a clinical psychological perspective, school adjustment is a key indicator of children's mental health, as it reflects their ability to respond to academic, social, and emotional demands of the school environment. Studies on school social adjustment indicate that students with learning disabilities show lower levels of adjustment compared to their typically developing peers, particularly in relationships with teachers and classmates and in adherence to classroom rules [Al-Samadi & Beibars, 2012].

Furthermore, recent research shows that adjustment disorders in the school context - such as school anxiety, school refusal, or chronic withdrawal - act as mediating

factors between learning disabilities and school failure. Recurrent negative emotional responses contribute to increased aversion to learning and the consolidation of learned helplessness among students [Kearney & Silverman, 2024].

Based on the above, it becomes evident that school failure cannot be understood or addressed in isolation from the interaction between learning disabilities and psychological adjustment disorders. This necessitates the adoption of an integrative approach that combines accurate clinical diagnosis with supportive educational intervention. Accordingly, the present study seeks to provide a psychological–educational reading of school failure trajectories among students with learning disabilities by analyzing their relationship with adjustment disorders within the school environment.

2. Research Problem

School is one of the most important developmental contexts contributing to the construction of the child’s personality at psychological, cognitive, and social levels. However, for some students, this environment may become a source of psychological pressure and repeated frustration, especially when the educational system fails to respond to individual differences and special learning needs. School failure represents one of the most prominent manifestations of this dysfunction, as its impact extends beyond low academic achievement to include psychological and emotional disorders that may accompany the individual across different stages of development [Ferreira & Félix, 2019].

Psychological and educational literature indicates that learning disabilities constitute a core factor associated with school failure trajectories. Students experience persistent difficulties in acquiring basic academic skills despite having average intellectual abilities and adequate educational opportunities, which exposes them to repeated experiences of failure in the classroom [National Research Center for Learning Disabilities, 2007]. These repeated failures weaken learning motivation and reinforce feelings of helplessness and frustration.

From a clinical psychology perspective, learning disabilities cannot be separated from school psychological adjustment disorders. Numerous studies have shown that students with learning disabilities experience high rates of school anxiety, social withdrawal, aggressive behavior, and low self-esteem - symptoms that fall under adjustment disorders resulting from an inability to cope effectively with school demands [Bezrāwī, 2024; Saadi & Saadi, 2021]. These disorders further complicate students’ academic situations and transform academic difficulty into a comprehensive psychological crisis.

Similarly, studies on school social adjustment indicate that students with learning disabilities display low levels of positive interaction with teachers and peers, weak adherence to classroom rules, and difficulty engaging in school activities, which increases feelings of rejection and isolation within the school environment [Al-Samadi & Beibars, 2012]. This poor adjustment acts as a mediating factor that accelerates the shift from temporary academic underachievement to chronic school failure.

Recent research also highlights that adjustment disorders, such as school refusal or chronic school-related anxiety, play a pivotal role in consolidating school failure trajectories, as students shift from being academically struggling learners to learners who are psychologically and behaviorally withdrawn from the educational process [Kearney & Silverman, 2024]. However, most educational approaches continue to focus on the academic dimension of school failure, neglecting the clinical psychological dimensions that constitute the core of the problem.

Despite the abundance of studies addressing learning disabilities or school adjustment separately, there is a clear lack of integrative field studies that examine the interactive relationship between learning disabilities and psychological adjustment disorders in explaining school failure trajectories, particularly in Arab contexts and in Algeria specifically. Moreover, field practice lacks intervention models that combine clinical diagnosis with educational support within schools.

Accordingly, the research problem of the present study is defined by attempting to answer the following main question:

What is the nature of the relationship between learning disabilities and school psychological adjustment disorders in explaining school failure trajectories among students at the educational stage?

This main question gives rise to the following sub-questions:

- What is the level of learning disabilities among academically underachieving students?
- What is the level of school psychological adjustment disorders among this group?
- Is there a statistically significant relationship between learning disabilities and psychological adjustment disorders?
- To what extent do adjustment disorders contribute to predicting school failure among students with learning disabilities?
- Do school failure trajectories differ according to the severity of learning disabilities or the type of adjustment disorder?

3.Objectives

- To identify the level of learning disabilities among academically underachieving students at the educational stage.
- To determine the level of school psychological adjustment disorders among students with learning disabilities.
- To examine the nature of the correlational relationship between learning disabilities and school psychological adjustment disorders.
- To investigate the extent to which school psychological adjustment disorders contribute to predicting school failure among students with learning disabilities.
- To compare school failure trajectories according to the severity of learning disabilities.
- To identify differences in school psychological adjustment disorders according to the type of learning disability.

- To highlight the mediating role of psychological adjustment disorders in the relationship between learning disabilities and school failure.
- To provide a clinical–educational perspective that contributes to the development of preventive and therapeutic psychological and educational interventions targeting academically underachieving students.

4. Significance of the Study

4.1. Theoretical Significance

The theoretical importance of this study lies in its contribution to deepening the scientific understanding of school failure trajectories by addressing the interactive relationship between learning disabilities and school psychological adjustment disorders within an integrative clinical–educational framework. It also enriches Arabic psychological and educational literature, which still suffers from a scarcity of field studies that combine clinical psychological and educational dimensions in explaining academic underachievement and school failure. Furthermore, the study clarifies the mediating role of psychological adjustment disorders in the relationship between learning disabilities and school failure, thereby supporting the development of more comprehensive theoretical models for understanding the interaction between cognitive and psychological factors within the school environment.

4.2. Practical Significance

The practical significance of this study stems from its expected findings, which may help guide field practices within educational institutions by providing diagnostic indicators that assist psychologists and educators in the early identification of learning disabilities and school psychological adjustment disorders. The study may also contribute to the design of preventive and therapeutic psychological–educational intervention programs aimed at improving school psychological adjustment, enhancing learning motivation, and reducing school failure trajectories among academically underachieving students. In addition, the findings may benefit educational policymakers in developing more inclusive educational policies that take into account individual differences and the psychological needs of learners.

5. Theoretical Framework of the Study

5.1. School Failure

School failure is considered one of the problematic concepts in psychological and educational sciences due to the multiplicity of approaches that have addressed it and the diversity of perspectives through which it has been interpreted. Traditionally, school failure has been defined as a student’s inability to achieve the prescribed educational objectives within a specific time frame, and it is often reflected in low academic achievement, grade repetition, or school dropout. However, this narrow definition is no longer sufficient to explain the phenomenon in light of recent developments in educational psychology [Ferreira & Félix, 2019].

Contemporary approaches indicate that school failure represents a cumulative process resulting from the interaction of cognitive, psychological, familial, and school-related factors. Persistent academic difficulties may become a gateway to deeper psychological problems such as anxiety, frustration, and low self-esteem, ultimately leading to the student’s explicit or implicit withdrawal from the educational

process [Ferreira & Félix, 2019]. This perspective emphasizes that school failure is not a sudden event, but rather a developmental trajectory that is open to intervention and prevention.

5.2. Learning Disabilities

Learning disabilities are neurodevelopmental disorders that affect the acquisition and use of basic academic skills despite average or above-average intelligence and the absence of sensory impairments or clear cultural deprivation. The National Research Center for Learning Disabilities defines them as disorders that affect the basic psychological processes involved in understanding or using spoken or written language, and that manifest in difficulties in reading, writing, spelling, or mathematics [National Research Center for Learning Disabilities, 2007].

The literature indicates that the impact of learning disabilities is not limited to the cognitive domain, but extends to emotional and behavioral aspects. Students with learning disabilities often experience repeated academic failure within the classroom, leading to reduced learning motivation, learned helplessness, and the development of a negative self-concept [Saadi & Saadi, 2021]. This accumulation of negative experiences is considered a key factor pushing students toward trajectories of school failure.

5.3. Psychological Adjustment Disorders

The concept of school psychological adjustment refers to the student's ability to achieve a dynamic balance between the demands of the school environment and their psychological, cognitive, and social capacities. When a student fails to achieve this balance, adjustment disorders emerge in the form of emotional and behavioral symptoms such as school anxiety, social withdrawal, aggressive behavior, and school refusal [Kearney & Silverman, 2024].

Clinical studies confirm that students with learning disabilities are more vulnerable to school psychological adjustment disorders due to repeated experiences of failure and exposure to stigma or negative comparison within the classroom, which reinforces feelings of psychological threat and insecurity in the school environment [Bezrawi, 2024]. These disorders are viewed as maladaptive defensive mechanisms that students resort to in order to escape stressful learning situations.

5.4. School Social Adjustment and Its Relationship to School Failure

School social adjustment is one of the fundamental indicators of a student's mental health, as it reflects the quality of their relationships with teachers and peers, their ability to comply with school rules, and their engagement in classroom activities. Findings from field studies indicate that students with learning disabilities demonstrate lower levels of social adjustment compared to their peers, which increases their feelings of isolation and rejection within the school context [Al-Samadi & Beibars, 2012].

Poor social adjustment contributes to reinforcing the vicious cycle of school failure, as social rejection or weak school support intensifies emotional disturbances and subsequently leads to a decline in academic performance, thereby consolidating chronic school failure.

5.5. The Relationship Between Learning Disabilities and Adjustment Disorders in Explaining School Failure

Recent literature points to an interactive relationship between learning disabilities and school psychological adjustment disorders in explaining school failure trajectories. Learning disabilities represent the primary factor that triggers a series of negative psychological responses, while adjustment disorders function as a mediating factor that accelerates the transition from academic underachievement to school failure [Ferreira & Félix, 2019; Kearney & Silverman, 2024].

This perspective underscores the importance of adopting an integrative approach to understanding school failure - one that combines accurate clinical diagnosis with supportive educational intervention - rather than relying solely on superficial academic remediation.

6. Study Methodology

6.1. Research Design

The present study adopted the **descriptive–analytical correlational approach**, as it is well suited to the nature of the research problem, which aims to examine the relationship between learning disabilities and psychological adjustment disorders, and to analyze their contribution to explaining school failure trajectories among students.

This approach is appropriate for psycho-educational studies that seek to combine accurate description of phenomena with quantitative analysis of relationships between variables.

6.2. Study Population

The study population consisted of **students enrolled in public middle schools** in the Wilaya of **Sidi Bel Abbès (Algeria)** during the **2024–2025 academic year**, who exhibit indicators of learning disabilities and recurrent school failure.

6.3. Study Sample

The study sample was selected using **intentional (purposive) sampling**, due to the specificity of the target group and the need for preliminary diagnostic screening.

- **Sample size:** 105 male and female students
- **Age range:** 7 to 15 years
- **Educational level:** Primary and middle education
- **Gender distribution:**
 - 58 males
 - 47 females

The participants were selected according to the following criteria:

- Presence of academic delay or repeated grade retention.
- Clear difficulties in reading, writing, or mathematics.
- Absence of diagnosed intellectual or sensory disabilities.
- No regular psychological follow-up or pharmacological treatment.

6.4. Study Instruments

6.4.1. Learning Disabilities Diagnostic Inventory (LDDI)

This study employed the **Learning Disabilities Diagnostic Inventory (LDDI)** developed by **Hammill and Bryant (1998)** to diagnose specific learning disabilities. The instrument consists of six independent subscales: **Listening, Speaking, Reading,**

Writing, Mathematics, and Reasoning, with each subscale containing **15 items** rated on a **nine-point scale** reflecting the frequency of behaviors indicative of learning difficulties.

The LDDI is not designed to measure academic ability or achievement; rather, it describes patterns of performance in basic skills associated with specific learning disabilities. This allows researchers and practitioners to identify areas of cognitive and behavioral weakness with greater precision [Emam et al., 2019].

6.4.2. Bell Adjustment Inventory (BAI)

Psychological adjustment disorders were assessed using the **Bell Adjustment Inventory (BAI)** in its **adapted version commonly used in Arab studies**. The inventory measures dimensions of **school, social, emotional, and family adjustment**, and has demonstrated satisfactory psychometric properties in terms of validity and reliability [Bell, 1961; Al-Qarni, 2015].

7. Study Procedures

7.1. Administrative and Organizational Procedures

The study was initiated after completing a set of administrative and organizational procedures. Prior coordination was established with the administrations of public educational institutions in the Wilaya of **Sidi Bel Abbès**, through the provision of written and oral explanations regarding the objectives of the study, its scientific nature, the target population, and data collection mechanisms. Emphasis was placed on the purely academic purpose of the study and its lack of any evaluative or administrative implications concerning students or institutions.

The administrations of the concerned institutions demonstrated positive cooperation, which facilitated the provision of appropriate conditions for administering the study instruments within classrooms, ensuring minimal disruption or interference with the normal course of the educational process.

7.2. Procedures for Sample Screening

In the first stage, an initial screening of students was conducted based on:

- School records (academic averages and repetition of grades).
- Reports provided by teachers and educational counselors.
- General classroom observation of indicators of academic underachievement.

This stage aimed to identify students who exhibited indicators of learning disabilities and school failure, while excluding cases with officially diagnosed intellectual or sensory disabilities, in order to maintain sample homogeneity and enhance the validity of the results.

7.3. Administration of Study Instruments

After determining the final study sample, the research instruments were administered according to standardized methodological steps:

- The instruments were administered collectively within classrooms at times previously agreed upon with school administrations.
- Clear and simplified instructions were provided to students in accordance with their age and cognitive level.
- Students were reassured that there were no right or wrong answers and that their responses were intended solely for scientific research purposes.

The administration process took between **30 and 45 minutes**, with the provision of a supportive psychological atmosphere to minimize anxiety or tension among participants.

7.4. Ethical Considerations

This study was conducted in accordance with established ethical standards for scientific research involving human participants, and in compliance with the principles of the **Declaration of Helsinki** issued by the World Medical Association.

8. Study Results

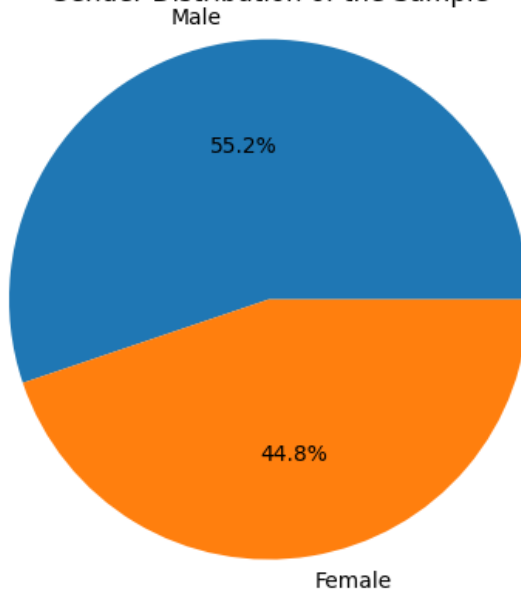
8.1. General Characteristics of the Sample

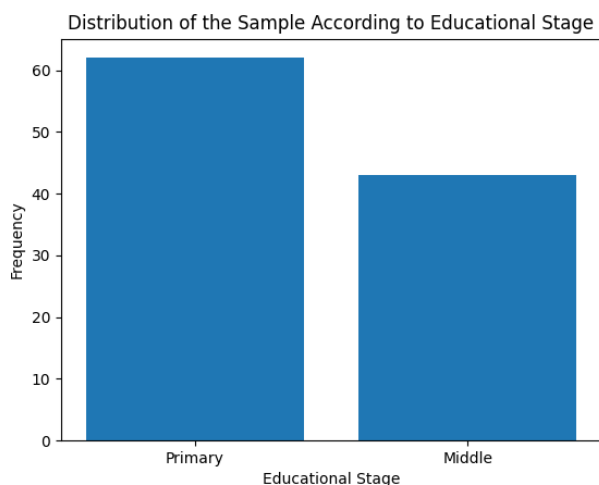
Table (1): Distribution of the Sample According to Gender and Educational Stage

Variable	Category	Frequency	Percentage (%)
Gender	Male	58	55.2
	Female	47	44.8
Educational stage	Primary	62	59.0
	Middle	43	41.0
Total		105	100

The table shows that the study sample consists of **105 students**, with a relatively balanced gender distribution and a numerical predominance of primary school students. This distribution is consistent with the nature of learning disabilities, which tend to become more apparent during the early stages of the academic trajectory.

Gender Distribution of the Sample





8.2. Level of Learning Disabilities Among Academically Underachieving Students

Table (2): Means and Standard Deviations of Learning Disabilities Dimensions

Learning Disabilities Dimensions (LDDI)	Mean	SD	Level
Listening Difficulties	3.74	0.63	High
Speaking Difficulties	3.68	0.70	High
Reading Difficulties	3.87	0.61	High
Writing Difficulties	3.65	0.72	High
Mathematics Difficulties	3.92	0.58	High
Reasoning Difficulties	4.01	0.55	Very High
Total Learning Disabilities Score	3.81	0.50	High

The table indicates that the overall level of learning disabilities among the students in the sample is high according to the LDDI scale. The **reasoning dimension** recorded the highest mean, followed by mathematics and reading. This suggests that higher-order cognitive difficulties related to thinking, analysis, and problem-solving represent the most affected domains among academically underachieving students.

These results are consistent with the nature of the LDDI, which focuses on describing functional performance patterns in basic skills rather than measuring direct academic achievement, thereby clearly reflecting areas of cognitive weakness associated with specific learning disabilities.

8.3. Level of School Psychological Adjustment Disorders

Table (3): Means and Standard Deviations of Adjustment Disorders Dimensions

Adjustment Disorder Dimension	Mean	SD	Level
School Anxiety	3.78	0.64	High
Social Withdrawal	3.54	0.70	Moderately High
Aggressive Behavior	3.21	0.68	Moderate
Low Self-Esteem	3.89	0.60	High
School Refusal	3.67	0.73	High

Total Score	3.62	0.52	High
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The results indicate that school psychological adjustment disorders among students with learning disabilities are at a **high level**, particularly in the dimensions of **low self-esteem** and **school anxiety**, reflecting the profound psychological impact of repeated experiences of academic failure.

8.4. Relationship Between Learning Disabilities and Psychological Adjustment Disorders

Table (4): Pearson Correlation Coefficients Between LDDI Dimensions and School Psychological Adjustment Disorders

Learning Disabilities Dimensions (LDDI)	Adjustment Disorders
Listening Difficulties	0.45**
Speaking Difficulties	0.41**
Reading Difficulties	0.48**
Writing Difficulties	0.42**
Mathematics Difficulties	0.51**
Reasoning Difficulties	0.63**
Total Learning Disabilities Score	0.59**

Note:

(**) Statistically significant at the 0.01 level.

Table (4) shows the existence of **positive and statistically significant correlations** between all dimensions of learning disabilities (LDDI) and school psychological adjustment disorders, with correlation coefficients ranging from **0.41 to 0.63**.

The highest correlation was recorded for **reasoning difficulties**, indicating that higher-order cognitive difficulties related to abstract thinking and problem-solving are among the dimensions most strongly associated with psychological adjustment disorders within the school environment.

The relatively high correlation of the total learning disabilities score ($r = 0.59$) further indicates that students with higher levels of learning disabilities tend to exhibit higher levels of psychological adjustment disorders, supporting the **clinical-educational perspective** that views school failure as the result of a complex interaction between cognitive and psychological factors.

8.5. Contribution of Psychological Adjustment Disorders to the Prediction of School Failure

Table (5): Results of Simple Linear Regression Analysis Predicting School Failure

Independent Variable			β	t-value	Sig.
Adjustment Disorders			0.57	6.84	0.000
R ²	F	Sig.			
0.32	46.78	0.000			

The regression analysis results indicate that psychological adjustment disorders explain **32%** of the variance in school failure, a statistically significant proportion. This confirms the important predictive role of these disorders in the trajectories of academic underachievement and school failure among students with learning disabilities.

8.6. Differences in School Failure Trajectories According to Severity of Learning Disabilities

Table (6): Differences in School Failure by Severity of Learning Disabilities (ANOVA)

Severity of Learning Disabilities		Mean	SD
Mild		2.91	0.47
Moderate		3.45	0.51
Severe		4.02	0.56
F	Sig.		
18.62	0.000		

The results indicate the presence of **statistically significant differences** in the level of school failure according to the severity of learning disabilities. School failure increases as the severity of learning difficulties increases, confirming the **cumulative nature** of the problem.

Written informed consent was obtained from the parents or legal guardians of participating students after they were fully informed about the objectives, nature, and procedures of the study. Participation was voluntary, and participants were informed of their right to withdraw at any time without any educational or psychological consequences.

Confidentiality and privacy were strictly respected; no directly identifiable data were collected, numerical codes were used instead of names, and the data were used exclusively for scientific purposes.

Furthermore, care was taken to avoid any psychological or educational harm to participants and to prevent practices that could lead to labeling or embarrassment within the school environment. All study procedures were conducted in a manner that ensured the dignity and psychological well-being of the participants.

9. Discussion of Results

9.1. Level of Learning Difficulties among Academically Struggling Students

The results of the present study reveal the existence of positive and statistically significant correlations between all dimensions of learning difficulties, as measured by the *Learning Disabilities Diagnostic Inventory (LDDI)*, and psychological adjustment disorders. This indicates that deficits in basic cognitive and academic skills are closely associated with difficulties in psychological adjustment within the school environment. These findings confirm that learning difficulties are not merely an academic problem, but extend to the emotional and social domains of the student, which is consistent with the contemporary clinical–educational conceptualization of learning disabilities [Hammill & Bryant, 1998].

9.2. Level of School Psychological Adjustment Disorders

The results related to school psychological adjustment disorders showed a clear increase in school anxiety and low self-esteem, along with moderate levels of aggressive behavior among some students. This is consistent with studies that link academic difficulties to negative emotional adjustment, as school anxiety plays a central role in deteriorating the quality of the educational experience among academically struggling students [Nel & Müller, 2020].

Sobsey (1995) reported that students who face undiagnosed learning difficulties often exhibit maladaptive emotional responses as defensive mechanisms, such as anxiety and intense emotional reactions in the classroom. This is consistent with the low self-esteem observed in the current study. Low self-esteem is considered one of the psychological adjustment disorders most strongly associated with school failure, as it weakens students' motivation to participate and engage within the educational environment [Ratz & Lenhard, 2013].

9.3. The Relationship between Learning Difficulties and Psychological Adjustment Disorders

Correlation coefficients revealed a positive and statistically significant relationship between learning difficulties and school psychological adjustment disorders, with the strongest association observed for the attention dimension, followed by the other dimensions. This finding is consistent with previous studies demonstrating that learning difficulties do not operate independently of the student's emotional and behavioral context [Mazzocco & Myers, 2003].

Attention and working memory are also closely linked to psychological adjustment processes. Barkley (1997) notes that attention difficulties affect not only academic performance but also constitute a psychological stressor that may lead to anxiety and avoidance of learning situations. Accordingly, it is reasonable that high correlation coefficients emerge between learning difficulties and adjustment disorders, given that the neurocognitive foundations of learning difficulties overlap with the psychological functions that regulate behavior and emotions within the school setting.

The highest correlation was recorded for reasoning difficulties ($r = 0.63$), reflecting the central role of higher-order cognitive processes- such as abstract thinking, planning, and problem-solving- in achieving school psychological adjustment. Weak reasoning limits the student's ability to understand complex educational demands and to regulate appropriate behavioral and emotional responses, making them more vulnerable to anxiety, frustration, and feelings of failure, which are core manifestations of psychological adjustment disorders [Swanson & Harris, 2014]. This finding supports the view of Hammill and Bryant that specific learning difficulties, particularly in reasoning, are associated with maladaptive performance patterns in educational contexts [Hammill & Bryant, 1998].

Relatively strong correlations were also found for mathematics ($r = 0.51$) and reading ($r = 0.48$), which can be explained by the central role of these domains in school assessment and judgments of academic competence. The literature indicates that repeated failure in reading and mathematics contributes to lower academic self-concept and reinforces negative emotional experiences, such as shame, withdrawal, and avoidance of learning situations, which negatively affect psychological and social adjustment [Kavale & Forness, 1996].

In contrast, the listening, speaking, and writing dimensions showed moderate positive correlations with psychological adjustment disorders, highlighting the importance of language and communication skills in building positive school relationships. Difficulties in these skills may lead to poor interaction with teachers and peers and repeated experiences of failure in the classroom, exacerbating feelings

of tension and social rejection and weakening psychological adjustment [Snowling et al., 2020].

The relatively high correlation coefficient for the total learning difficulties score ($r = 0.59$) reflects the cumulative and interactive nature of these difficulties. The overlap of multiple cognitive, linguistic, and academic deficits increases the psychological burden on the student, supporting the clinical–educational perspective that psychological adjustment disorders and school failure result from a complex interaction between cognitive, emotional, and contextual factors rather than a single isolated cause [Rutter et al., 2006].

Accordingly, these findings emphasize the need for a comprehensive diagnostic and intervention approach when dealing with students with learning difficulties - one that simultaneously addresses cognitive, academic, and psychological dimensions, with particular attention to higher-order cognitive processes, especially reasoning, due to their profound impact on trajectories of school psychological adjustment.

9.4. Contribution of Psychological Adjustment Disorders to the Prediction of School Failure

The results of regression analysis showed that psychological adjustment disorders significantly contribute (32%) to explaining school failure among students with learning difficulties. This is consistent with findings from numerous applied studies indicating that school failure is not merely an academic weakness, but rather a psychological–behavioral phenomenon closely linked to indicators of social and psychological adjustment [Roeser et al., 1998].

The interaction between school anxiety and weak psychological support suggests that school failure in this group may result from a compounded interaction between repeated failure experiences and persistent adjustment difficulties. For example, Ladd and Burgess (2001) indicated that students' inability to socially adjust within the classroom exacerbates their academic problems, supporting the predictive relationship between adjustment disorders and school failure as reflected in the results of the current study.

9.5. Differences in School Failure Trajectories According to the Severity of Learning Difficulties

Statistically significant differences were found in the level of school failure according to the severity of learning difficulties; as the severity of difficulties increased, the level of school failure also increased. This finding aligns with numerous studies indicating that the severity and type of learning difficulties are directly associated with final learning outcomes, with students experiencing severe difficulties being more vulnerable to persistent failure than others [Swanson et al., 2008].

Similarly, Shaywitz et al. (2008) confirmed that students with complex learning difficulties (i.e., involving multiple domains) show lower academic achievement and continuous decline in grades, reinforcing the significance of the differences identified in the present study.

9.6. Interaction between Psychological and Cognitive Dimensions in School Failure Trajectories

Based on the analytical results, it can be concluded that school failure trajectories are not linear, but rather the outcome of a complex interaction between cognitive variables (learning difficulties) and psychological variables (adjustment disorders). This conclusion is consistent with contemporary literature that conceptualizes school failure as a multidimensional construct requiring a deeper understanding from a psychological-educational perspective - an approach that aligns with the objectives of the present study [Wang et al., 2014].

Accordingly, the current findings do not support traditional educational strategies that focus solely on the academic aspect of school failure; instead, they highlight the necessity of integrating psychological interventions within the educational framework.

The *Reasoning* dimension recorded the highest correlation coefficient with psychological adjustment disorders ($r = 0.63$), indicating that difficulties related to higher-order cognitive processes - such as abstract thinking, information organization, and problem-solving - are among the most influential factors affecting students' psychological adjustment. Weak reasoning skills limit the student's ability to understand academic demands, anticipate behavioral outcomes, and make appropriate decisions, thereby increasing levels of anxiety, frustration, and feelings of helplessness, which are core features of psychological adjustment disorders [Swanson & Harris, 2014].

The results also showed significant correlations with mathematics ($r = 0.51$) and reading ($r = 0.48$), two academic domains that are strongly associated with school pressure and continuous evaluation. The literature suggests that repeated failure in these areas reinforces negative experiences, undermines academic self-concept, and leads to poor psychological and social adjustment within the school context [Kavale & Forness, 1996].

Furthermore, the listening, speaking, and writing dimensions demonstrated moderate positive correlations with psychological adjustment disorders, highlighting the critical role of language and communication skills in school interaction. Students who experience difficulties in listening or in oral and written expression are more likely to face misunderstandings, negative evaluations from teachers, and weakened peer relationships - factors that contribute significantly to maladaptive psychological adjustment [Snowling et al., 2020].

The relatively high correlation coefficient for the total learning difficulties score ($r = 0.59$) reflects the cumulative nature of these difficulties. The interaction of multiple cognitive and academic deficits increases the psychological burden on the student, supporting the assumption that school failure and psychological adjustment disorders result from a complex interaction between cognitive and emotional factors rather than from a single isolated cause [Rutter et al., 2006].

Accordingly, these findings underscore the importance of adopting a comprehensive diagnostic approach when dealing with students with learning difficulties - one that considers not only academic underachievement, but also the

associated psychological and adjustment-related consequences, with particular emphasis on higher-order cognitive dimensions such as reasoning.

10. Conclusion

The present study sought to explore the nature of the relationship between learning difficulties and school psychological adjustment disorders in explaining trajectories of school failure among academically struggling students, based on an integrative psycho-educational perspective that combines the cognitive dimension with the emotional-psychological dimension. The results indicated that learning difficulties among the sample were at a high level, particularly in the reasoning dimension, which confirms that academic underachievement cannot be reduced merely to poor academic performance, but is also associated with impairment in basic cognitive processes that are necessary for effective learning.

The results further revealed a clear increase in indicators of school psychological adjustment disorders, especially school anxiety and low self-esteem, reflecting the fragility of psychological balance among students with learning difficulties within the school environment. Statistical analyses showed a significant correlation between learning difficulties and psychological adjustment disorders, in addition to the considerable contribution of these disorders in predicting school failure. This supports the view that school failure is a multidimensional phenomenon shaped by the interaction of interrelated cognitive, psychological, and contextual factors.

These results confirm that focusing solely on academic aspects in addressing school failure is an inadequate approach, as ignoring the psychological disorders accompanying learning difficulties leads to reinforcing failure trajectories rather than breaking them. Therefore, there is a need to reconsider educational policies and classroom practices through the adoption of comprehensive interventions that combine clinical diagnosis with psychological and adaptive support within the school, in a way that safeguards students' mental health and enhances their chances of academic and social success.

Recommendations of the Study

- Activating early detection mechanisms for learning difficulties within educational institutions to prevent academic underachievement from developing into chronic school failure.
- Adopting flexible teaching approaches that take individual differences into account, with an emphasis on developing attention and basic cognitive functions among students with learning difficulties.
- Enhancing school psychological care through interventions aimed at reducing school anxiety, supporting self-esteem, and improving psychological adjustment among academically struggling students.
- Integrating the school psychologist within educational teams to ensure clinical diagnosis and continuous psychological follow-up.
- Encouraging educational and psychological research that adopts an integrative approach to studying school failure as a multidimensional phenomenon.

Conflict of Interest

The authors declare that there is no financial, personal, or institutional conflict of interest that could directly or indirectly influence the design, implementation, data analysis, interpretation of results, or publication of this study. This research was conducted purely for scientific and academic purposes, without any influence or direction from any external party.

Funding

This study did not receive any funding or financial support from any governmental, private, institutional, or non-profit entity. The research was carried out solely based on the authors' own efforts, with no research grants or financial support provided for data collection, measurement instruments, statistical analysis, or preparation and publication of the manuscript. No external party had any role in the study design, implementation, interpretation of results, or the decision to publish.

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