



An-Najah National University
Faculty of Graduate Studies

**THE EFFICACY OF A COGNITIVE
BEHAVIORAL THERAPY PROGRAM IN
REDUCING DEPRESSION AND IMPROVING
SELF-EFFICACY AMONG STUDENTS WITH
LEARNING DISABILITIES**

By
Mayar Esam Adnan Athamleh

Supervisors
Dr. Fayez Mahamid
Dr. Fakher Khalili

**This Thesis is Submitted in Partial Fulfillment of the Requirements for the Degree of
Master of Clinical Psychology, Faculty of Graduate Studies, An-Najah National
University, Nablus, Palestine.**

2023

THE EFFICACY OF A COGNITIVE BEHAVIORAL THERAPY PROGRAM IN REDUCING DEPRESSION AND IMPROVING SELF-EFFICACY AMONG STUDENTS WITH LEARNING DISABILITIES

By
Mayar Esam Adnan Athamleh

This Thesis was Defended Successfully on 23/8/2023, and approved by

Dr. Fayez Mahamid
Supervisor


Signature

Dr. Fakher Khalili
Co-Supervisor


Signature

Dr. Wael Abu Hassan
External Examiner


Signature

Dr. Falastin Nazaal
Internal Examiner


Signature

Dedication

I dedicate this dissertation to:

My loving and great Parents, whose love, words of encouragement and support make me able to get such success.

My beloved sister who has been supporting and encouraging me.

My supervisors for their constant support during this hard work.

My friends and colleagues.

To all with warm regards.

Acknowledgements

There are many people to thank for their hard work from the beginning till the completion of the present research.

I would like to express my gratitude and to say warm thanks to my supervisors Dr. Fayed Mahamid and Dr. Fakher Khalili, who has been always generous with their efforts, support, encouragements, and guidance by providing me with their endless advice and support.

I am particularly grateful for the cooperation offered by the headmaster Mr. Qasim Mousa for giving me the opportunity to implement the program in his school.

Another thank is also due to the students who participated in this study.

My great appreciation is to the teacher Mrs. Reem Marei for her patience and invaluable assistance on every taken step of the program application.

And behind everything, throughout the entire journey, I have benefitted immensely from the invaluable support of my family and friends. I am beyond grateful to these people without whom I would not have been able to pursue my graduate degree.

Declaration

I, the undersigned, declare that I submitted the thesis entitled:

THE EFFICACY OF A COGNITIVE BEHAVIORAL THERAPY PROGRAM IN REDUCING DEPRESSION AND IMPROVING SELF-EFFICACY AMONG STUDENTS WITH LEARNING DISABILITIES

I declare that the work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

Student's Name

Signature

Date

Table of Contents

Dedication	iii
Acknowledgements	iv
Declaration	v
Table of Contents	vi
List of Tables	ix
List of Appendices	x
Abstract	xi
Chapter One: Theoretical Framework and Previous Studies	1
1.1 Introduction.....	1
1.2 Learning Disability.....	4
1.2.1 Introduction	4
1.2.2 Definition of Learning Disability	5
1.2.3 Learning Disability Theories.....	6
1.2.3.1 The Developmental Approach	6
1.2.3.2 The Behavioral Approach	7
1.2.3.3 Cognitive Approach.....	7
1.2.3.4 Neuropsychological Approach	7
1.2.3.5 Basic Processes Approach	7
1.2.4 Types of Learning Disabilities.....	8
1.2.4.1 Dyslexia	8
1.2.4.2 Dysgraphia	9
1.2.4.3 Dyscalculia.....	9
1.2.5 Associated Deficits and Disorders	9
1.2.5.1 Auditory Processing Disorder	9
1.2.5.2 Language Processing Disorder	9
1.2.5.3 Nonverbal Learning Disabilities	10
1.2.5.4 Visual Perceptual/Visual Motor Deficit	10
1.2.6 Causes of Learning Disabilities	10
1.2.6.1 Factors of Heredity or Genetics	10
1.2.6.2 Neurological Factors	10
1.2.6.3 Environmental Factors.....	11
1.3 Self Efficacy.....	11
1.3.1 Definition Self-Efficacy	12

1.3.2 Efficacy-Activated Processes	13
1.3.2.1 Cognitive Processes	13
1.3.2.2 Motivational processes	13
1.3.2.3 Affective Processes.....	14
1.3.2.4 Selection Processes.....	14
1.3.3 Self-Efficacy and Psychological Well-Being	14
1.3.4 Self-Efficacy and Psychotherapy.....	15
1.3.5 The Role of Self-efficacy in Student Transitions	17
1.3.6 Self-Efficacy Factors	18
1.4 Depression.....	19
1.4.1 Introduction	19
1.4.2 Definitions of Depression	19
1.4.3 Depression Prevalence and Etiology	21
1.4.4 The Level of Depression.....	23
1.4.4.1 Mild Depression	23
1.4.4.2 Moderate Depression	23
1.4.4.3 Severe Depression.....	23
1.4.4.4 Classification of Depression	24
1.4.4.5 Depression among Children	24
1.4.5 Symptoms of Depression	25
1.4.5.1 Psychological and Emotional Symptoms.....	25
1.4.5.2 Physiological Symptoms	25
1.4.5.3 Cognitive Symptoms.....	25
1.4.6. Explanatory Theories of Depression.....	26
1.4.6.1 Biological Theories.....	26
1.4.6.2 Genetic Factors.....	27
1.4.6.3 Behavioral Models	28
1.4.6.3 Cognitive Models.....	28
1.4.6.4 Self-Control Model.....	29
1.4.6.5 Sociocultural Models	30
1.4.6.6 Aaron Beck's Cognitive Theory of Depression	30
1.4.7 Depression and Learning Disabilities	31
1.5 Cognitive Behavioral Therapy (CBT)	33
1.5.1 Introduction	33
1.5.2 History of Cognitive Behavioral Therapy	33

1.5.3 Cognitive Behavioral Therapy Theories	34
1.5.4 Cognitive Behavioral Therapy (CBT).....	37
1.5.5 Therapeutic Techniques of Cognitive Behavioral Therapy	39
1.5.6 CBT, Children with Learning Disabilities, Depression and Level of Self- efficacy.....	41
1.6 Definitions of Key Terms	42
1.7 Statement of the Problem	43
1.8 Sub Questions	44
1.9 Statement of Importance	44
1.10 Objectives of the Study	45
1.11 Study Hypotheses	45
Chapter Two: Methodology	47
2.1 Introduction.....	47
2.2 Study Design	47
2.3 Study Population	48
2.4 Sampling and Sample Size	48
2.5 Study Instruments	49
2.6 The Group CBT Program:	52
2.7 The Study Procedures	55
2.8 The Statistical Analysis:	56
2.9 Study Variables	56
2.10 The Equivalence of the Two Study Groups	56
Chapter Three: The Results	58
3.1 The Results of the First Question.....	58
3.2 The Results of the Second Question	60
3.5 The Results of the third Question	61
3.6 The Results of the fourth Question.....	63
Chapter Four: Discussions and Conclusions	66
4.1 Conclusion.....	68
4.2 Limitations of the Study.....	69
4.3 Recommendations	69
References	70
Appendixes.....	88
الملخص	ب

List of Tables

Table 1: Participants description (n = 12)	49
Table 2: The construct validity of the Arabic version of the DSRS-C	50
Table 3: The DSRS-C items' scoring direction.....	50
Table 4: The construct validity of the Arabic version of the GSES.....	51
Table 5: The content of the ten-session CBT group program	54
Table 6: Testing the normality of the responses in depression and perceived self-efficacy for both groups in the pre-tests by the Shapiro-Wilk test.	57
Table 7: Means, standard deviations and the results of the independent sample t-Test of depression and self-efficacy for both groups in the pre-tests	57
Table 8: Testing the normality of the responses in depression in the pre-test and post-test for the experimental group by the Shapiro-Wilk test (n = 6)	58
Table 9: Means and standard deviations of depression for the pre-test and post-test of the experimental group.....	59
Table 10: The results of paired samples t-Test of the differences between the pre-test and post-test of depression in the experimental group	59

List of Appendices

Appendix A: Table.....	88
Table A.1: Testing the normality of the responses in self-efficacy in the pre-test and post-test for the experimental group by the Shapiro-Wilk test (n = 6).....	88
Table A.2: Means and standard deviations of self-efficacy for the pre-test and post-test of the experimental group.....	88
Table A.3: The results of paired samples t-Test of the differences between pre-test and post-test of self-efficacy in the experimental group.....	88
Table A.4: Testing the normality of the responses in depression in the post-test a by the Shapiro-Wilk test (n = 6).	88
Table A.5: Means and standard deviations of depression in the post-test according to group type, gender, and age	89
Table A.6: Three-way ANCOVA results of differences in depression in the post-test according to group type, gender, and age	89
Table A.7: Testing the normality of the responses in self-efficacy in the post-test a by the Shapiro-Wilk test (n = 6)	89
Table A.8: Means and standard deviations of self-efficacy in the post-test according to group type, gender, and age.	89
Table A.9: Three-way ANCOVA results of differences in self-efficacy in the post-test according to group type, gender, and age	90
Table A.10: The adjusted means and standard errors of self-efficacy in the post-test according to group type	90
Appendix B: The CBT group program to reduce depression and improve self-efficacy among students with learning disabilities.....	91
Appendix C: Assessment Tools	110

THE EFFICACY OF A COGNITIVE BEHAVIORAL THERAPY PROGRAM IN REDUCING DEPRESSION AND IMPROVING SELF-EFFICACY AMONG STUDENTS WITH LEARNING DISABILITIES

By
Mayar Esam Adnan Athamleh
Supervisors
Dr. Fayez Mahamid
Dr. Fakher Khalili

Abstract

Background: Learning disabilities are a type of neurodevelopmental condition. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), the underlying aspects include deficits in learning skills, leading to decreased self-efficacy and future despair. Previous research has shown that cognitive-behavioral treatment improves self-efficacy and decreases depression in students with learning disabilities. As a result, this study aimed to investigate the impact of Cognitive-Behavioral Therapy (CBT) on reducing depression and increasing self-efficacy among students with learning difficulties.

Methodology: The quasi-experimental method with a pre-test-post-test control group design was used in the current study to test the effect of the independent variable (a Cognitive Behavioral Therapy (CBT) group program) on the two dependent variables (reducing depression and improving self-efficacy) among students with learning disabilities. The design of two equivalent groups was used; control and experimental groups, the sample comprised 12 children who exhibited learning disabilities, with an age range of 12 to 13 years because their brain is still developing and deserves to be studied. Whereas the CBT program was applied to the experimental group. Meanwhile, the control group did not receive any intervention. Pre-test and post-test were conducted for the two groups to assess depression and self-efficacy before and after applying for the therapeutic program, and scores were compared and analyzed.

Results: The results showed that CBT is effective in developing self-efficacy and reducing depression. This study examines the correlation between the level of depression and learning disabilities in children, upon the results of utilizing the level measure of depression as the primary metric and self-efficacy in children with learning

disabilities, which was used as a pre-measure before applying the program for children with learning disabilities and as a measure after therapeutic intervention.

Conclusions: The findings of the study lead us to consider the efficiency of cognitive-behavioral therapy and the significance of its continuity in lowering depression and increasing self-efficacy among students with learning disabilities, and can be used to train teachers and educational counsellors in schools and guide parents in developing a CBT intervention plan for children with learning disabilities.

Keywords: Self-efficacy; Learning Disability; Depression; Cognitive Behavioral Therapy (CBT)

Chapter One

Theoretical Framework and Previous Studies

1.1 Introduction

The effectiveness of the education and training process is mostly influenced by how effectively the approaches are tailored to the individual characteristics of the students. It is dependent on the capabilities of instructors working at various stages of the educational process as a key issue. Teachers work with many categories of students that require particular attention under general education legislation including talented kids, students with learning disabilities, students with special educational requirements, integration challenges, and pupils who are cumulatively disadvantaged (Szilvia et al., 2013).

Learning disabilities are long-term psychological issues; Nonetheless, if children with learning disabilities receive the appropriate interventions and support for the sequences, they can succeed in their education and other distinguished professions in their life (Bekirogullari, 2018).

There are several reasons for learning difficulties, and the cause is often unknown despite extensive research. People with learning difficulties have relatively high rates of physical and mental illness, and co-morbidity is common (Muktamath et al, 2021).

Assessments take longer and must include hired caregivers, family members, and individuals with learning impairments. Other factors must be considered in addition to the normal examination and treatment approaches. A biopsychosocial-developmental approach to both is a valuable framework to utilize. It is essential to avoid "diagnostic overshadowing," which occurs when symptoms of medical illnesses are mistakenly attributed to the person's learning impairments and go untreated. People with learning impairments confront several challenges to receiving the necessary treatment, and more proactive methods by health professionals are required (Mizen & Cooper, 2012).

People with learning disabilities may also be affected by some psychological disorders, including depression. A study by Gallegos et al. (2012) conducted a comparative analysis between children diagnosed with learning disabilities and their counterparts who are at risk of developing anxiety and depression. The study's results showed that

there is a higher prevalence of children diagnosed with LD exhibited a susceptibility to anxiety (22.33% vs. 11.5%) and depression (32% vs. 18%).

Unfortunately, childhood mental disorders, such as depression, have been undertreated and misinterpreted. Most studies, such as Gautam et al. (2020) and Palacios et al. (2018), have only been conducted on adult samples. However, developments in the mental health field have led to an increasing interest in the early identification of depression symptoms in school-aged populations (Ahlen et al, 2012).

Social acceptability is critical in a kid's life, but it is more difficult to achieve if the youngster has a learning problem (LD). People with learning difficulties are sometimes shunned, mocked, and stigmatized by their peers as dumb, subnormal, or slow learners. The phrase "learning difficulties" refers to several sorts of learning impairments. Learning disabilities are not diseases. Learning-disabled children are frequently stigmatized and associated with failure, which decreases their self-esteem (Pandy, 2012).

Children with learning difficulties face numerous academic setbacks, bullying, despair, and suicide attempts, all of which can contribute to poor self-esteem. Individuals with learning difficulties acquire a negative self-perception of themselves, contrary to their counterparts who do not have a learning disability, according to the research. There are researches associating learning disabilities with depressive tendencies, poor self-perceptions, low self-esteem, emotional and behavioral problems, anxiety, and suicidal conduct (Pandy, 2012).

Perceived self-efficacy refers to people's perceptions of their ability to achieve specific performance levels. People who are confident in their talents view tough jobs as challenges to be overcome rather than dangers to be avoided. Such an optimistic viewpoint promotes intrinsic interest and deep involvement in activities. People who question their talents avoid challenging undertakings that they perceive as personal risks. In the face of adversity, they reduce their efforts and give up fast. Because they interpret poor performance as a lack of ability, it does not take many failures for them to lose trust in their talents. They are easily influenced by stress and depression (Bandura & Wessels, Self-efficacy, 1994).

According to research (Abbaszadeh & Saroie, 2016), Self-efficacy beliefs exert a substantial impact on an individual's motivation to achieve, decision-making, level of exertion, persistence, and ultimately, their advancement and attainment of objectives. Individuals with high self-efficacy beliefs often view challenging tasks as occasions for personal advancement and improvement. They exhibit a high level of commitment towards their objectives and rejection of failure, they tend to increase their efforts, ultimately resulting in successful outcomes. For individuals who possess low self-efficacy, challenging tasks pose a significant risk, as the possibility of experiencing failure elicits feelings of suffering rather than effort, ultimately resulting in unsuccessful outcomes.

The academic underachievement and subsequent dropout of children with learning disorders can have a lasting impact on their educational trajectory. The educational system's efficacy in catering to individual needs and providing targeted attention is reflected in the academic accomplishments and success of students within a given society (Abbaszadeh & Saroie, 2016). Thus, there have been numerous calls to implement CBT with people with learning disabilities who suffer from depression. CBT is a prevalent intervention strategy employed in psychotherapeutic treatment for various significant mental health conditions. CBT techniques were originally designed to address depression and anxiety disorders, and subsequently adapted to treat a wide range of other conditions. CBT has been modified and utilized as a supplementary approach in the treatment of mental illnesses (Hassiotis et al, 2011).

CBT has been extensively utilized to address various psychological issues, including its growing implementation in the treatment of individuals with learning disabilities (Van Duijvenbode et al, 2015) CBT has the potential to be tailored to individuals with mild learning disabilities. Individuals possess the entitlement to avail themselves of the complete spectrum of therapeutic interventions such as depression and anxiety (Unwin et al, 2016). (WHO, 2016)suggests a more pragmatic procedure for utilizing CBT among people with learning disabilities.

According to the researcher's observations of the study community (in Al-Reineh village in Nazareth of 48), the community suffers from various learning disabilities that must be corrected since these learning disabilities severely influence students' self-efficacy, psychology, and social compatibility.

The present study utilized CBT's techniques and methodologies to mitigate depression and enhance self-efficacy in students with learning disabilities residing in Al-Reineh village in Nazareth of 48.

1.2 Learning Disability

1.2.1 Introduction

From 1997 to 2008, As per the National Health Interview Survey (NHIS), the occurrence of learning disabilities (LD) reported by parents was estimated to be 5% among children aged 3 to 10 and 9.3% among children aged 11 to 17. Despite the fact that individuals may develop effective compensatory strategies for their learning disabilities, such conditions are typically chronic and are unlikely to be remedied upon a child's completion of their education (NHIS, 2015).

According to many sources, males have a greater rate of LD than females. According to 2010 data, 2.8 percent of boys aged 6 to 17 have a learning disability. From 1997 to 2008, the NHIS survey suggests that the prevalence of any parent-reported learning disability was around 9% among boys (3–17) and 5% among girls. When the identification is based on direct cognitive tests of the kid rather than teacher identification and parent reports, the incidence of males and girls is about equal. Males' more dynamic and potentially disruptive behavior may be considered by teachers when referring a kid for evaluation. (NHIS, 2015).

Children acquire various abilities, such as listening, talking, reading, writing, and performing math. Some abilities may be more challenging to learn than others. If the kid has received proper learning experiences and guidance but is still unable to keep up with classmates, it is critical to determine why and how to assist (Zubler, 2021).

Researchers have pursued various avenues in their quest to investigate the origins of learning disabilities. Scholarly contributions have indicated that the pivotal factors at this stage are nerves, anatomy, and physiology. Franz Gall, a German physician, was among the pioneering scientists who endeavored to identify key brain functions such as personality, speech, and intelligence (Chirimuuta, 2019).

1.2.2 Definition of Learning Disability

The phrase "learning disabilities" was found in 1960 to coincide with the rebranding of the then-"auxiliary school" to "school for the learning challenged," but it had been in use for decades prior. However, they have been increasingly called into question since the 1990s, particularly during the integration and contemporary inclusion debates. Above all, it is argued that the phrase "learning impairments" stigmatizes the children and young people involved and might impede their identity development. As a result, attempts are being made to employ categorization terminology that is less stigmatizing. In its "Recommendations on Priority Learning Funding", The European Conference of Ministers of Education has replaced the phrase "learning disability" with "learning impairment," and the words "pupils with learning disabilities" or "learning impairments" (Schroeder & Graziano, 2015) are used regularly. In scholarly discussions, the word "learning impairment" has largely supplanted the phrase "learning disability," e.g., in B. Basic's book "Pedagogics with Learning Impairments" Nonetheless, in more recent scientific articles (e.g., Grünke et al, 2016), learning disorders are used as a technical term. The LERNEN FRDERN group, which afflicted parents mostly sponsor, is known as the "Federal Association for the Promotion of People with Learning Disabilities" (Robinson et al, 2016).

Children with learning disabilities have long impacted child diagnosis and education significantly. Traditional theories highlighted the importance of governing processes, which they felt were shared by most, if not all, cognitive activities. These procedures differed significantly from those involved in typical academic activities, making the transition from diagnosis to instruction difficult—the "jump to instruction" challenge. On the other hand, contemporary theorists are concerned with understanding the precise knowledge and abilities that underpin achievement in academically essential domains such as reading, writing, math, and science (Brown & Campione, 1986).

According to the DSM-IV-TR (APA Dictionary of Psychology), any neurologically based information-processing disease is defined by an accomplishment significantly below that predicted for the individual's age, education, and intellect, as determined by standardized tests in reading, mathematics, and writing. A difference of two standard deviations must exist between general intelligence testing scores (as evaluated by a normal normed IQ test) and accomplishment scores in routine practice (measured by a

standard normed achievement test). If another specific trait is present, such as a cognitive-processing illness, a related mental disease, a conspicuous medical handicap, or an extraordinary absence from formal schooling, a disparity of 1 to 2 deviations might be deemed a learning disorder (APA, 2017).

Learning impairments and learning disorders are catch-all words for a wide range of learning issues. A learning impairment does not impair IQ or motivation, and children with learning problems are neither lazy nor stupid. In truth, the majority are just as intelligent as everyone else. Their brains are just wired differently, which influences how they absorb and interpret information (Kemp et al, 2023).

In essence, children who experience challenges in learning possess a distinct mode of perception, auditory processing, and comprehension of information. This could potentially pose challenges in the acquisition and application of novel knowledge and skills. The most commonly observed challenges in the realm of learning pertain to reading, writing, arithmetic, critical thinking, auditory processing, and verbal communication (Kemp et al, 2023).

1.2.3 Learning Disability Theories

As our understanding of learning progresses, the assumptions and limits of present theories are examined, questioned, and replaced by new insights. Yet, perceptions about learners who have learning challenges are more likely to affect judgments about how to educate and what techniques to use than fresh facts and insights (Dee et al, 2006).

1.2.3.1 The Developmental Approach

Individuals with learning disabilities exhibit a core deficit in phonological processing, which encompasses the ability to convert letters and letter combinations into phonological representations. Additionally, they may experience difficulties in naming speed and working memory. Individuals with dyslexia often experience difficulties in their cognitive ability to represent words and speech sounds, as well as in their capacity to deconstruct complex items into distinct sounds. It should be mentioned that another explanation proposes that phonological deficiencies result from visuospatial issues, however (Moreau & Waldie, 2016).

1.2.3.2 The Behavioral Approach

Reading and math abilities are important in children's lives and might be linked to emotional-behavioral issues. Students with SLD exhibit behavioral issues, impulsivity, and interpersonal and communication issues, and as a result of these issues, they may face scholastic inadequacies. Furthermore, because these pupils are constantly failing, they are more vulnerable to emotional-behavioral issues. (Rezaei et al., 2020).

1.2.3.3 Cognitive Approach

The cognitive approach posits that there exists a distinct set of cognitive processes or mechanisms that are responsible for human information processing; each performs a particular primary function, and it presupposes organization and succession in a certain way. The cognitive approach seeks to comprehend human behavior by making the best possible use of its mental and cognitive abilities. The individual possesses knowledge that necessitates the selection of specific operations while disregarding others in order to successfully achieve the desired objective (Young, et al., 2020).

1.2.3.4 Neuropsychological Approach

Learning impairment is caused by a well-documented neurological malfunction of the learning network. Functional Magnetic Resonance Imaging (fMRI) investigations have identified functional and structural anomalies in the left parietal and temporal regions that are implicated in phonological processing. Additionally, anterior systems surrounding the inferior frontal gyrus and a posterior system situated in the right occipital-temporal region have been found to compensate for these abnormalities (Moreau & Waldie, 2016).

1.2.3.5 Basic Processes Approach

Children with Learning Disabilities (LD) are often required to participate in remedial education programmed in order to enhance their ability to keep pace with their non-LD peers. There is no common method available for the detection of learning disabilities (Manghirmalani et al, 2012).

1.2.4 Types of Learning Disabilities

A consensus among mental health practitioners, including the Learning Disabilities Association of America, has been reached regarding seven primary learning disabilities. Autism spectrum disorder (ASD) and attention deficit hyperactivity disorder (ADHD) are acknowledged as interrelated conditions that have an impact on learning, albeit not classified as specific learning disorders (Young, et al., 2020).

Difficulties in school are not necessarily the result of a learning handicap. Anxiety, depression, stressful experiences, emotional trauma, and other disorders that impair focus make it more difficult to learn. Moreover, ADHD and autism can co-occur or be misdiagnosed with learning difficulties (Kemp et al, 2023). Particular learning disabilities are frequently associated with neurodevelopmental (e.g., ADHD, communication difficulties, developmental coordination disorder, autism spectrum disorder) or other mental illnesses (e.g., anxiety disorders, depressive and bipolar disorders). These comorbidities do not necessarily rule out the diagnosis-specific learning condition, but they may make testing and differential diagnosis more challenging because each of the cooccurring illnesses interferes with daily living tasks, including learning. To attribute such impairments to learning issues, clinical judgment is necessary. A specific learning condition should not be identified if there is evidence that another diagnosis might explain the difficulty in mastering the essential academic abilities outlined in Criterion (APA, 2013).

1.2.4.1 Dyslexia

Dyslexia is a neurodevelopmental condition characterized by difficulties in language processing, which manifest in challenges with reading, writing, and comprehension. Individuals diagnosed with dyslexia may demonstrate challenges in decoding written language or in phonemic awareness, which refers to the ability to identify and manipulate individual sounds within words. Dyslexia is frequently subject to misdiagnosis over an extended period, leading to difficulties in reading, grammar, reading comprehension, and other language-related abilities (Wines, 2002).

1.2.4.2 Dysgraphia

Individuals diagnosed with dysgraphia experience difficulties in the process of translating their ideas into written or drawn form. Dysgraphia is a condition that presents with a range of symptoms, of which poor handwriting is but one. Individuals afflicted with this condition encounter difficulties in expressing their ideas in written form, encompassing areas such as orthography, syntax, and using lexicon, critical analysis, and recollection. Individuals diagnosed with dysgraphia may present challenges with letter spacing, deficient motor planning and spatial awareness, and difficulty with the simultaneous coordination of thinking and writing (Frye, 2023).

1.2.4.3 Dyscalculia

Dyscalculia pertains to learning disabilities that are associated with mathematical calculations. Individuals diagnosed with dyscalculia experience difficulties in comprehending mathematical concepts, numerical operations, and logical reasoning. Individuals with math difficulties, commonly known as "dyscalculia," may experience challenges in various mathematical tasks such as reading analogue clocks, performing mental calculations, recognizing patterns, recalling mathematical facts, and counting currencies (Pandey & Agarwal, 2014).

1.2.5 Associated Deficits and Disorders

1.2.5.1 Auditory Processing Disorder

Individuals diagnosed with Auditory Processing Disorder (APD) exhibit challenges in effectively processing auditory stimuli. Individuals diagnosed with APD may exhibit difficulties in distinguishing the sequence of sounds or in discriminating between different sounds, such as a teacher's speech and ambient noise. It is a condition in which the brain inaccurately interprets the auditory information that is received and processed from the ear (Moore Z. , 2009).

1.2.5.2 Language Processing Disorder

Language-processing disorder is a type of auditory processing disorder that is characterized by difficulties in processing spoken language, which can impact both the receptive and expressive aspects of language. The Learning Disabilities Association of America has reported that individuals with language processing disorder experience

challenges in assigning significance to auditory clusters that constitute words, sentences, and narratives (Frye, 2021).

1.2.5.3 Nonverbal Learning Disabilities

Nonverbal learning disabilities (NVLD) pertain to challenges in interpreting nonverbal cues or social behaviour, despite the misleading implication of a speech-related deficit. Individuals with Nonverbal Learning Disorder (NVLD) experience difficulties in comprehending nonverbal cues such as body language, facial expressions, tone of voice, and other nonverbal aspects of communication (Giofrè et al, 2016).

1.2.5.4 Visual Perceptual/Visual Motor Deficit

Individuals who experience visual perceptual or motor impairments tend to demonstrate inadequate hand-eye coordination, frequently encounter difficulties in maintaining their place while reading, and encounter challenges when handling pencils, crayons, glue, scissors, and other activities that require fine motor skills. Individuals with dyslexia may experience difficulty in discriminating between visually similar letters, exhibit challenges in spatial orientation, and display atypical eye movements when engaged in reading or completing academic tasks (Cho et al, 2015).

1.2.6 Causes of Learning Disabilities

1.2.6.1 Factors of Heredity or Genetics

Studies conducted on children who experience learning difficulties, specifically dyslexia, have uncovered the involvement of brain regions and systems responsible for cognitive functions related to speech and learning. The concept of cerebral networks that could account for learning impairments is corroborated by structural or functional anomalies of cerebral systems that are localized in the left hemisphere, corticostriatal systems, and cerebro-cerebellar connections. The aforementioned cerebral areas are crucial in the acquisition of knowledge and various facets of linguistic expression, including its phonemic and morphosyntactic constituents (Sandro, 2020).

1.2.6.2 Neurological Factors

According to neurological theories, learning disabilities are attributed to structural damage or inadequate development of the nervous system. These issues may arise during the development of the nervous system either prenatally or postnatally. Damage

to the central nervous system may occur as a result of head injury, oxygen deprivation, exposure to toxins, seizures, and nutritional deficiencies. The neurological hypothesis is empirically supported by studies that demonstrate the presence of electroencephalogram (EEG) irregularities in certain children who experience difficulties with learning. Learning disabilities are often linked to a range of neuropsychological impairments, including but not limited to deficits in visuospatial perception, auditory perception, semantic memory, and phonemic discrimination. Individuals with reading disorders exhibit deficits in the left hemisphere of the brain and may also experience autonomic disorders, such as eczema and allergies. Individuals with mathematical disorders exhibit deficiencies in neuropsychological functions that are suggestive of impairment in the right hemisphere damage (Rao, 2003).

1.2.6.3 Environmental Factors

Environmental factors may have a direct impact on the development of learning disabilities. Empirical evidence in previous studies suggests that various factors, including malnutrition, prematurity, inadequate prenatal and postnatal healthcare, stress, suboptimal parenting, and pedagogy, may exert an adverse influence on learning by fostering an environment conducive to brain dysfunction. Learning disabilities may be attributed to various factors, including substance abuse involving alcohol and other drugs, flawed learning models, emotional disruptions, and social and cultural inadequacies (Silver & Hagin, 2002).

1.3 Self Efficacy

Distinguishing self-efficacy from similar concepts is one of the greatest ways to understand how it is defined and assessed. Self-efficacy is not a perceived talent; it is what I feel I am capable of doing with my abilities in specific situations. The focus lies not on the individual's self-perception of their capability to perform specific and minor physical actions, but rather on their beliefs regarding their aptitude to effectively coordinate and integrate various skills and talents in challenging and dynamic circumstances. Self-efficacy beliefs encompass more than mere predictions of future behavior. Self-efficacy is concerned with what I feel I can accomplish rather than what I believe I will do. Self-efficacy beliefs are not haphazardly assigned. Casual attributions are explanations for occurrences, such as my own actions and their repercussions. (Maddux, Expectancies and the social cognitive perspective: Basic principles,

processes, and variables, 1999) indicated that Self-efficacy beliefs are my beliefs about my own abilities. Self-efficacy beliefs are distinct from both action intentions and achievement intentions. An intention refers to a self-proclaimed commitment to perform a certain action. Empirical studies have demonstrated that multiple factors, encompassing self-efficacy beliefs among others, exert an influence on individuals' intentions.

Perceived self-performance pertains to individuals' perceptions of their own abilities to accomplish particular objectives. One cannot be all things, which would require mastery of all aspects of human existence. Individuals differ in the areas in which they grow their effectiveness and the extent to which they develop it even within the confines of their assigned occupations (Bandura A. , 2005).

1.3.1 Definition Self-Efficacy

Contemporary psychologists acknowledge that individuals possess agency in their personal development, exhibiting the capacity to adjust and govern themselves in order to achieve their desired outcomes, as per the theories posited by Bandura (Zimmerman & Schunk, 2003).

In the years since the landmark paper 'Self-Efficacy: Toward a Unifying Theory of Behavioral Change' by Albert Bandura, in the social and behavioral sciences, innumerable researchers have utilized self-efficacy to predict and explain a wide spectrum of human functioning. Furthermore, during the last 34 years, self-efficacy principles have been used well beyond the confines of psychology, reaching sectors as diverse as health, medicine, social and political change, psychopathology, athletics, business, and international affairs. Over the last decade, research on student self-efficacy has gained prominence in the field of academic motivation and accomplishment. (Artino, 2012).

The constructs of agency and self-efficacy have exerted an influence on perspectives regarding other crucial phenomena, including optimism and realism. Prior to Bandura's research, psychologists did not acknowledge the advantages of optimism, particularly in situations where an individual's likelihood of achieving a desired outcome was low. Bandura's research has established that the ability to maintain a positive outlook in the

face of adversity is widely recognized as a crucial factor for achieving success in diverse roles (Moore C. , 2022).

What is encouraging is that anyone can gain self-efficacy. Self-efficacy is not a feature that some people possess while others do not. Instead, regardless of their history or current situation, everyone may exercise agency and increase their self-efficacy (Schunk & Ertmer, 2000).

Self-efficacy expectations are related to certain actions that result in specific results; people have action outcome expectations for these possible action outcomes. As a result, both components are critical for motivation and behavioral control (Jerusalem & Schwarzer, 1981).

Many researchers have defined self-efficacy, including the following (Carey-Pace, 2021):

Carey & Forsyth: an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments.

Albert Bandura: The belief in one's capabilities to organize and execute the courses of action required to manage prospective situations.

1.3.2 Efficacy-Activated Processes

Much work has been undertaken on the four basic psychological mechanisms via which self-efficacy beliefs influence human functioning (Bandura A, 1994).

1.3.2.1 Cognitive Processes

People's self-efficacy beliefs influence the anticipatory scenarios they create and practice. The greater people's perceived self-efficacy, the greater the goal they set for themselves. Those who question their effectiveness imagine failure scenarios and fixate on the numerous things that can go wrong.

1.3.2.2 Motivational processes

Self-efficacy beliefs are essential for motivational self-regulation. People use foresight to inspire themselves and influence their activities in advance. Causal attributions primarily influence motivation, performance, and affective reactions through self-

efficacy beliefs. Three sorts of self-influencing control motivation based on objectives or personal standards. Examples are self-satisfying and self-dissatisfying reactions to one's performance, perceived self-efficacy for goal accomplishment, and personal goal modification.

1.3.2.3 Affective Processes

A significant aspect of managing thought-produced stress and depression is perceived self-efficacy in mental processes. People who place self-worth criteria on themselves that they believe they cannot meet are more likely to suffer from depression. A lack of confidence in one's ability to control ruminative thoughts leads to the frequency, length, and recurrence of depressive episodes.

1.3.2.4 Selection Processes

People's self-efficacy beliefs impact the activities and locations they select. People build various talents, hobbies, and social networks through their decisions, influencing their life paths. Occupations are an important element of people's lives and a significant source of personal growth.

1.3.3 Self-Efficacy and Psychological Well-Being

The prevailing view among philosophers and psychological theorists is that the regulation of one's behaviour, environment, cognition, and effect is a crucial component of achieving happiness and maintaining psychological wellness. People who seek the assistance of psychotherapists and counsellors frequently experience feelings of losing control. Self-efficacy beliefs play a pivotal role in addressing a multitude of prevalent psychological problems. Low self-efficacy expectations constitute a fundamental element of depression (Bandura A, 1997; Maddux & Meier, 1995). Individuals experiencing depression often perceive themselves as being less capable than their peers in effectively navigating important domains of life. Low self-efficacy beliefs cause dysfunctional anxiety and avoidant behavior in dealing with frightening events (Bandura, 1997; Williams, 1995). Self-efficacy beliefs are also important in drug addiction and eating disorders (Bandura A, 1997). Enhancing self-efficacy for conquering the problem and practicing self-control skills in specific complicated situations is critical to the effectiveness of therapeutic therapies for each disorder (Bandura A, 1997; (Maddux & Meier, 1995).

1.3.4 Self-Efficacy and Psychotherapy

Perceived self-efficacy, defined as people's belief in their ability to complete complex or innovative activities to achieve desired goals, is a crucial common aspect of psychotherapy, not just in treating depression but in all sorts of diseases in general. It influences the onset and persistence of coping behavior, particularly in frightening or challenging situations, and should thus be addressed in psychotherapy. Increased perceived self-efficacy is another crucial protective element that supports psychological resilience. Furthermore, a current study has discovered that increased self-efficacy positively influences overall well-being, health behavior, pain tolerance, and active dealing with stressful situations. Furthermore, there exists a negative correlation between elevated levels of perceived self-efficacy and heightened levels of despair and anxiety (Kratzer et al., 2021).

While Bandura accepted that self-regulation is essential in all such interventions, he uses the word "psychotherapy" to generally refer to professionally directed therapies to improve psychological well-being. Different therapies, or different intervention components may have comparable efficacy as they enhance self-efficacy for critical cognitive and behavioral skills in a similar manner (Bandura A, 1997; Maddux & Lewis, 1995).

Bandura A. (1977) identified four distinct elements of self-efficacy and stated that the interaction of these components determines whether we have strong beliefs or skepticism about our skills (Celestine, 2022).

Mastery Experiences (Performance Outcomes)

Mastery experiences are considered to be the most crucial source of efficacy knowledge as they provide the most authentic evidence of an individual's ability to accomplish a task. The attainment of success can cultivate a robust belief in one's ability to accomplish tasks. Failures can have a detrimental impact, particularly if they transpire prior to the development of a robust sense of efficacy. Engaging in deliberate practice is widely regarded as a highly efficacious means of acquiring novel skills or augmenting one's expertise in a specific pursuit (Lopez-Garrido, 2020).

Vicarious Experiences

The second origin of self-efficacy is derived from vicarious experiences. Bandura A (1977) contended that witnessing others excelling (or failing) at tasks allows us to evaluate our chances of success or failure when undertaking comparable activities based on the similarity or difference, we perceive between ourselves and the person we observe. (Celestine, 2022).

According to Conger & Keane (1981) the utilization of vicarious learning and imagination can be employed as effective strategies for teaching novel skills and enhancing self-efficacy. The utilization of modelling videos and videotapes has proven to be efficacious in promoting social interaction among socially isolated children. The juvenile observer of the motion picture perceives the prototypical juvenile, who bears resemblance to their own self, attains triumph and subsequently experiences a sense of capability to replicate the achievement.

Imagined experience

Although live or recorded models are challenging to come by, imagination is a readily available resource. To boost self-efficacy, imagine yourself participating in dreaded actions or overcoming challenges (Kazdin, 1979).

Verbal persuasion

The majority of conventional psychological therapies heavily rely on persuasive techniques to enhance clients' self-efficacy and motivate them to undertake low-risk actions that may lead to modest accomplishments. In cognitive and cognitive-behavioral therapies, the therapist engages the client in a collaborative dialogue aimed at exploring the client's maladaptive cognitions, attitudes, and expectations. The therapist facilitates the client's recognition of the irrationality and counterproductive nature of these thought patterns (Hollon et al, 2006).

Emotional and physiological states

When we are tranquil, we normally feel more self-efficacious than when we are agitated and worried. As a result, strategies aimed at regulating and reducing emotional arousal, specifically anxiety, during the execution of novel behavior, have the potential to enhance self-efficacy perceptions and increase the likelihood of successful

implementation. The most frequent techniques for lowering physiological arousal linked with low self-efficacy and poor performance include hypnosis, biofeedback, relaxation training, meditation, and medication. (Bandura A, 1997; Maddux & Lewis, 1995).

1.3.5 The Role of Self-efficacy in Student Transitions

Self-efficacy is a construct that has been linked to three key domains within the realm of primary education, namely academic pursuits, social interactions, and career aspirations (Cheng et al., 2015):

Academic self-efficacy

According to Schunk (1991), academic self-efficacy pertains to an individual's belief in their ability to effectively complete assigned academic tasks at specified levels. Numerous academic studies have indicated a direct correlation between academic self-efficacy and academic performance (Multon et al, 1991). This may be because students with a strong sense of individuals who possess superior monitoring abilities and are adept at optimizing their knowledge and skills tend to perform more effectively (Fenollar et al, 2007)

Social self-efficacy

Social self-efficacy is a crucial skill that has significant implications for both personal growth and social interactions. Self-efficacy refers to an individual's confidence in their ability to establish and sustain social connections, collaborate with others, and administrate navigate diverse interpersonal conflicts (Bandura et al., 2001). Loneliness is generally associated with negative feelings about interpersonal relationships (de Jong-Gierveld, 1987).

Career self-efficacy

Career self-efficacy (people's perceptions of their ability to undertake actions related to career growth, choice, and adjustment) is a significant predictor of career trajectories across several domains of activity (Bandura et al., 2001; Gore, 2006; Anderson and Betz 2001). Tang et al, (1999) discovered that students who majored in disciplines in which they felt most confident had a beneficial effect on career decisions. According to (Taylor, 1983)Taylor and Betz (1983), confidence in one's capacity to make professional decisions is highly connected to one's overall level of career uncertainty.

1.3.6 Self-Efficacy Factors

Everyone has a distinct amount of self-efficacy. People with strong self-efficacy exist alongside others with poor self-efficacy. Some elements that each individual experiences impact the difference. According to Feist & Feist (2010), the following elements impact an individual's self-efficacy:

1. Culture: Culture impacts self-efficacy through values, beliefs, and self-regulatory processes that serve as a source of self-efficacy evaluation and a result of self-efficacy belief.
2. Task Characteristics: The degree of difficulty of the task before the individual will influence the individual's judgment of the ability itself. The greater the difficulty of the task, the lower the individual's ability rating. Otherwise, if the individual is presented with a straightforward and uncomplicated task, the individual's competence assessment will be more significant.
3. External Incentives: Incentives provided by others might reflect someone's achievement.
4. Positive Self-Ability Information: Individuals who receive positive information about themselves from others will have high self-efficacy. Individuals will have poor self-efficacy when they get bad information about themselves from others.
5. The mastery experience is the most important factor in determining a person's self-efficacy. The mastery experiences or direct experiences are situations in which someone has been through something and realizes that what he or she is going through now is the same as what he or she has gone through in the past. Obtained successes often increase an individual's self-efficacy, while failure brings it down.
6. Vicarious Experiences: Seeing the success of others comparable to the individual in a task frequently increases a person's self-efficacy in performing the same activity. Self-efficacy is gained through social models, which frequently occurs in a person who is less confident in her abilities to inspire someone to perform the modelling. However, the acquired self-efficacy has little influence when the model does not include comparable or distinct models. When we watch someone achieve, our self-efficacy rises; when we see someone fail, our self-efficacy falls. This technique works best when we consider ourselves similar to the model. Although not as powerful as direct experience, modelling is especially beneficial for self-conscious people.

7. Psychological and emotional states: This factor plays an important role. Physiological and emotional states affect health and activities requiring physical strength and stamina. Stress, negative emotions, and misunderstandings will decrease the value of self-efficacy.

1.4 Depression

1.4.1 Introduction

Depression is a mental disorder that makes people feel depressed, listless, and lacking motivation. In addition, there are often symptoms such as low self-esteem, guilt, insomnia, and poor concentration. In most cases, depression severely affects those affected, restricts their everyday lives, puts a strain on romantic relationships, in some patients, leads to incapacity to work—in the worst case, even to suicide. According to the World Health Organization, approximately 7% of the European population suffers from depression yearly. If anxiety and milder forms of depression are included, these disorders affect one in four Europeans (Dobmeier & Fux, 2022).

The foremost cause of illness and incapacity on a global scale is depression. Based on research pertaining to the prevalence of depression among minors and young adults, it has been determined that both cohorts exhibit noteworthy levels of symptoms associated with depression (Bernaras et al., 2019).

The issue of depression has emerged as a significant global health concern. According to the World Health Organization's report in 2016, depression is responsible for 10% of the worldwide non-fatal illness burden. Moreover, it is noteworthy that this particular responsibility is unequally shouldered by females. As per a research study, the major depressive disorder's global prevalence over a period of 12 months was found to be 5.8% in females and 3.5% in males. The health disparity resulting from the gender imbalance in depression is a widely recognized phenomenon, with females being affected at a rate approximately twice that of males (Salk, Hyde, & Abramson, 2017)

1.4.2 Definitions of Depression

There are many explanations for depression among researchers, according to their different philosophies and theories.

Ibrahim (2008) described depression as "a traumatic event-induced response, such as the breakdown of a relationship or disappointment, the loss of something significant,

such as a job, or the death of a close person." Some of the third are social, and these symptoms are known as depressive syndrome. They contain characteristics of behavior, thoughts, and feelings that occur, some or most of which are connected, which finally helps to characterize and identify depressive behavior.

Beck defined depression as "a disorder of thinking rather than a disorder of conscience, as it is due to the cognitive distortion that leads to the formation of a negative attitude towards oneself, the world, and the future and results in the emergence of a group of depressive symptoms" (Tavares et al., 2003).

Depression is thought to be caused by various maladaptive emotional and cognitive processes, including abnormal cognitive control mechanisms. Impairment in negative thought inhibition, often known as rumination, is a significant hallmark of depression (Kenett et al., 2018).

The definition of DSM5, as outlined in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, is a standardized classification system for mental health disorders used by healthcare professionals to diagnose and treat patients. Major depressive disorder, also referred to as clinical depression, is a prevalent and severe mood disorder. Individuals experiencing depression exhibit persistent feelings of sadness and despair, accompanied by a diminished interest in previously enjoyed activities. In addition to the psychological distress associated with depression, affected individuals may experience somatic manifestations such as enduring pain or gastrointestinal disturbances. The diagnosis of depression necessitates the manifestation of symptoms for a minimum duration of two weeks (APA, 2013).

The researcher defined it as a response out of control and overwhelmed by the nature of intense and continuous sadness and pessimism that expresses loss or is the result of traumatic events, which leads to disturbance of emotions, thoughts, behaviors, and physical functions and is accompanied by feelings of guilt and negative self-concept and is procedurally represented by the degrees of the respondent on the depression scale.

1.4.3 Depression Prevalence and Etiology

Depression constitutes a substantial contributor to the worldwide disease burden and impacts individuals across all communities on a global scale. Presently, it is approximated that 350 million individuals are impacted by depression. According to findings from the World Mental Health Survey, which was conducted across 17 countries, the mean prevalence of individuals reporting a depressive episode within the past year was approximately 1 in 20. Depressive disorders frequently manifest early in life, impede individuals' ability to perform daily activities, and tend to recur. Depression is considered the primary contributor to disability on a global scale, as measured by the cumulative years of productivity lost due to disability. The global demand for addressing depression and other mental health disorders is increasing. The World Health Assembly has recently urged the World Health Organization and its member states to undertake measures in this regard (World Health Organization, 2012).

The lifetime prevalence of MDD ranged from 2 to 21%, with certain European nations having the highest rates and some Asian countries having the lowest (Gutiérrez-Rojas et al., 2020).

When major depressive disorder (MDD) begins in infancy or adolescence, it can have serious consequences. Reduced school performance, later-life interpersonal issues, early motherhood, and an increased risk of additional mental health illnesses and drug use disorders have all been linked to a childhood diagnosis of MDD. Depression rates rise from infancy through adolescence and then into adulthood. According to statistical data from 2016, approximately 12.8% of individuals within the age range of 12 to 17 in the United States experienced a severe episode of depression. Up to 8% of adolescents who have been diagnosed with Major Depressive Disorder (MDD) experience suicidal ideation or behaviour before entering early adulthood, rendering suicide as the second leading cause of mortality among individuals aged 12 to 17 (Mullen, 2018).

Major depressive disorder is a significant pathological condition that impacts individuals across all age groups. Research has indicated that a proportion of 2-6% of children and adolescents within the community experience depression. In children and adolescents, major depressive disorder is a chronic and recurring illness that does not resolve spontaneously. A considerable proportion of depression among juveniles and

adolescents remains unidentified and unaddressed. It is not feasible for children who are experiencing depression to simply overcome their condition instantaneously. Untreated depression among children and adolescents can result in a range of negative outcomes, including academic underachievement, behavioral issues, eating disorders such as anorexia and bulimia, school avoidance, panic attacks, substance abuse, and in severe cases, suicide. The presence of depression during adolescence is strongly associated with an elevated risk of suicide. Therefore, it is imperative to promptly identify and address it in order to mitigate its incidence (Gehlawat & Gehlawat, 2020).

Depression is a noteworthy mental health concern that impacts the paediatric population. Depression is a prevalent mental disorder observed among children and adolescents who exhibit suicidal tendencies. Throughout the last two decades, psychiatry, psychology, and other allied disciplines have conducted substantial research on depression in children and adolescents. The fact that the bulk of research on depression in children and adolescents has been undertaken since the mid-1970s is particularly notable. This lag in our attention to depression in teenagers may be due in part to long-term psychodynamic perceptions of depression as nonexistent in children or typical in adolescents. (Weisz et al., 2006).

The category of learning disability is one of the categories that are most at risk of depression owing to the severity of the psychological and life stresses to which they are subjected. Depression affects 22.1% of children with learning difficulties, whereas anger affects 21.6% and disturbed behavior affects 20.9%) (Abu Al-Saud, 2015).

Depression is noteworthy the aforementioned prevalence rates indicate that depression is the most significant mental health issue for this age group, with a particular emphasis on adolescent females. Despite the fact that several theories have been proposed to account for the deviation from equal prevalence rates of depression between boys and girls prior to adolescence, a conclusive explanation has yet to be established. The co-occurrence of social and physical changes that occur during puberty is a probable contributing factor to the elevated prevalence rates observed among adolescent females. mental health concern that impacts the paediatric population (Angold & Rutter, 1992)The onset of heightened risk for depression in females typically occurs during puberty, while the likelihood of experiencing a subsequent depressive episode may

reach its apex during the middle to late adolescent years (ages 15-18). Notably, the recurrence rate is twice as high for females compared to males (Hankin et al., 1998).

1.4.4 The Level of Depression

The diagnosis of depression is facilitated by two primary classification system manuals, namely, The International Classification of Diseases, 10th Revision (ICD-10) by the World Health Organization (WHO) in 2016 and the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) by the American Psychiatric Association in 2013.

The two manuals classify depression into three primary classifications, namely mild, moderate, and severe, based on the quantity of symptoms, duration, and frequency.

1.4.4.1 Mild Depression

According to the DSM-5, mild depression is characterized by a state of depressed mood accompanied by heightened fatigability, loss of interest and enjoyment, and a minimum of two additional symptoms from a specified list.

Symptoms must be discernible, yet not manifest to a significant extent. Individuals may encounter challenges in maintaining their routine work and social engagements, however, such hindrances are not expected to impede these activities entirely.

1.4.4.2 Moderate Depression

National Collaborating Centre for Mental Health (UK) (2010) Moderate depression can be characterized as a state of low mood and loss of interest, accompanied by a minimum of three additional symptoms from the list of recognized indicators. The manifestation of symptoms is significantly apparent, and there exists a challenge in maintaining routine daily tasks.

1.4.4.3 Severe Depression

According to DSM-5, severe depression is characterized by the presence of at least five symptoms over a period of two weeks, resulting in a significant change from the individual's previous level of functioning. These symptoms include a persistent low mood for the majority of the day, nearly every day, as well as subjective feelings of sadness, emptiness, or hopelessness. Additionally, objective observations by others may

reveal tearfulness or agitation in the individual or the expression of suicidal thoughts (National Institute for Health and Care Excellence, 2009).

1.4.4.4 Classification of Depression

The 10th International Classification (ICD-10 Version:2019) classifies depression into several types:

- Bipolar affective disorder (F31)
- Depressive episode (F32)
- Recurrent depressive disorder (F33)
- Persistent mood [affective] disorders (F34)
- Other moods [affective] disorders (F38)
- Unspecified mood [affective] disorder (F39)

While the fifth diagnostic manual (DSM5, 2013) classified depression into the following:

- Disruptive Mood Dysregulation Disorder
- Major Depressive Disorder
- Persistent Depressive Disorder (Dysthymia)
- Premenstrual Dysphoric Disorder
- Substance/Medication-Induced Depressive Disorder
- Depressive Disorder Due to Another Medical Condition
- Other Specified Depressive Disorder
- Unspecified Depressive Disorder

1.4.4.5 Depression among Children

Monitoring childhood mental illnesses is critical for quantifying effects, influencing public health initiatives, and recording this population's prospective service requirements. Depression was one of the most frequent mental diseases among children, according to a 2004 assessment of community-based research (major depressive disorder: 0.2%–12.9%). From 2001 to 2004, the most frequent mental condition was lifetime depression (11.7%). In studies, direct assessment of children allows for identifying both previously diagnosed and undiagnosed youngsters. Direct assessment, on the other hand, necessitates large resources, and studies based on direct assessment

seldom allow for the evaluation of changes over time, are rarely nationally representative, and may still misclassify children. Nationwide monitoring reveals a broad range of depression estimates. According to parent-reported data from the 2007 National Health Interview Survey, 3% of children aged 4 to 17 years were depressed (Bernaras, E., Jaureguizar, J., &Garaigordobil, M., 2019).

1.4.5 Symptoms of Depression

Bernaras et al)2019)classified the symptoms of depression into the following:

1.4.5.1 Psychological and Emotional Symptoms

They are represented by: sadness and crying; low energy; uncontrolled crying spells; guilt, shame, disappointment; anxiety and low confidence; despair; fatigue and exhaustion; and apathy.

1.4.5.2 Physiological Symptoms

The following symptoms are frequently present in depressed individuals, such as tightness in the chest, feeling of tightness, loss of appetite, refusal of food because the patient feels he is not worthy of it due to his desire to die, pain, loss of appetite, and fatigue.

Especially in the back, general weakness of activity, psychomotor delay, slowness and monotony of movement, delayed reaction time, a delusion of illness and preoccupation with health, sleep disturbance, menstrual disorder, and depression.

1.4.5.3 Cognitive Symptoms

- Homelessness, absolutist thinking, self-criticism, difficulty concentrating and remembering distraction and loss of insight, and the presence of suicidal thoughts.
- Behavioral symptoms: the most important.
- Avoiding people and not caring about them, not leaving the house.
- Neglecting household chores and not doing the usual daily activities.
- Screaming for the slightest reason, and many disagreements.
- Loss of self-control.

1.4.6. Explanatory Theories of Depression

Depression is a widespread disorder globally, affecting an estimated 3.8% of the population, with 15.08% of teenagers (ages 12–17) reporting at least one Severe Depressive Episode (SDE). If untreated, childhood depression is more likely to persist into adulthood. (World Health Organization, 2012)

1.4.6.1 Biological Theories

In cases when a person's mood condition cannot be explained by genetics or their immediate surroundings, it is plausible that the affected child or adolescent may be experiencing a neurological ailment. In instances of this nature, indications of depression may present themselves syndromes, sleep difficulties, chronic recurring cephalalgias, neurometabolic illnesses, and primary intracranial tumors in children and adolescents (Bernaras et al., 2019).

Some medical and neurological problems may lead to depression, the most important of which is:

Noradrenalin Deficit:

The modulation of neuroplasticity by serotonin is particularly significant during the early developmental stages, and the pathogenesis of depression is attributed to dysfunctions in both systems (Kraus et al., 2017).

Endocrine Alterations:

The susceptibility of individuals to depression is influenced by age-related alterations and biological risk factors, including endocrine, inflammatory or immunological, cardiovascular, and neuroanatomical variables (Clarke & Currie, 2009).

Sleep Disorders:

There exists a correlation between sleep disruptions and the onset of depressive symptoms. Insufficient sleep has been found to have an impact on the hippocampus, causing more neuronal sensitivity to excitotoxic insult and a higher propensity to be damaged by neurotoxic stimuli. The left orbitofrontal cortex and the hippocampus both suffer atrophy as a consequence (Novati et al, 2012).

Altered Neurotransmission:

In the past twenty years, studies have indicated that increased inflammation and overactive functioning of the Hypothalamic-Pituitary-Adrenal (HPA) axis may account for severe depression (Pariante, 2017). The pathophysiological mechanisms underlying depression encompass a range of factors such as perturbations in neurotransmission, and abnormalities in the Hypothalamic-Pituitary-Adrenal (HPA) that is the stress-inflammation-neuroplasticity-network-dysfunction axis that has been related to chronic stress, inflammation (Dean & Keshavan, 2017).

1.4.6.2 Genetic Factors

The role of genetics in the onset of depression has been the focus of several research, accounting for approximately 40% of cases (Scourfield et al., 2003). It is crucial to acknowledge that a hereditary inclination towards an exaggerated amygdala reaction to stress or an overactive HPA axis (moderate hyperphenylalaninemia) caused by stress during the formative years can potentially initiate an imbalanced impact or modify an otherwise sound psychological framework (Dean & Keshavan, 2017). According to Kaufman et al., (2018) there is evidence to suggest that genes associated with the homeobox two genes of Orthodenticle (OTX2) and the OTX2-related gene may play a role in the pathogenesis of stress-related depressive disorders in paediatric populations. Additionally, there is a correlation between genetic abnormalities in serotonergic transmission and the occurrence of depression. The 5-HTTLPR is a repetitive sequence within the SLC6A4 gene that is associated with serotonin regulation. The presence of the s/s genotype in this particular region has been correlated with a decrease in serotonin expression, which has been found to be associated with increased susceptibility to depression (Molteni et al., 2010).

According to Oken et al. (2015), psychological disturbances have the potential that it must be led to the induction of alterations in physiological parameters, such as DNA transcription, or the occurrence of epigenetic modifications can potentially affect the sensitivity of neurotransmitter receptors.

1.4.6.3 Behavioral Models

According to this model, the initial hypotheses suggest that depression arises as a result of the absence of reinforcement for behaviour that were previously reinforced (Skinner, 1953; Ferster, 1966; Lewinsohn, 1975), the presence of excessive avoidance behaviour coupled with a dearth of positive reinforcement (Ferster, 1966), or regarding the reduction in the effectiveness of positive reinforcement (Alloy, Olino, & Freed, 2017). In the context of childhood depression, it is common for the affected child to receive heightened attention from their social environment, including family and friends. This attention may serve to reinforce certain behaviour, such as crying, complaints, or expressions of guilt. As depressive behaviour escalates, the parent-child relationship may become aversive, and individuals who previously interacted with the child may withdraw from socializing with them, exacerbating their depressive symptoms (Lewinsohn, 1975). The phenomenon of low reinforcement rates can be attributed to factors such as maternal rejection and reduced levels of parental support (Simons & Miller, 1987), mothers of children with depression tend to provide a reduced rate of reinforcement to their offspring (Cole & Rehm, 1986), or by low social competence (Shah & Morgan, 1996).

The aetiology of depression is primarily attributed to a learned process that is influenced by adverse interactions between an individual and their surroundings, such as inadequate social relationships or a reduced frequency of positive reinforcement. The dynamics of these interactions are shaped by cognitive processes, behavioral patterns, and affective states (Antonuccio et al., 1997).

1.4.6.3 Cognitive Models

The two most widely-accepted cognitive theories among modern cognitive models of depression are the attributional reformulation of the learned helplessness model (Abramson Seligman, & Teasdale, 1978) and Beck's cognitive theory (Beck et al., 1979).

Cognitive attributions, specific or global, internal or external, and stable or unstable, are linked to learned helplessness (Hiroto & Seligman, 1975; Abramson et al., 1978). Global attribution suggests that an unpleasant event is not limited to a specific context, but rather is consistent with the overall situation. Internal attribution is the assumption

that personal factors rather than external forces cause the adverse event. The notion that the adverse condition will not change over time is referred to as stable attribution (Miller & Seligman, 1975). People who are prone to depression attribute negative events to internal, stable, and global factors while attributing success to external, unstable, and specific factors (Abramson et al., 1978) a cognitive style that is also present in children and adolescents with depression (Gladstone & Kaslow, 1995).

As per the Information Processing model proposed by (Beck, 1967; Beck et al., 1979), the onset of depression can be attributed to specific stressors that trigger a schema, resulting in negative filtering and coding of experiences in individuals with depression (Ingram & Kendall, 1987) According to Beck's theory, the distortion of reality can be observed in three distinct areas, commonly known as the "cognitive triad". These areas include negative attitudes towards oneself, the world, and the future, which are believed to be a result of an individual's learning history. (Beck et al, 1983). The aforementioned convictions are instigated by life occurrences that hold great importance to the individual (Beck & Alford, 2009).

1.4.6.4 Self-Control Model

The notion posits that depression arises from deficiencies in the self-control mechanism, which comprises three phases: self-observation, self-assessment, and self-manage of consequences. (Rehm, 1977). Individuals in the self-monitoring phase focus solely on unfavorable occurrences and tend to identify only immediate, short-term implications. Individuals experiencing depression tend to establish unattainable standards for self-evaluation and exhibit inaccurate attributional tendencies when assessing their personal successes and failures. When an individual's self-evaluation is negative, they are likely to engage in minimal self-reinforcement and often resort to self-punishment during the phase of self-administered consequences.

Rehm's (1977) The self-control model and Bandura A's (1977) theoretical framework regarding child depression posit that children internalize societal norms of control. The aforementioned principles exhibit a correlation with familial communication patterns, and both factors may potentially play a role in the development or endurance of depressive symptoms in children.

In research with children aged 8 to 12, Kaslow et al, (1988) found that children who experienced depression exhibited a higher tendency towards a depressive attributional style and faced greater challenges with self-control.

1.4.6.5 Sociocultural Models

These ideas contend that cultural factors are to blame for the emergence of depressive symptoms. Acculturation and enculturation are the most important of these factors. The process of acculturation encompasses alterations in both the structural aspects of society, such as those related to economics, politics, and demographics, as well as modifications in individuals' psychological behavior (Casullo & Fernandez, 2001). Some studies relate rising suicide rates to economic downturns (Chang et al., 2013). This is called enculturation, When the older generation encourages, influences, or coerces the younger generation to conform to traditional ideas and behavior.

Lorenzo-Blanco et al, (2012) investigated the relationship between acculturation, cultural values, and family functioning among Hispanic students who were born in the United States. better to understand culture and family's effect on depression symptoms. According to the findings, family conflict and cohesiveness were linked to depressive symptoms.

At last, the role of family linkage in the development of depressed symptoms must not be discounted. The significance of parenting style in the psychosocial adaptation of children and adolescents has been firmly established (Lengua & Kovacs, 2005). The investigation of parental conduct has been approached from two distinct perspectives: warmth and control. The attribute of warmth is commonly linked to characteristics such as active parental participation, demonstration of fondness, admiration, and positive concern (Rohner & Khaleque, 2003). Previous studies have established a correlation between parental warmth and favorable adolescent adaptation (Barber et al., 2005).

1.4.6.6 Aaron Beck's Cognitive Theory of Depression

According to Dr. Aaron Beck, Dysfunctional beliefs are frequently identified as the primary origin of depressive symptoms stemming from negative ideation. There exists a positive correlation between the magnitude and intensity of an individual's pessimistic cognitions and the severity of their depressive manifestations. Stated differently, an

increase in negative thoughts correlates with a decrease in overall happiness (Mental Help, 2022).

According to Beck, individuals who are experiencing depression are characterized by the prevalence of three primary maladaptive belief patterns, also known as "schemas."

- 1) The individual perceives themselves as possessing imperfections or insufficiencies.
- 2) The individual has encountered setbacks or disappointments in all of their past endeavors.
- 3) The individual holds a pessimistic outlook towards their future prospects.

The Negative Cognitive Triad is a theoretical construct that encompasses the amalgamation of three distinct cognitive concepts. The prevalence of such cognitive patterns is a strong predictor of the onset of depression if it has not already manifested (Mental Help, 2022).

The researcher posits that depression can be attributed to a variety of factors, 1- including biological aetiologies, 2- insecure attachment, 3- insufficient reinforcement of previously-reinforced behaviour, 4- negative interpersonal relationships and environmental associations, negative consequences thereof, 5- attributions made by individuals regarding themselves, the world, and their future, and 6- sociocultural changes. While there is no comprehensive theory that can fully account for the emergence and endurance of depression, the escalation in the incidence of depression may be attributed to negative interpersonal relationships, as well as relationships with one's environment and sociocultural transformations (such as economic, political, and demographic changes).

1.4.7 Depression and Learning Disabilities

Several inequities exist in mental health care for people with learning difficulties. According to research, around 2% of people have an intellectual disability and are four times more likely than the general population to suffer from mental health problems. It is expected that 20% to 40% of people with learning difficulties will have poor mental health symptoms. Learning-disabled youngsters account for 14 percent of all children with mental health disorders. (Burke, 2016)

Pupils with LD are a subset of students who have long been linked to a higher risk of depression. Many studies have revealed that students with learning disabilities have higher depressive symptoms than non-LD pupils (e.g., Mahlon et al, 1992; Hawes,

1989; Wright-Strawderman & Watson, 1992). These findings are not surprising considering that longitudinal studies have shown that academic challenges frequently precede the development of depression symptoms (Herman et al., 2008; Maughan et al., 2003).

They claim that when school psychologists deal professionally with students with learning disabilities, they frequently encounter academic challenges and emotional sequelae connected with these issues. Because kids with LD account for most students getting special education services (about 50%; U.S. Department of Education, 1995), recognizing and assessing the severity of depressive symptoms in students with LD may be a routine activity for school psychologists.

Using the Reynolds Adolescent Depression Scale conducted a comparison between high school students experiencing learning difficulties and their nondisabled counterparts (Reynolds, 1987). This self-rating instrument focuses on various depression markers, the authors have presented suitable technical details concerning the reliability and validity. In contrast to utilizing norm tables associated with the instrument, the researchers opted to compare the self-rating scores of 42 students with learning disabilities to those of 105 students without disabilities, thereby employing a more robust research design than studies that rely on norm table comparisons. The study assessed depression in an LD group whose participants were older than the established age threshold, which is a rare occurrence. The average age for both groups ranged from 16.9 to 17.3 years. Students who experience learning difficulties were categorized based on their general academic aptitude. The research indicates that students who have learning disabilities and exhibit lower levels of academic achievement experience notably elevated levels of depression in comparison to their non-disabled counterparts. In contrast, individuals with learning disabilities who exhibited comparatively greater academic achievement did not display elevated levels of depression. Like Wiener & Tardif-Williams (2004) study, in grades 5 and 8, melancholy was assessed in 66 children with learning problems and 69 without learning disabilities.

1.5 Cognitive Behavioral Therapy (CBT)

1.5.1 Introduction

CBT is a form of psychotherapy treatment that assists people in identifying and changing damaging or unsettling thinking patterns that affect their behavior and emotions. (Nakao, Shiotsuki & Sugaya, 2021).

It is a psychological intervention that has demonstrated efficacy in addressing a wide range of conditions, such as depression, anxiety disorders, substance abuse, marital discord, eating disorders, and severe mental illness. A plethora of research studies have demonstrated that it leads to a significant improvement in both functionality and quality of life. Numerous trials have demonstrated that it is comparably or even more efficacious than alternative forms of psychological intervention or pharmacological therapy (APA, 2017).

It is a prevalent form of psychotherapeutic intervention. It is a widely recognized and frequently employed therapeutic approach that is structured, time-bound, and oriented towards the present. Its primary objective is to aid individuals in addressing and resolving issues such as depression, anxiety, and anger. It is inaccurate to refer to CBT as a singular therapy; instead, it has been used as an umbrella phrase. It is an intervention based on the idea that incorrect or unreasonable thought processes prompt maladaptive behavior. (Nehra et al., 2013)

1.5.2 History of Cognitive Behavioral Therapy

It was founded on dominant behaviorist psychology and represented a new approach to the origins and treatment of psychological illnesses. It was met with skepticism, and the concept of treating neurotic and other patients' behavior was ridiculed. It explains why the medical profession and psychoanalysts disagree. Similar but distinct kinds of behavior therapy emerged in the United States and the United Kingdom. Incorporating cognitive concepts and methods resulted in a fusion of behavior therapy and CBT. (Rachman, 2015).

It was the first type of psychotherapy to be assessed using the strictest standards of the evidence-based framework utilized in the health profession (for instance, randomized trials and active comparator methodologies, akin to those employed in pharmacotherapy

cases). Consequently, it gained widespread recognition as evidence-based psychotherapy, alongside interpersonal psychotherapy for depression, in most therapeutic recommendations. Consequently, a number of recently developed psychotherapies that have not undergone comprehensive and timely evaluations have adopted CBT as the benchmark therapy. These therapies often assert their efficacy in cases where no discernible distinction has been observed between them and CBT. On the other hand, no difference to CBT may be claimed as support for a form of clinical resemblance only in equivalence or non-inferiority designs, not in superiority designs (although many of these comparisons were not framed as equivalence/non-inferiority designs). (David et al, 2018).

Some people become gloomy and unable to address difficulties in stressful situations. CBT encourages more balanced thinking to increase one's capacity to cope with stress. Applying learning theory ideas to clinical difficulties may be traced back to the roots of CBT. Online and computer-based CBT programs have also been established, either with or without the assistance of doctors. (Nakao, Shiotsuki & Sugaya, 2021).

Extinction, habituation, modelling, cognitive restructuring, problem-solving, development of coping skills, mastery, and a feeling of self-control are among the several intervention modalities that comprise cognitive-behavioral therapy (CBT). CBT employs developmentally guided procedures to address several areas of possible vulnerability (e.g., cognitive, behavioral, and emotional) and traverses many therapeutic paths. Although CBT is frequently regarded as the "first-line treatment" for many psychiatric illnesses in adolescents, more effort is needed to address non-responders to treatment and to spread effective CBT treatments (Benjamin et al., 2011).

1.5.3 Cognitive Behavioral Therapy Theories

The phrase "cognitive-behavioral" is something of a misnomer. However, CBT is a therapeutic approach that draws upon two distinct theoretical frameworks, namely Cognitive Theory (CT) and Behavioral Theory (BT). It aids individuals in cultivating strategies to enhance dysfunctional cognitive patterns or cognitions (represented by the "C" in CBT) and maladaptive emotions and behavior (represented by the "B" in CBT) with the aim of resolving current challenges. It aims to address maladaptive emotions and behavior (referred to as the "B" in CBT) by focusing on the cognitive aspect

(referred to as the "C" in CBT). The ultimate goal is to assist individuals in resolving current difficulties (Wenzel, Brown, and Karlin, 2011). The origins of behavior therapy can be traced back to the pioneering research conducted by Pavlov in the late 19th and early 20th centuries, as well as the seminal studies conducted by Watson and Rayner in the 1920s. (Pavlov, 1927; Watson & Raynor, 1920). In addition to these, the writings of B.F. Skinner and other behaviorists formed the true foundation of behavior theory and treatment. During the 1960s and early 1970s, a major advancement in psychotherapy was using learning theory concepts by behavior therapists to treat different behaviors in children and adults.

Early behavioral therapies concentrated solely on visible, outward actions, ignoring ideas. The behavioral tradition originated from the belief that individuals have the capacity to alter or adjust their behaviour, and it utilized and incorporated behavioral strategies to achieve this objective. BT examines individuals' responses and behaviour exhibited in circumstances that elicit stress or anxiety. Despite BT's rapid success, especially in treating anxiety disorders, there was significant dissatisfaction with the constraints of an exclusively behavioral approach (Keegan & Holas, 2009).

Furthermore, as a result of the so-called "cognitive revolution," behaviorism began to lose favor, while therapy approaches emphasizing "cognitive components" began to gain favor (Keegan & Holas, 2009).

The cognitive aspect of cognitive-behavioral therapy (CBT) has roots in philosophical ideas, such as René Descartes' notion of "Cogito, ergo sum" and Immanuel Kant's proposition that the mind constructs reality is a well-known philosophical concept (Collingwood, 1949). Cognitive therapy is a growing area of study has undergone significant growth and development subsequent to the initial research conducted by Ellis and Beck (Beck, 1976).

The cognitive approach developed by Ellis is based on the underlying assumption that maladaptive emotional and behavioral outcomes stem from irrational beliefs, such as unconditional "shoulds," "musts," "mandates," and "demands" (Ellis, 1962). Ellis (1970) identified a set of 12 primary irrational beliefs that manifest as impractical or categorical anticipations. The researchers Beck and Abramson, along with their

collaborators, have conducted a study on the topic. Becks and Abramson and colleagues' (Beck, 1967; Abramson, et al., 1978).

According to Beck's (1964) models, affect is predicated on an individual's comprehension and contemplation of a life experience, while anxiety and sadness are often accompanied by cognitive distortions. The Cognitive Therapy (CT) approach is rooted in an information-processing framework that posits that individual experiencing psychological distress exhibit cognitive inflexibility and distortion, overgeneralization and absolutist thinking, and rigidification of their fundamental beliefs about themselves, others, and their surroundings (Weishaar, 1996).

To clarify, the fundamental tenet of cognitive theory posits that the vast majority of human emotions and behaviour stem from an individual's cognitive processes, specifically their thoughts, assumptions, and beliefs regarding themselves, others, and the world (Weishaar, 1996).

CT endeavors to modify irrational thought patterns, while behavioral therapy seeks to correct the associated maladaptive behaviour. After Beck's pioneering work in utilizing the cognitive model for depression treatment (Beck, 1970; 1976), a range of cognitive interventions incorporating elements of both cognitive and behavioral therapy were developed. The interplay between BT and CT has undergone a gradual transformation, leading to a confluence that is commonly denoted as CBT. It can be argued that the term "CBT" is a relatively new amalgamation of the work of Aaron T. Beck's and Albert Ellis' cognitive theories and methodologies, as well as behavioral theories based on B.F. Skinner's work on mental depression (Beck, 1970; 1976), various cognitive treatments that included components of behavioral and cognitive therapy began to emerge. The interplay between BT and CT has led to their mutual evolution, culminating in the emergence of the integrated approach known as CBT. It can be argued that the nomenclature "CBT" denotes a contemporary amalgamation of cognitive theories and methodologies developed by Aaron T. Beck and Albert Ellis, along with behavioral theories founded on the works of B.F. Skinner and Ivan Pavlov (Sadock, & Sadock, 2003).

1.5.4 Cognitive Behavioral Therapy (CBT)

A variety of disorder-specific CBT protocols that particularly address the distinct cognitive and behavioral maintenance elements of the various disorders have been created. Although some of the specific treatment procedures used in these disorder-specific therapy protocols vary significantly, they nonetheless share the same basic paradigm and general approach to treatment (Rector et al., 2014).

The overarching objective of therapy, in accordance with the medical model of psychiatry, is symptom reduction, improvement in functioning, and remission of the disease. To do this, the patient becomes an active participant in a collaborative problem-solving process designed to test and question the validity of maladaptive cognitions and improve maladaptive behavioral patterns. As a result, current CBT refers to a group of therapies that include cognitive, behavioral, and emotion-focused strategies. Although these treatments strongly emphasize cognitive issues, physiological, emotional, and behavioral components are also acknowledged for their significance in the disorder's maintenance. (Hofmann et al., 2012).

Numerous cognitive-behavioral techniques have been devised to treat diverse clinical issues such as cognitive therapy, problem-solving therapy, dialectical behaviour therapy, meta-cognitive therapy, rational-emotive BT, cognitive processing therapy, mindfulness-based CT, cognitive-behavioral analysis system of psychotherapy, and schema-focused therapy are just some of the cognitive-behavioral approaches that have been developed to treat a wide range of clinical issues such as psychotherapy, and schema-focused treat (Kuehlwein & Rosen, 1993), there are some fundamental principles that all of them share. Furthermore, while CBT for different illnesses differs in form and application, they all highlight the significance of modifying cognitions and behaviors to lower symptoms and enhance the affected person's functioning (Roth et al., 2002). All CBT is predicated on the concept that anybody can acquire mental health problems if the interpretations they assign to certain situations are unpleasant enough. These explain that there are always several perspectives on events and that one's point of view is mostly a question of choice (Butler & Hope, 1996).

Moreover, it is grounded on the fundamental principle that emotional disorders are sustained by cognitive factors. Psychological intervention facilitates modifications in

these factors by employing cognitive techniques such as cognitive restructuring, and behavioral techniques such as exposure, behavioral experiments, relaxation training, and social skills training (Beck & Emery, 2005). The comprehension of an interdependent association among cognitive processes (what people think), and affecting emotional experience, physiology, and behaviour is a crucial aspect of cognitive behavioral therapies. It helps people become aware of the mental and emotional connections between their actions. The fundamental characteristic of CBT is the notion that cognitive mediation often underlies symptoms and dysfunctional behaviour, and that modifying dysfunctional thoughts and beliefs can lead to change (Dobson & Dozois, 2010). It focuses on specific cognitive approaches intended to create thinking shifts that lead to emotional or behavioral transformations of mood (Harrington, 2000).

CBT sessions aim to alleviate symptoms and educate patients on how to better manage their disorders via thought and action. Patients receiving CBT are helped to recognize cycles of negative thought and behaviour. The next step is for patients to reflect on their dysfunctional beliefs and behaviour via methodical discourse and well-crafted behavioral assignments. Different parts of the treatment plan emphasize different aspects of the patient's mental state. The primary objective of therapy is to assist patients in bringing about the desired changes in their lives, therefore therapy tends to concentrate on the here and now. As a consequence, treatment plans emphasize facilitating growth and transformation outside of the therapeutic setting (Hawton et al., 1989).

Cognitive behavioral techniques can aid in the development of when a client is experiencing emotional issues as a consequence of physical conditions and is unable to cope with stressful life events, a more realistic or adaptive way of understanding oneself, others, and the environment might help (Nehra et al., 2012). According to Enright (1997), it is reasonable to assume that a cognitive behavioral approach may assist in recovery from any health problem, mental or physical.

Kaup et al. (2005) Defining the key ways in which patients might benefit from psychosocial therapies, as opposed to traditional psychotherapy, can be helpful.

- a. The approach, timing, and aims of psychosocial treatments with the medically sick are determined by the interplay between illness variables (onset, aetiology, course, prognosis, stigma) and medical therapy (disfiguring, agonizing, aversive, palliative, complicated)
- b. The present inquiry concerns the characteristics of emotional distress, namely anxiety, depression, disorientation, and posttraumatic stress disorder.
- c. The adequacy of social services.
- d. The psychological attributes of the patient, including premorbid psychopathology, personality traits, and intelligence, were evaluated.
- e. The response to illness may manifest in various ways, including the employment of typical coping mechanisms, denial, hostility, and dependency (Andersen, 2002)

Williams and Garland (2002) argued for cognitive-behavioral therapy in the following situations:

1. The patient expresses a desire to utilize psychological interventions either as a standalone treatment or in combination with pharmacological interventions.
2. The issues present targeted by CBT include the presence of extreme and unhelpful thinking, decreased activity, as well as avoidant or unhelpful actions.
3. Medication has provided little or no relief.
4. Side effects make it impossible to take a suitable amount of medication over an acceptable period of time.
5. There are significant psychosocial problems (e.g., marital issues, employment difficulties, or harmful habits such as self-cutting or alcoholism) that cannot be successfully treated solely with medicine.

Moorey stated in 1996 that the duration of therapy is contingent upon the specific ailment being addressed. For example, cognitive therapy, as a treatment for depression, typically involves a weekly one-hour therapy session for a duration of 10 to 20 sittings.

1.5.5 Therapeutic Techniques of Cognitive Behavioral Therapy

CBTs are classified into three types: Cognitive Restructuring, Coping Skills Therapies, and Problem-Solving Therapies (Mahoney & Arnkoff, 1978). The therapies classified as "cognitive restructuring" frequently believe that emotional suffering results from maladaptive thinking. Coping skills treatments are focused on the cultivation of a

diverse set of abilities that can aid the client in managing a broad spectrum of stressful circumstances. The amalgamation of cognitive restructuring techniques and coping skills training processes is commonly referred to as "problem-solving treatments." The aforementioned interventions prioritize the cultivation of universal coping mechanisms for addressing a diverse array of personal issues, as well as the significance of collaborative engagement in devising a treatment strategy. This entails a joint effort between the therapist and the client to comprehend and surmount the latter's apprehensions (Dobson, & Dozois, 2010).

CBTs are classified into three types (Mahoney & Arnkoff, 1978):

The therapies classified as "*cognitive restructuring*" frequently believe that emotional suffering results from maladaptive thinking.

"*Coping skills treatments*" concentrate on developing a repertoire of abilities to help the client cope with a wide range of stressful situations (Dobson, & Dozois, 2010).

"*Problem-solving treatments*" combine cognitive restructuring approaches and coping skills training processes.

These treatments emphasize the development of general techniques that are applicable to a wide variety of personal issues and active client-therapist collaboration in treatment planning, in which the client and therapist work together to comprehend and surmount the client's concerns (Dobson, & Dozois, 2010).

Kisely et al. (2010) proposed the following procedures for classifying "well-defined CBT":

1. The receiver must develop linkages between their ideas, feelings, and behaviors in relation to the target symptom.
2. The intervention must address the person's misperceptions, illogical beliefs, and reasoning biases in relation to the target symptom.
3. The intervention should include one or both of the following elements:
 - The receiver keeps track of his or her thoughts, feelings, and behaviors in relation to the target symptom.
 - Promoting alternative coping strategies for the target symptom.

1.5.6 CBT, Children with Learning Disabilities, Depression and Level of Self-efficacy

Hamdan-Mansour et al. (2009) conducted a study in Jordan on the effectiveness of cognitive behavioral therapy (CBT) with university students suffering from moderate to severe depression symptoms. They found that using CBT resulted in a substantial improvement in outcome measures. Students had reduced perceived stress, lower depressed symptoms, less use of avoidance coping strategies, and more use of approach coping methods after the intervention. Furthermore, there is a large body of studies on gender variations in depression.

After analyzing numerous hypotheses and data, Nole-Hoeksema (1987) found that sad males are more inclined to engage in diverting action that tends to counterbalance their mood. In contrast, depressed women are more likely to intensify their melancholy mood by ruminating over its origins. It is also possible that in our culture, women have fewer opportunities than males to engage in various diverting activities that might help alleviate a melancholy mood.

While Moloud et al. (2022) studied Cognitive-Behavioral Group Therapy (CBGT) in major depressive disorder with a focus on self-esteem and optimism: Based on the findings after three months and six months following the intervention, it was determined that the CBGT group's level of optimism and self-esteem grew considerably after the intervention. As a result, special efforts must be made to ensure that CBGT sessions for patients with severe depressive illness are held regularly.

Overall, the research found that children with LD and Mathematical Disabilities had greater levels of depression and school anxiety and worse self-esteem than children with standard learning. Furthermore, data show that depression and anxiety co-occur in students with Learning Disabilities (Alesi, 2014).

Children with Nonverbal Learning Disorders (NLD), Reading Disabilities (RD), or normal development are treated specifically (TD). NLD and RD children reported higher generalized and social anxiety levels than TD children. NLD children were more concerned about school and separation than TD children, while RD children had more depressive symptoms than either NLD or TD children (Mammarella et al, 2016).

Oud et al. (2019) conducted a study titled Effectiveness of CBT for Children and Adolescents with Depression: A Systematic Review. A systematic review and meta-regression analysis of a comprehensive review of randomized controlled trials was done, and searches in CINAHL, CENTRAL, EMBASE, MEDLINE/PubMed, and PsycINFO were conducted. It was found that CBT reduced depression symptoms after treatment and at follow-up, and CBT, as suggested for prevention, led to a 63% lower probability of being depressed at follow-up. CBT that included both behavioral activation and challenging ideas (as part of cognitive restructuring) or the engagement of caregivers (s) in the intervention was related to superior long-term results for kids. These results agreed with the findings of (Guo et al, 2017) on the effectiveness of CBT in reducing depression and raising self-efficacy.

The current study is similar to earlier studies in that it seeks to determine the effectiveness of a cognitive-behavioral treatment program to raise self-efficacy and reduce symptoms of depression among students with learning difficulties; however, the research community differed.

1.6 Definitions of Key Terms

Self-efficacy: Self-efficacy is one of the most important concepts in learning theories. The term pertains to an individual's perception or belief regarding their competence in accomplishing a particular task or employment with efficacy. The term also pertains to one's perceptions regarding their aptitude to acquire knowledge or exhibit actions at specified levels (Seyed et al., 2017)

Learning Disability: The definitions given by various authors suggest that the term learning disability refers to retardation, disorder, or delayed development in any of the processes of speech, language, reading, writing, or arithmetic. A disorder or deficiency causes these issues in one or more of the fundamental psychological processes involved in understanding or using spoken or written language. They do not include learning problems due primarily to visual, hearing, or motor handicaps; mental retardation; emotional disturbance or adverse environmental factors (Edition, 2013).

Depression: The term "depression" describes a wide range of emotional lows, from mere sadness to a pathological suicidal state. This is a common mental problem

encountered in a day-to-day stress-filled life. Usually, an unhappy person should return to normal emotional stability within a reasonable period. There are times when this sadness or unhappiness may continue to such a degree and for such a length that it far outweighs the significance of the precipitating factor. The sufferer continues to be in a prolonged state of sadness and withdrawn from his or her personal, social, and occupational activities. In such situations, a diagnosis of depression should be considered (World Health Organization, 2011)

Cognitive Behavioral Therapy: It is a type of psychotherapeutic treatment that teaches people how to recognize and change harmful or upsetting thinking habits that negatively impact their actions and emotions. From a procedural point of view, it is defined as therapeutic sessions that will be constructed and used in this research. This includes many exercises and techniques based on cognitive behavior. That will be conducted over 12 sessions (Hofmann, Asnaani, Vonk, Sawyer, & Fang, 2012)

1.7 Statement of the Problem

Depression, and low self-efficacy are all linked to students with learning disabilities. In students with learning difficulties, there is a substantial positive link between depression and anxiety and a large negative correlation between self-esteem and depression and self-efficacy and anxiety (Shah, 2019).

The study's problem arose from manifestations of depression and a significant decrease in self-efficacy among students with various learning disabilities observed by special education teachers in Al-Reineh school, resulting in social maladjustment and social isolation, as well as a lack of confidence that leads to isolating behaviors in the surrounding community. This is why researchers and specialists are looking at the feasibility of a suggested cognitive-behavioral therapy program to lower melancholy and increase self-efficacy in children with learning difficulties. The program was implemented with a group of students with learning disabilities in the occupied 48 territories hamlet of Al- Reineh.

Thus, the researcher sought to assist students with learning disabilities by reducing depression and improving self-efficacy through a cognitive behavioral program.

The situation raises the following major question: What is the efficacy of the CBT program in improving self-efficacy and reducing depression among students with learning disabilities (ages 12–13) in Al-Reineh village?

1.8 Sub Questions

The following sub-questions emerge from the main question:

The first question: Is there a difference between the means of depression in the pre-test and post-test in the experimental group among students with learning disabilities in Al-Reineh village?

The second question: Is there a difference between the means of self-efficacy in the pre-test and post-test in the experimental group among students with LD in Al-Reineh village?

The third question: Is there a difference between the means of depression in the post-test according to group type, gender, age, the interaction between gender and group type, and interaction between age and group type among students with learning disabilities in Al-Reineh village?

The fourth question: Is there a difference between the means of self-efficacy in the post-test according to group type, gender, age, the interaction between gender and group type, and interaction between age and group type among students with learning disabilities in Al-Reineh village?

1.9 Statement of Importance

This study derives its importance from the following:

1. Offering a cognitive-behavioral therapy-based training program to pupils with learning disabilities in order to minimize depression and increase self-efficacy.
2. The use of the training program by educational guides and psychotherapists dealing with children with learning difficulties.
3. Studying a number of important basic concepts, which are self-efficacy and learning disabilities and depression and investigating to which extent they are affected by CBT, may help in creating new research fields. In addition, the study sample consists of elementary school students with learning disabilities. It aims to reduce learning

disabilities and achieve the greatest degree of psychological compatibility, which will be reflected in what they present, do and perform.

4. Highlighting self-efficacy and learning disabilities and depression among students with learning disabilities through focusing on cognitive behavioral therapy, which will include various techniques to increase and develop self-efficacy and reduce depression among elementary school students who suffer from learning disabilities.
5. Preparing and using similar programs in developing and improving self-efficacy and reducing depression among students the moment the program proves effectiveness on similar samples from various ages.

1.10 Objectives of the Study

After defining the problem, the researcher explains the goals of the thesis.

1. Researching the effectiveness of a cognitive behavioral program to reduce the rate of depression and increase the effectiveness of self-efficacy among students with learning difficulties for the age group of 12–13 years in the village of Al-Raina
2. This thesis aims to develop a comprehensive framework on the importance of cognitive-behavioral therapy for students with learning difficulties among high school students of the age group (12–13) years in the village of Al-Raina.
3. To identify the impact of a cognitive-behavioral program to reduce the rate of depression and increase the effectiveness of self-efficacy among students with learning difficulties for the age group (12–13) years in the village of Al-Raina as a result of the following variables: gender, age, the interaction between gender and group type, and the interaction between age and group type.

1.11 Study Hypotheses

1. There are statistically significant differences at the significance level ($\alpha = 0.05$) between the means of depression in the pre-test and post-test in the experimental group among students with learning disabilities in Al-Reineh village.
2. There are statistically significant differences at the significance level ($\alpha = 0.05$) between the means of self-efficacy in the pre-test and post-test in the experimental group among students with learning disabilities in Al-Reineh village.
3. There are statistically significant differences at the significance level ($\alpha = 0.05$) between the means of depression in the post-test according to group type, gender,

age, the interaction between gender and group type, and interaction between age and group type among students with learning disabilities in Al-Reineh village.

4. There are statistically significant differences at the significance level ($\alpha = 0.05$) between the means of self-efficacy in the post-test according to group type, gender, age, the interaction between gender and group type, and interaction between age and group type among students with learning disabilities in Al-Reineh village.

Chapter Two

Methodology

2.1 Introduction

The present chapter encompasses the methodology and procedures employed in the current investigation, as well as the study's design, population, and sampling technique. Additionally, this chapter explicated the research instruments employed in data gathering and their psychometric characteristics. Furthermore, this chapter comprises a synopsis of the group therapeutic programme sessions, the statistical analysis techniques employed, and the classifications of variables.

2.2 Study Design

The quasi-experimental method with a pretest-post test control group design was used in the current study to test the effect of the independent variable (a CBT group program) on the two dependent variables (reducing depression and improving self-efficacy) among students with learning disabilities. The design of two equivalent groups was used; control and experimental groups, whereas the CBT program was applied to the experimental group. Meanwhile, the control group did not receive any intervention. Pretest and post test were conducted for the two groups to assess depression and self-efficacy before and after applying for the therapeutic program, and scores were compared and analyzed. The study design with symbols is illustrated by the following.

$$G_{\text{exp}} \quad O_{\text{pre-exp}} \quad X \quad O_{\text{post-exp}} \quad \dots\dots\dots(1)$$

$$G_{\text{con}} \quad O_{\text{pre-con}} \quad \text{----} \quad O_{\text{post-con}} \quad \dots\dots\dots(2)$$

Where the symbols refer to:

G_{exp} : Experimental group that received a CBT program.

G_{con} : The control group that did not receive any intervention.

$O_{\text{pre-exp}}$: Pre-test of the two dependent variables of depression and self-efficacy for the experimental group members.

$O_{\text{pre-con}}$: Pre-test of the dependent variables of depression and self-efficacy for the control group members.

X: The experimental intervention represented by a CBT program that the experimental group received.

O_{post-exp}: Post-test of the two variables dependent of depression and self-efficacy for the experimental group members.

O_{post-con}: Post-test of the two variables dependent of depression and self-efficacy for the control group members.

2.3 Study Population

The population of this study consisted of children with learning disabilities from 12 to 13 years old and of both gender at the primary stage who live in Al-Reineh village in Nazareth of 48.

2.4 Sampling and Sample Size

The study sample was a purposive sample of 12 children (Children diagnosed with learning disabilities by school), and all participants were selected from Al-Reineh (A) primary school. The inclusion criteria for selecting children were:

- Students who were already diagnosed with a Specific Learning Disorder (SLD) according to DSM-5 criteria.
- Students whose ages ranged from (12 to 13) years old and in the sixth and seventh grades.
- Students with an IQ of 90 and above on the Wechsler Intelligence Scale for Children (WISC).
- Students who do not have either a disability or disorder.
- Students whose parents have agreed to consent.
- The following table shows the description of participants in light of gender and grade level.

Table 1*Participants description (n = 12)*

Group Type	Demographic Variables		Frequency	Percentage
Experimental	Gender	Male	6	50%
		Female	6	50%
		Total	12	100%
	Grade	Sixth	6	50%
		Seventh	6	50%
		Total	12	100%
Control	Gender	Male	6	50%
		Female	6	50%
		Total	12	100%
	Grade	Sixth	6	50%
		Seventh	6	50%
		Total	12	100%

2.5 Study Instruments

Two self-report questionnaires were presented to the participants. These are (a) The Birleson Depression Self-Rating Scale for Children (DSRS-C) (Denda, 2004) and (b) The Generalized Self-Efficacy Scale (GSES) for Schwarzer and Jerusalem (1995) (Kiba et al,2020)

a. The Birleson Depression Self-Rating Scale for Children (DSRS-C)

DSRS-C was constructed by Birleson et al. (1987) in order to assess the level of depression and mood status among children aged from (8 to 14) years old. The original version of the scale consisted of (18) three-point Likert scale items (most of the time = 2, sometimes = 1, and never = 0), and for the reversed items (most of the time = 0, sometimes = 1, and never = 2) with no subscales. According to Birleson et al. (1987), DSRS-C has good psychometric properties. In the current study, the researcher used the Arabic-adapted and translated version of the DSRS-C for Mattar and Thabet (2005) applied in the Palestinian context.

The DSRS-C Validity

Since the DSRS-C was translated into different languages, including Arabic and has good psychometric properties in different cultures, therefore the current study did not assess the DSRS-C by judge's validity. However, the validity of this study was evaluated using a construct validity method. The Corrected Item-Total Correlations (CITCs) were calculated by applying the DSRS-C to an exploratory sample of (30)

children and adolescents (17 males and 13 females) with learning disabilities those who are studying in Albayader primary school (B) in Kafr Kanna village in 48.

The Pearson correlation coefficients were calculated between each item and the total score. All items significantly correlated with the total score ($p < .01$), and correlation coefficients ranged from (.39 to .74). Accordingly, the Arabic version of the DSRS-C has kept all the scale items which indicates sufficient construct validity of the scale and adequately assess the underlying construct that it is supposed to measure. The table below shows the CITCs' results of the DSRS-C.

Table 2

The construct validity of the Arabic version of the DSRS-C

Item number	CITCs	Item number	CITCs
1.	.522**	10.	.470**
2.	.688**	11.	.730**
3.	.658**	12.	.390**
4.	.426**	13.	.440**
5.	.703**	14.	.742**
6.	.485**	15.	.525**
7.	.410**	16.	.420**
8.	.582**	17.	.647**
9.	.654**	18.	.599**

**($p < .01$).

The DSRS-C Reliability

The current study checked the internal consistency reliability of the Arabic version of the DSRS-C by using the Cronbach Alpha equation, resulting in a coefficient of (.913), indicating excellent reliability. The following table shows the items' scoring direction.

Table 3

The DSRS-C items' scoring direction

	Scoring direction		
Positive Items	Most of the time = 2 3, 5, 7, 10, 14, 15, 17, 18.	Sometimes = 1	Never = 0
Reversed Items	Most of the time = 0	Sometimes = 1	Never = 2
	1, 2, 4, 6, 7, 8, 9, 11, 12, 13, 16.		

b. The Generalized Self-Efficacy Scale (GSES)

GSES was constructed by Schwarzer and Jerusalem (1995) in order to assess the level of perceived self-efficacy among children, adolescents, and adults. The original scale consisted of (10) four-point Likert scale items without reversed items (always = 3, mostly = 2, rarely = 1, and not at all = 0) and with no subscales. According to (Schwarzer & Jerusalem, 1995), GSES has good psychometric properties. In the current study, the researcher used the Arabic-adapted and translated version of the GSES for Dighaish (2017) applied in the Algerian context.

The GSES Validity

Since the GSES was translated into (30) languages, including Arabic and has good psychometric properties in different cultures, therefore the current study did not assess the GSES by judge's validity. However, this study's validity was evaluated using a construct validity method. The corrected item-total correlations (CITCs) were calculated by applying the GSES to an exploratory sample of (30) children and adolescents (17 males and 13 females) with learning disabilities those who are studying in Albayader primary school (B) in Kafr Kanna village in 48.

The Pearson correlation coefficients were calculated between each item and the total score. All items significantly correlated with the total score ($p < .01$), and correlation coefficients ranged from (.44 to .86). Accordingly, the Arabic version of the GSES has kept all the scale items which indicates sufficient construct validity of the scale and adequately assess the underlying construct that it is supposed to measure. The table below shows the CITCs' results of the GSES.

Table 4

The construct validity of the Arabic version of the GSES

Item number	CITCs	Item number	CITCs
1.	.638**	6.	.457**
2.	.439**	7.	.563**
3.	.711**	8.	.493**
4.	.801**	9.	.811**
5.	.859**	10.	.706**

**($p < .01$).

The GSES reliability

The current study checked the internal consistency reliability of the Arabic version of the GSES by using the Cronbach Alpha equation, resulting in a coefficient of (.935), indicating excellent reliability.

2.6 The Group CBT Program:

a. The general objectives of the program:

The current study took advantage of the CBT techniques and methods to reduce depression and improve the self-efficacy of SLD students in Al-Reineh village in Nazareth of 48.

b. The specific objectives of the program:

- Getting to know scientists, writers, and inventors who were talented in various fields despite their learning difficulties to be models for students with learning disabilities.
- Developing self-confidence, self-esteem, and self-efficacy among students with learning disabilities.
- Helping students with learning disabilities to know types of irrational thinking and cognitive distortions.
- Assisting students with learning disabilities to identify irrational thoughts, their risks, and how to deal with them.
- Increasing students with learning disabilities' awareness of the linkage between thoughts, emotions, and behaviors.
- Helping students with learning disabilities to discover the impact of irrational thinking and cognitive distortions on their adjustment .
- Developing students' sense of automatic thoughts, assumptions, and core thoughts .
- Training students with learning disabilities to confront negative thoughts that take their power away.
- Reducing anxiety and pessimism among students with learning disabilities.
- Training students with learning disabilities to replace negative thoughts with positive ones.

- Providing students with learning disabilities with strategies to reduce negative feelings and sadness, such as relaxation, systematic desensitization, meditation, and problem-solving.
- Increasing social competencies and skills among students with learning disabilities.
- Encouraging students with learning disabilities to express their-selves freely and without hesitation.
- Assisting students with learning disabilities to distinguish different feelings and emotions.
- Training students with learning disabilities to describe their thoughts and feelings easily and clearly.

CBT group program techniques

The current study designed the therapeutic group program based on the CBT techniques that are useful and suitable for students with SLD, such as physical and moral reinforcement, lecturing and psychoeducation, modelling, giving feedback, cognitive reframing and restructuring, problem-solving, homework, discovering the negative internal dialogue, relaxation, systematic desensitization, meditation, and role-playing.

Tools

One of the halls of Al-Reineh primary School was used to conduct group therapy sessions. In addition, LCD, laptop, flip chart, flip chart papers, pens, pencils, coloring pens, psychological and emotions cards, videos, worksheets, a ball of wool, a small ball, and some gifts.

a. Executing the CBT group program:

The CBT group program was conducted (10) sessions/ one or two sessions per week over two months, and each session was (60) minutes.

Content of the CBT group program

The following table shows the content of the ten-session CBT group program that was applied to the experimental group.

Table 5*The content of the ten-session CBT group program*

Session number	Session objectives	Session duration
The first session	<ul style="list-style-type: none"> • Clarify and explain the objectives of the program. • Getting participants to know each other and the researcher through icebreakers. • Develop group rules and encourage commitment and cooperation. • Getting to know the objectives and expectations of the members that they hope to achieve through the group program. • Getting to know scientists, writers, and inventors, who were talented in various fields despite their learning difficulties to be models for participants. 	60
The second session	<ul style="list-style-type: none"> • Helping participants to know types of irrational thinking and cognitive distortions. • Assisting participants to identify irrational thoughts, their risks, and how to deal with. • Increasing participants awareness for linkage between thoughts, emotions, and behaviors. • Helping participants to discover the impact of irrational thinking and cognitive distortions on their adjustment. • Developing participants' sense of automatic thoughts, assumptions, and core thoughts. 	60
The third session	<ul style="list-style-type: none"> • Training participants to confront negative thoughts that takes their power away. • Reducing anxiety and pessimism among the participants. • Training participants to replace negative thoughts with positive ones. 	60
The fourth session	<ul style="list-style-type: none"> • Introducing the concepts of self-efficacy and depression and their impacts on mental health. 	60
The fifth session	<ul style="list-style-type: none"> • Providing participants with strategies to reduce negative feelings and sadness such as relaxation, and systematic desensitization. 	60
The sixth session	<ul style="list-style-type: none"> • Increasing self-efficacy, social competencies and skills among the participants. • Encouraging participants to express their-selves freely and without hesitation. 	60
The seventh session	<ul style="list-style-type: none"> • Assisting participants to distinguish different feelings and emotions. • Training participants to describe their thoughts and feelings easily and clearly. 	60
The eighth session	<ul style="list-style-type: none"> • Providing participants with strategy of meditation to reduce negative feelings and sadness. 	60
The ninth session	<ul style="list-style-type: none"> • Training participants to learn problem-solving skills. 	60
The tenth session	<ul style="list-style-type: none"> • Discuss participants about the pros and cons of the program. • Knowing the extent to which the objectives of the program have been achieved. • Summarize the most important ideas from previous sessions. • Conducting the post-test. 	60

2.7 The Study Procedures

The following procedures were followed to achieve the objectives of the study:

- Reviewing and preparing the theoretical framework and presenting the previous studies that addressed the current study subjects; CBT, depression, self-efficacy, and learning disabilities.
- Preparing the study instruments in terms of scales (DSRS-C and GSES) and the CBT group program.
- Testing the validity and reliability of both DSRS-C and GSES by applying them to the study population and outside the study sample (experimental and control groups).
- Identifying the study sampling technique (purposive sample) and establishing the inclusion criteria for selecting students, conducting the pre-tests to assess the levels of depression and perceived self-efficacy of participants. Those who obtained the highest scores on the DSRS-C scale were identified.
- The informed consent was presented to students' parents to get permission to apply to the CBT group program for selected students. Most of the families agreed and welcomed letting their children participate in the program, resulting in a sample of (12) students with learning disabilities.
- Distributing the participants to the two study groups (6 in the experimental group and 6 in the control group) using an equivalent group design through matching, where the participants were matched based on a depression variable in both groups.
- The CBT group program was applied to the participants in the experimental group, while the participants in the control group did not receive any therapeutic intervention.
- After implementing the CBT group program, post-tests were conducted on the participants in the experimental and control groups.
- Entering the data into the computer to perform the statistical analysis using the Statistical Analysis Program (SPSS).
- Coming up with the results, discussing them, and presenting recommendations in light of the findings.

2.8 The Statistical Analysis

After collecting the data and entering them into SPSS software, the following statistical methods were used:

- Frequencies, percentages, means, and standard deviations of the study variables.
- The Pearson Product-Moment Correlation Coefficient was used to reveal the study variables' validity.
- Cronbach Alpha equation was used to reveal the study variables' reliability.
- The Shapiro-Wilk Test was used to check the study variables' normality, using this test in small samples (less than 30 individuals).
- Independent samples t-Test was used to check the mean difference of depression and self-efficacy scores between both groups in pre-tests.
- Paired Samples t-Test was used to check the mean difference of depression and self-efficacy scores between pre-tests and post-test for the experimental group.
- Three-way ANCOVA was used to examine the effects of the pre-test, gender, and age on the post-test of depression and self-efficacy.
- The effect size of (Rosenthal et al, 1994) was used to examine the effectiveness of the CBT group program on the two dependent variables; depression and self-efficacy.

2.9 Study Variables

- a. Independent variables: represented by the CBT group program, where the experimental group received the intervention meanwhile the control group received nothing. In addition, independent variables included gender and age.
- b. Dependent variables: The two dependent variables were depression and self-efficacy.

2.10 The Equivalence of the Two Study Groups

Before getting the study results, the two groups equivalence was verified in the pre-tests in the levels of depression and self-efficacy. Furthermore, the researcher checked the normality of depression and self-efficacy for both groups in the pre-tests to perform appropriate statistical tests. When data follow the normal distribution, the parametric tests are the most powerful statistical test. Meanwhile, when data do not follow the normal distribution, non-parametric tests are suitable (Verma & Abdel-Salam, 2019).

Furthermore, in the case of a sample size of less than (30) individuals, the appropriate test for normality is the Shapiro-Wilk test (Field, 2013), and the following table shows the results of the Shapiro-Wilk test.

Table 6

Testing the normality of the responses in depression and perceived self-efficacy for both groups in the pre-tests by the Shapiro-Wilk test

Group type	Dependent variables	Shapiro-Wilk test		
		Statistic	Df	Sig.
Control (n = 6)	Depression	.958	6	.801
	self-efficacy	.927	6	.557
Experimental (n= 6)	Depression	.903	6	.390
	self-efficacy	.833	6	.113

As shown in the previous table, responses were normally distributed in depression and self-efficacy for both groups in the pre-tests. Where all statistic values of the Shapiro-Wilk test were insignificant ($p > .05$), parametric statistical methods can be used in this case. To examine the equivalence of the two groups in depression and self-efficacy in the pre-tests, differences between means were tested using the independent samples t-Test and the following table presents the results.

Table 7

Means, standard deviations and the results of the independent sample t-Test of depression and self-efficacy for both groups in the pre-tests

Dependent variables	Con. group (n = 6)		Exp. group (n = 6)		df	T-value	Sig.
	Mean	S.D.	Mean	S.D.			
Depression	20.17	2.23	19.83	2.99	10	0.219	.831
self-efficacy	12.50	3.21	12.00	1.89	10	0.329	.749

Table 7 shows that the mean of depression in the pre-test in the control group was (20.17) with standard deviation of (2.23), whereas it was (19.83) with standard deviation of (2.99) in the experimental group. The difference between the two means was insignificant ($t = 0.219$, $p > .05$), which indicated that there was no difference between the two groups in depression in the pre-test, resulting in the availability of the equivalence of the two groups before the intervention. On the other hand, the mean of self-efficacy in the pre-test in the control group was (12.50) with standard deviation of (3.21), whereas it was (12.00) with standard deviation of (1.89) in the experimental group. The difference between the two means was insignificant ($t = 0.329$, $p > .05$), which indicated that there was no difference between the two groups in self-efficacy in the pre-test, which indicated equivalence between the two groups before the intervention.

Chapter Three

The Results

The main goals of this study were to investigate the effectiveness of the CBT group program in reducing depression and improving self-efficacy among students with learning disabilities in Al-Reineh village. Furthermore, this study tried to test the impact of gender and age on depression and self-efficacy. Accordingly, this chapter answered questions related to the above objectives:

3.1 The Results of the First Question

This question states, "Is there a difference between the means of depression in the pre-test and post-test in the experimental group among students with learning disabilities in Al-Reineh village?"

Before answering this question and determining the statistical test that should be used since the study sample is small ($n = 6$ and less than 30), moreover, based on what was reported by (Field, 2013), the normality of responses in depression in the pre-test and post-test for the experimental group was examined in order to choose the appropriate statistical methods. The table below shows the results.

Table 8

Testing the normality of the responses in depression in the pre-test and post-test for the experimental group by the Shapiro-Wilk test ($n = 6$)

Test type	Shapiro-Wilk test		
	Statistic	df	Sig.
Pre-test ($n = 6$)	.903	6	.390
Post-test ($n = 6$)	.880	6	.214

As shown in the previous table, responses were normally distributed in depression for the experimental group in the pre-test and post-test. Where, all statistic values of the Shapiro-Wilk test were insignificant ($p > .05$), consequently parametric statistical methods can be used in this case.

To examine the differences between depression in the pre-test and post-test of the experimental group, means and standard deviations were calculated, and the following table presents the results.

Table 9

Means and standard deviations of depression for the pre-test and post-test of the experimental group

Dependent variables	Pre-test		Post-test	
	Mean	S.D.	Mean	S.D.
Depression	19.83	2.99	8.00	2.60

Table (9) shows apparent differences between depression means according to measuring type in the experimental group. Where the mean of depression in the pre-test was (19.83) with standard deviation of (2.99), then it became (8.00) with standard deviation of (2.60) in the post-test.

In order to test the differences between these means according to measuring type, the researcher used paired samples t-Test. It is worth noting that the option of calculating the effect size of paired samples t-Test is not available in the SPSS software. Therefore, it was calculated manually using the equation developed by Rosenthal et al. (1994).

The effect size for Paired Sample t-Test = $Mean_D / SD_D$

That is, dividing the mean of the differences by the standard deviation of these differences.

Table 10

The results of paired samples t-Test of the differences between the pre-test and post-test of depression in the experimental group

Dependent variables	Mean _D	SD _D	T-value	df	Sig.	Effect size
Depression	11.83	2.64	10.98	5	.000**	4.48

**($p < .01$).

As shown in table (10), the difference between the two means of depression in the pre-test ($M = 19.83$, $S.D. = 2.99$) and post-test ($M = 8.00$, $S.D. = 2.61$) for the experimental group was significant ($t = 10.98$, $p < .01$) in favor to the post-test where the depression level among students with learning disabilities decreased significantly after the intervention. The effect size of the CBT group program was (4.48) which is considered a big effect size according to Klappa (2019), which in turn indicated the effectiveness of the CBT group program in reducing depression among the students with learning disabilities in Al-Reineh village.

3.2 The Results of the Second Question

This question states, "Is there a difference between the means of self-efficacy in the pre-test and post-test in the experimental group among students with learning disabilities in Al-Reineh village?"

Before answering this question and determining the statistical test that should be used since the study sample is small ($n = 6$ and less than 30), furthermore, based on what was reported by Field (2013), the normality of responses in self-efficacy in the pre-test and post-test for the experimental group was examined in order to choose the appropriate statistical methods. See Appendix (A) Table (A.1).

As shown in the previous table (A.1), responses were normally distributed in self-efficacy for the experimental group in the pre-test and post-test. Where, all statistic values of the Shapiro-Wilk test were insignificant ($p > .05$), consequently parametric statistical methods can be used in this case.

Mean and standard deviations were calculated to examine the differences between self-efficacy in the pre-test and post-test of the experimental group. See Appendix (A) Table (A.2).

As shown in table (A.2), there were apparent differences between self-efficacy means according to measuring type in the experimental group. Where the mean of self-efficacy in the pre-test was (12.00) with standard deviation of (1.89), then it became (21.00) with standard deviation of (3.35) in the post-test.

In order to test the differences between these means according to measuring type, the researcher used paired samples t-Test. The effect size of paired samples t-Test was calculated manually using the equation developed by Rosenthal et al. (1994).

As shown in Appendix (A) Table (A.3), the difference between the two means of self-efficacy in the pre-test ($M = 12.00$, $S.D. = 1.89$) and post-test ($M = 21.00$, $S.D. = 3.35$) for the experimental group was significant ($t = -7.99$, $p < .01$) in favor to the post-test where the self-efficacy level among students with learning disabilities increased significantly after the intervention. The effect size of the CBT group program was (2.80) which is considered a big effect size according to Klappa (2019), which in turn

indicated the effectiveness of the CBT group program in improving self-efficacy among the students with learning disabilities in Al-Reineh village.

3.5 The Results of the third Question

This question states, "Is there a difference between the means of depression in the post-test according to group type, gender, age, the interaction between gender and group type, and interaction between age and group type among students with learning disabilities in Al-Reineh village?"

Before answering this question, and to determine the statistical test that should be used since the study sample is small ($n = 6$ and less than 30). In addition, based on what was reported by Field (2013), the normality of responses to depression in the post-test for both groups were examined in order to choose the appropriate statistical methods. See Appendix (A) Table (A.4) for the results.

As shown in table (A.4) responses were normally distributed in depression for the post-test in both groups. Where, all statistic values of the Shapiro-Wilk test were insignificant ($p > .05$), consequently parametric statistical methods can be used in this case.

To examine the differences between depression in the post-test according to group type, gender, and age, means and standard deviations were calculated. See Appendix (A) Table (A.5) for the results.

As shown in table (A.5), there were apparent differences between depression means according to group type, gender, and age in the post-test. Where the mean of depression in the control group was (19.50) with standard deviation of (1.22). Meanwhile, it was (8.00) with standard deviation of (2.60) in the experimental group. The mean of depression in the post-test among males was (11.17) with standard deviation of (6.15). Meanwhile, it was (16.33) with standard deviation of (5.82) among females. On the other hand, the mean of depression in the post-test among the age group of 12 years old was (16.17) with standard deviation of (5.27); meanwhile, it was (11.33) with standard deviation of (6.77) among the age group of 13 years old.

In order to test the differences between these means according to group type, gender, age, the interaction between gender and group type, and interaction between age and group type in the post-test, the researcher used a three-way ANCOVA test in order to control for the effect of depression pre-test in depression post-test. Moreover, the effect sizes of independent variables were calculated. See Appendix (A) Table (A.6) for the results.

As illustrated in table (A.6), there is a significant difference in depression means according to group type within post-test, the results were better for the experiential group ($F = 84.17, p < .01$) with an effect size of (.923), which considered a big effect size according to Klappa (2019) which in turn indicated to the effectiveness of the CBT group program in reducing depression among the students with learning disabilities in the experimental group ($M = 8.00, S.D. = 2.60$) comparing with the control group ($M = 19.50, S.D. = 1.22$).

On the other hand, there is an insignificant difference in depression means according to gender in the post-test ($F = 0.115, p > .05$) that indicated depression level among males ($M = 11.17, S.D. = 6.15$) did not differ significantly from females ($M = 16.33, S.D. = 5.83$). In addition, there is an insignificant difference in depression means according to age in the post-test ($F = 0.297, p > .05$) that indicated depression levels among the age group of 12 years old ($M = 16.17, S.D. = 5.27$) did not differ significantly from the age group of 13 years old ($M = 11.33, S.D. = 6.77$). (See Table (A.6))

Regarding the effect of the covariate (pre-test scores) on the post-test scores of depressions, results showed that pre-test scores had no significant impact on post-test scores ($F = 1.68, p > .05$), which means the change in depression level in the post-test caused by the CBT intervention.

In relation to the effect of interaction between gender and group type in depression level, the results showed that there is an insignificant difference in depression means according to the interaction between gender and group in the post-test ($F = 0.006, p > .05$), suggests that in general, consistent gender differences exist across both groups. Furthermore, regarding the effect of interaction between age and group type in depression level, the results showed that there is an insignificant difference in depression means according to the interaction between age and group in the post-test (F

= 1.71, $p > .05$), suggests that in general, consistent age differences exist across both groups.

3.6 The Results of the fourth Question

This question states, "Is there a difference between the means of self-efficacy in the post-test according to group type, gender, age, the interaction between gender and group type, and interaction between age and group type among students with LD in Al-Reineh village?"

Before answering this question, and to determine the statistical test that should be used since the study sample is small ($n = 6$ and less than 30). In addition, based on what was reported by Field (2013), the normality of responses in self-efficacy in the post-test for both groups were examined in order to choose the appropriate statistical methods. (See Appendix (A) Table (A.7) for the result)

As shown in table (A.7), responses were normally distributed in self-efficacy for the post-test in both groups. Where, all statistic values of the Shapiro-Wilk test were insignificant ($p > .05$), consequently parametric statistical methods can be used in this case.

To examine the differences between self-efficacy in the post-test according to group type, gender, and age, means and standard deviations were calculated. Appendix (A) Table (A.8) presents the results.

As shown in table (A.8), there were apparent differences between self-efficacy means according to group type, gender, and age in the post-test. The mean of self-efficacy in the control group was (14.67) with a standard deviation of (2.80). Meanwhile, it was (21.00) with standard deviation of (3.35) in the experimental group. The mean self-efficacy in the post-test among males was (19.17) with a standard deviation of (4.17). Meanwhile, it was (15.83) with standard deviation of (5.60) among females. On the other hand, the mean of self-efficacy in the post-test among the age group of 12 years old was (14.67) with standard deviation of (4.54); meanwhile it was (20.33) with standard deviation of (3.92) among the age group of 13 years old. (See Table (A.8))

In order to test the differences between these means according to group type, gender, age, the interaction between gender and group type, and interaction between age and group type in the post-test, the researcher used a three-way ANCOVA test in order to control for the effect of self-efficacy pre-test in self-efficacy post-test. Moreover, the effect sizes of independent variables were calculated. Appendix (A) Table (A.9) shows the results.

As illustrated in table (A.9), there is a significant difference in self-efficacy means according to group type in the post-test in favor of the experimental group ($F = 21.02$, $p < .01$) with an effect size of (.808), which considered a big effect size according to Klappa (2019) which in turn indicated to the effectiveness of the CBT group program in improving self-efficacy among the students with SLD in the experimental group ($M = 21.00$, $S.D. = 3.35$) comparing with the control group ($M = 14.67$, $S.D. = 2.80$). (See Table (A.9))

On the other hand, there is an insignificant difference in self-efficacy means according to gender in the post-test ($F = 2.04$, $p > .05$) that indicated self-efficacy level among males ($M = 19.17$, $S.D. = 4.17$) did not differ significantly from females ($M = 15.83$, $S.D. = 5.60$). In addition, there is an insignificant difference in self-efficacy means according to age in the post-test ($F = 2.93$, $p > .05$) that indicated self-efficacy level among the age group of 12 years old ($M = 14.67$, $S.D. = 4.54$) did not differ significantly from the age group of 13 years old ($M = 20.50$, $S.D. = 5.01$). (See Table (A.9))

In relation to the effect of interaction between gender and group type in self-efficacy level, the results showed that there is an insignificant difference in self-efficacy means according to the interaction between gender and group in the post-test ($F = 0.288$, $p > .05$) suggests that in general, consistent gender differences exist across both groups. Furthermore, regarding the effect of interaction between age and group type on self-efficacy level, the results showed that there is an insignificant difference in self-efficacy means according to the interaction between age and group in the post-test ($F = 0.005$, $p > .05$) suggests that in general, consistent age differences exist across both groups.

Regarding the effect of the covariate (pre-test scores) on the post-test scores of self-efficacies, results showed that pre-test scores had a significant impact on post-test

scores ($F = 10.25, p < .05$), which means the changing in self-efficacy level in post-test caused by the CBT intervention and pre-test scores. Therefore, the researcher computed the adjusted means for both groups to remove the effect of the pre-test on the post-test, which leads to controlling for the covariate of pre-test scores for each group. (See Appendix (A) Table (A.10).

Chapter Four

Discussions and Conclusions

The current study sought to assess the efficiency of a cognitive-behavioral therapy program in decreasing depression and increasing self-efficacy among students with learning disabilities.

The findings revealed a considerable improvement in students with learning disabilities reducing depression and perceived self-efficacy.

The study's findings are based on prior research that looked at the effectiveness of cognitive-behavioral therapy in decreasing depression and increasing self-efficacy among students with learning disabilities.

The results showed that CBT is effective in developing self-efficacy and reducing the level of depression in children with learning disabilities, based on the results of the measure of the level of depression and self-efficacy in children with learning disabilities, which was used as a pre-measure before applying the program for children with learning disabilities and as a measure after therapeutic intervention.

The means and standard deviations of the performance of children with learning disabilities before and after the program were computed to support the study's hypotheses in both sections: the level of depression and the level of self-efficacy.

In this study, paired samples t-tests were used to compare depression and self-efficacy levels before and after the suggested program, producing favorable outcomes and statistically significant differences. In the experimental group, there was also an increase in self-efficacy and a reduction in depression.

The researcher attributed this finding to the program's components, which included ways to reduce depressive symptoms and increase students' self-efficacy. These therapy strategies include muscular relaxation and meditation; detecting illogical beliefs; problem-solving methods; anger and emotion management training; role-playing; reinforcements; and homework. These tactics comprised critical components for dealing with negative emotions while feeling frightened or unhappy, giving the learner a sense of competence and control over his emotions.

This result can be attributed to the program's components, which included problem-solving training that gave the student a sense of competence in dealing with the problems in his surroundings, which would contribute to raising the level of his self-efficacy, given that the feeling of accomplishment associated with dealing with life's problems is a major component of the individual's self-efficacy and the program's inclusion of other cognitive skills.

The researcher also attributes this result to the nature of the program's components, including activities and events, which were based primarily on the transfer of the impact of the training of the skills that were trained during the treatment sessions to situations of daily life, which were in the form of homework and a discussion between the students after completing the activities. The method by which the activities were presented was based primarily on increasing students' awareness of the situations they face and employing activities and skills to deal with their problems, life, and school issues. Additionally, the counselling sessions were designed in a distributed manner to suit the students' levels of knowledge and to place the program's activities within a framework. Appropriate and adequate time spacing was kept between the sessions, such that the sessions were applied twice a week for around two months, allowing the participants to absorb and adopt the behavior to achieve the intended effect.

The researcher's findings lead us to consider the efficiency of cognitive-behavioral therapy and the significance of its continuity in lowering depression and increasing self-efficacy among students with learning disabilities.

This result is supported by the Oud et al. study (2019), which found that CBT used for prevention resulted in a 63% decreased risk of depression at follow-up. CBT that includes both behavioral activation and challenging concepts (as part of cognitive restructuring) or the involvement of caregivers (s) in the intervention was associated with better long-term outcomes for children.

Moreover, several studies and research have verified the usefulness of the cognitive behavioral program in treating depression in general, including Moloud et al. (2022) and Guo et al. (2017).

In summarizing the examination of research papers that discussed the use of CBT in treating various diseases and its efficacy in the same operations, the literature indicated that many psychological issues employ CBT as their treatment technique (Smith et al, 2014). The use of CBT in treating patients with anxiety and depression caused by learning challenges has been severely limited to a few case studies. Nonetheless, early attempts to use CBT on patients with learning disabilities demonstrated that the intervention was effective despite only minor changes in therapeutic techniques and communication styles. (Van Duijvenbodeet al, 2015)

Depression has an inverse association with self-efficacy; the lower the self-efficacy, the higher the child's depression rate, and vice versa. Because the program decreases the rate of depression, it naturally increases self-efficacy, as demonstrated by the current study, which agrees with the Caserta et al (2013) study which found that there were no significant variations in depression and self-efficacy levels based on age or gender.

This may be explained by the fact that ages 12 and 13 have extremely comparable ages and developmental features, so there is no significant difference in the outcomes depending on the age of the participants in the research. In terms of gender, this might be because they both share a social setting (at the same school, having learning difficulties at the same developmental stage). Moreover, the results indicate that the comparability of social conditions and student involvement did not result in significant disparities between boys and girls.

In studies, cognitive-behavioral therapy is useful in reducing depression and increasing self-efficacy in kids with learning impairments. According to research, improving children's sense of self-efficacy can also help them improve academic motivation and learning. (Schunk & DiBenedetto, 2021)

4.1 Conclusion

This study backs up prior research that looked at the effectiveness of a cognitive-behavioral treatment program in reducing depression and increasing self-efficacy in students with learning disabilities. The current study used a quasi-experimental approach and found that cognitive-behavioral therapy reduced depression and increased self-efficacy among students with learning disabilities. This research provides the foundation for a large body of work on students with various learning impairments. It is

critical to raise awareness in institutes and schools, particularly among teachers and parents, as well as educational counsellors residing in schools, about the nature of assisting students with learning disabilities in Boosting their self-confidence through workshops and training courses based on cognitive-behavioral therapy. Teachers must be trained. This thesis would be helpful as a guide for parents on creating an intervention plan for these children to help them improve their social and behavioral abilities.

4.2 Limitations of the Study

The primary limitations of this research are:

1. A sample of this research: An intentional sample of 12 male and female school students from the age category of 12–13 years with learning disabilities was selected to complete this study.
2. Study instruments: include the depression scale and the self-efficacy scale.
3. Time of this study: The implementation of the current study program in the second semester of the academic year 2022.

4.3 Recommendations

In light of the researcher's results, the following are the primary recommendations:

1. These findings highlight the importance of completing the program in lowering depression and increasing self-efficacy in school-aged children with learning disabilities.
2. Circulating the study to the Ministry of Education and specialists to publicize the experiment's outcomes so that others can benefit from them.
3. Program dissemination and assessment for all school-age pupils.
4. Targeting age groups other than the study's target groups to generalize the experience and assess the program's success for my cognitive behavior.

References

- Abbaszadeh, M., & Sardoie, G. (2016). Compare Academic Self-Efficacy and Self-Regulation among Students with Learning Disorder and without Learning Disorder in Normal Elementary Schools (Fourth and Fifth Grade) of Kerman. *Biomed Pharmacol*, 2016;9(2).
- Abramson, L. Y., Seligman, M. E., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology*, 87(1), 49-74.
- Abu Al-Saud, Shadi Muhammad Al-Sayed.. (2015). The effectiveness of psychodrama in reducing symptoms of depression among students with learning disabilities. *Journal of Special Education*, 13, 1-67.
- Ahlen, J. B. (2012). School-based prevention of anxiety and depression: A pilot study in Sweden. *Advances in School Mental Health Promotion.*, 5. 246-257.
- Alesi, M. (2014). Depression, Anxiety at School and Self-Esteem in Children with Learning Disabilities. *Journal of Psychological Abnormalities in Children*.
- Alloy, L.B., Olino, T.M., & Freed, R.D. (2017). *Costello's Legacy: Loss of Reinforcers or Reinforcer Effectiveness in Depression In a classic*.
- Andersen, B. (2002). Biobehavioral outcomes following psychological interventions for cancer patients. *J Consult Clin Psychol*, 70, 590–610.
- Anderson, S. L. (2001). (2001). Sources of social self-efficacy expectations: Their measurement and relation to career development. *Journal of vocational behavior*, 58(1), 98-117.
- Angold, A., & Rutter, M. (1992). Effects of age and pubertal status on depression in a large clinical sample. *Development and psychopathology*, 4(1), 5-28.
- Antonuccio, D.O., Thomas, M., Danton, W.G.. (1997). A cost-effectiveness analysis of cognitive behavior therapy and fluoxetine (Prozac) in the treatment of depression. *Behavior Therapy*, 28(2), PP.187-210..

- APA. (2013). Specific learning disorder.. *DSM 5*, 74.
- APA. (2017, July). What is Cognitive Behavioral Therapy? Retrieved from <https://www.apa.org/ptsd-guideline/patients-and-families/cognitive-behavioral>
- Artino, A. R. (2012, May). Academic self-efficacy: from educational theory to instructional practice. *Perspect Med Educ.*, pp. 76–85. doi:<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3540350/>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change., *Psychological Review.*, 84, 191-215.
- Bandura, A. (1994). Self-efficacy. In V. S. (Ed.), *Encyclopedia of human behavior* (pp. 71-81). San Diego: Academic Press: Academic Press. Retrieved from <https://www.uky>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Bandura, A. (2005). Guide for Constructing Self-Efficacy Scales. Information Age PublishingSelf. *Efficacy Beliefs of Adolescent*, 307–337. Retrieved from <https://motamem.org/wp-content/uploads/2020/01/self-efficacy.pdf>
- Bandura, A. B. (2001). (2001) Self-efficacy beliefs as shapers of children's aspirations and career trajectories. *Child Development*, 72, pp 187-206.
- Bandura, A., & Wessels, S. (1994). *Self-efficacy*. (Vol. 4, pp. 71-81). na.
- Barber, B. K., Stolz, H. E., Olsen, J. A., Collins, W. A., & Burchinal, M. (2005). Parental Support, Psychological Control, and Behavioral Control: Assessing Relevance across Time, Culture, and Method. *Monographs of the Society for Research in Child Development*, 70(4), i–147.
- Beck A.T., Rush A.J., Shaw B.F. & Emery, G. (1979). *Cognitive Therapy of Depression*.. New York: Guilford Press.
- Beck, A. (1967). *Depression: causes and treatment*. Philadelphia: University of Pennsylvania Press.

- Beck, A. T. (1964). Thinking and depression: Theory and therapy. *Archives of General Psychiatry*, 10, 561–571.
- Beck, A. T., & Alford, B. A. (2009). *Depression: Causes and treatment (2nd ed.)*. University of Pennsylvania Press.
- Beck, A. T., & Emery, G. (2005). *Anxiety disorders and phobias: A cognitive perspective*. 15th annual edition. New York: Basic Books.
- Beck, A. T., Epstein, N., & Harrison, R. (1983). Cognitions, attitudes and personality dimensions in depression. *British Journal of Cognitive Psychotherapy*, 1(1), 1–16.
- Bekirogullari, Z. (2018). Cognitive Behavioural Therapy in treating persons with learning disabilities. *Journal of Educational Sciences and Psychology*, pp. 31 - 39. Retrieved from <https://files.eric.ed.gov/fulltext/ED593577.pdf>
- Benjamin, C. L., Puleo, C. M., Settapani, C. A., Brodman, D. M., Edmunds, J. M., Cummings, C. M., & Kendall, P. C. (2011). History of cognitive-behavioral therapy in youth. *Child and adolescent psychiatric clinics of North America*, 20(2), 179–189.
- Bernaras, E., Jaureguizar, J., & Garaigordobil, M. (2019). (2019). Child and Adolescent Depression: A Review of Theories, Evaluation Instruments, Prevention Programs, and Treatments. *Frontiers in psychology*, 10, 543.
- Birleson, P., Hudson, I., Buchanan, D. G., & Wolff, S.. (1987). Clinical evaluation of a self-rating scale for depressive disorder in childhood (Depression Self-Rating Scale). *Journal of Child Psychology and Psychiatry*, 28(1), 43-60.
- Brown, A. L., & Campione, J. (1986, December 1). Psychological theory and the study of learning disabilities. *The American psychologist*, pp. 59-68. Retrieved from <https://www.semanticscholar.org/paper/Psychological-theory-and-the-study-of-learning-Brown-Campione/2dca515478bf2f102178d491db0e36ef93b7410f>
- Burke, C. (2016). Mental health support for children with learning disabilities. *The Learning Disabilities*. Retrieved from <https://www.nationalelfservice.net/learning-disabilities/mental-health-support-for-children-with-learning-disabilities/>

- Butler, G., & Hope, T. (1996). *Manage Your Mind*. Oxford: Oxford University Press.
- Carey-Pace, J. (2021). A Study of Educators' Experiences Implementing Academic Accommodations for Students with Invisible Disabilities in Higher Education: A Hermeneutic Phenomenology. Wilkes University ProQuest Dissertations. Retrieved from <https://www.proquest.com/openview/7141386ae42d9e78e3ff8994ab8ccb0d/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Caserta, M. T., Wyman, P. A., Wang, H., Moynihan, J., & O'Connor, T. G. (2011). Associations among depression, perceived self-efficacy, and immune function and health in preadolescent children. *Development and psychopathology*, 23(4), 1139–1147.
- Casullo, M.M, Fernandez L.M.. (2001). Coping strategies in adolescent students. *research psychologist*, 6(1): 25-49.
- Celestine, N. (2022, Jun 28). 4 Ways To Improve And Increase Self-Efficacy. positive psychology. Retrieved from <https://positivepsychology.com/3-ways-build-self-efficacy/>
- Cheng, M., Barnes, G. P., Edwards, C., Valyrakis, M., & Corduneanu, R. (2015). Self-efficacy (Transition Skills and Strategies). Retrieved from <https://www.enhancementthemes.ac.uk/docs/ethemes/student-transitions/self-efficacy.pdf>
- Chirimuuta, M. (2019, May). The Historiography of the Sciences of the Brain and Nervous System. *Handbook of the Historiography of Biology*, pp. 1-24. Retrieved from https://link.springer.com/referenceworkentry/10.1007/978-3-319-74456-8_23-1
- Cho, H.-M., Z. Zhang, K. Meyer, M. Lebsack, S. Platnick, A.S. Ackerman, L. Di Girolamo, L.C. Labonnote, C. Cornet, J. Riedi, and R.E. Holz. (2015). Frequency and causes of failed MODIS cloud property retrievals for liquid phase clouds over global oceans. *J. Geophys. Res. Atmos*, 120 (9), 4132-4154.

- Clarke, D.M. and Currie, K.C.. (2009). Depression, anxiety and their relationship with chronic diseases: a review of the epidemiology, risk and treatment evidence.. *Medical Journal of Australia*, 190: S54-S60.
- Conger, J. C., & Keane, S. P. (1981). Social skills intervention in the treatment of isolated or withdrawn children. *Psychological Bulletin*, 90, 478–495.
- David, D., Cristea, I., & Hofmann, S. G. (2018). Why Cognitive Behavioral Therapy Is the Current Gold Standard of Psychotherapy. *Frontiers in psychiatry*, 9, 4.
- de Jong-Gierveld, J. (1987). Developing and testing a model of loneliness. *Journal of personality and social psychology*, 53(1), 119.
- Dean, J., & Keshavan, M. (2017). The neurobiology of depression: An integrated view. *Asian journal of psychiatry*, 27, 101-111.
- Dee, L. D. (2006). *Being, Having and Doing: Theories of Learning and Adults with Learning Difficulties*. Retrieved from <https://eric.ed.gov/?id=ED508507>.
- Dighaish, R. (2017). *The relation between self-efficacy and decision-making among adolescents involved in youth homes in Ouargla*. (Unpublished Thesis), University of Ouargla, Ouargla, Algeria.
- Dobmeier, J., & Fux, C. (2022). Depression. Net Doktor. Retrieved from <https://www.netdokter.de/krankheiten/depression/>
- Dobson, K. S., & Dozois, D. J. (2010). Historical and Philosophical Bases of the Cognitive-Behavioral Therapies. In D. K. (Eds.), *Handbook of Cognitive-Behavioral Therapies*. The Guilford Publications, Inc., New York.
- Dobson, K. S., & Dozois, D. J. (2010). Historical and Philosophical Bases of the Cognitive-Behavioral Therapies. In D. K. (Eds), *Handbook of Cognitive-Behavioral Therapies*. The Guilford Publications, Inc., New York.
- Edition, F. (2013). Diagnostic and statistical manual of mental disorders. *Am Psychiatric Assoc*, 21.
- Ellis, A. (1962). *Reason and emotion in psychotherapy*. New York: Lyle Stuart.

- Ellis, A. (1970). *The essence of rational psychotherapy: A comprehensive approach to treatment*. New York: Institute for Rational Living.
- Enright, S. J. (1997). Cognitive behaviour therapy - clinical applications. *British Medical Journal*, 314, 1811-1816.
- Feist, J. &. (2010). *The Theory of Personality (Seventh ed.)*. Jakarta: SalembaHumanika Publisher.
- Fenollar, P. R. (2007). University students' academic performance: an integrative conceptual framework and empirical analysi. *British Journal of Educational Psychology*, 77(4), 873-891.
- Ferster, C. B. (1966). Animal behavior and mental illness. *The Psychological Record*, 16(3), 345–356.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage.
- Frye, B. L. (2023). St. Thomas Journal of Complex Litigation 3. Retrieved from <https://ssrn.com/abstract=4411107>
- Gallegos, J., Langley, A., & Villegas, D. (2012, February). Anxiety, Depression, and Coping Skills Among Mexican School Children: A Comparison of Students With and Without learning disabilities. *Learning Disability Quarterly*, pp. 54–61. Retrieved from <https://journals.sagepub.com/doi/10.1177/0731948711428772>
- Gehlawat, P., & Gehlawat, V. K. (2020). A narrative review of major depressive disorder in children and adolescents. *Arch Depress Anxiety*, 6(1): 019-022.
- Giofrè, D., Stoppa, E., Ferioli, P., & Pezzuti, I. (2016). Forward and backward digit span difficulties in children with specific learning disorder. *Journal of clinical and experimental neuropsychology*, 38(4), 478-486.
- Gladstone, T. R., & Kaslow, N. J. (1975). Depression and attributions in children and adolescents: A meta-analytic review. *Journal of abnormal child psychology*, 23, 597-606.

- Gore Jr, P. A. (2006). Academic self-efficacy as a predictor of college outcomes: Two incremental validity studies.. *Journal of career assessment*, 14(1), 92-115.
- Grünke, M. &. (2016). Learning disabilities around the globe: Making sense of the heterogeneity of the different viewpoints. *Learning Disabilities: A Contemporary Journal*, 14(1), 1-8.
- Guo, C., Pleiss, G., Sun, Y., & Weinberger, K. Q. (2017). On calibration of modern neural networks. *International conference on machine learning`*, (pp. 1321-1330).
- Gutiérrez-Rojas, L., Porrás-Segovia, A., Dunne, H., Andrade-González, N., & Cervilla, J. A. (2020). Prevalence and correlates of major depressive disorder: a systematic review. *Revista brasileira de psiquiatria (Sao Paulo, Brazil: 1999)*, , 42(6), 657–672.
- Hamdan-Mansour`, A., Puskar, K., & Bandak, A. G. (2009). Effectiveness of cognitive-behavioral therapy on depressive symptomatology, stress and coping strategies among Jordanian university students. *Issues Ment Health Nurs*, 30(3):188-96.
- Hankin, B. L., Abramson, L. Y., Moffitt, T. E., Silva, P. A., McGee, R., & Angell, K. E.. (1998). Development of depression from preadolescence to young adulthood: Emerging gender differences in a 10-year longitudinal study. *Journal of Abnormal Psychology*,.
- Harrington, R. (2000). Cognitive-behavioral therapies for children and adolescents. In M. G.-I. Gelder, *New Oxford Textbook of Psychiatry*. New York: Oxford University Press.
- Hassiotis, A., Serfaty, M., Azam, K., Strydom, A., Martin, S., Parkes, C.,... & King, M. (2011). Cognitive behaviour therapy (CBT) for anxiety and depression in adults with mild intellectual disabilities (ID): a pilot randomised controlled trial. *Trials*.
- Hawes, D. J. (1989). communication between teachers and children: a counselor consultant/trainer model. *Elementary School Guidance & Counseling*, 24(1), 58–67.

- Hawton, K., Salkovskis, P.M., Kirk, J., & Clark, D.M. (1989). *Cognitive behavior therapy for psychiatric problems: A practical guide*. New York: Oxford University Press.
- Herman, K. C., Lambert, S. F., Reinke, W. M., & Ialongo, N. S. (2008). Low academic competence in first grade as a risk factor for depressive cognitions and symptoms in middle school.. *Journal of Counseling Psychology*, 55(3), 400–410.
- Hiroto, D. S., & Seligman, M. E. (1975). Generality of learned helplessness in man. *Journal of Personality and Social Psychology*, 31(2), 311–327. Retrieved from <https://doi.org/10.1037/h0076270>
- Hofmann, S. G., Asnaani, A., Vonk, I. J., Sawyer, A. T., & Fang, A. (2012). The Efficacy of Cognitive Behavioral Therapy: A Review of Meta-analyses. *Cognitive Therapy and Research*, pp. 427-440. doi:10.1007/s10608-012-9476-1
- Hollon, S. D. (2006). Enduring effects for cognitive behavior therapy in the treatment of depression and anxiety. *Annu. Rev. Psychol*, 57, 285-315.
- Ibrahim, A. S. (2008). *Depression and psychological distress, it's understanding and methods of treatment, a perspective Cognitive-Psychological*. 2nd Edition, Al-Kitab House.
- Jerusalem, M., & Schwarzer, R. (1981). General self-efficacy. Free University of Berlin. Retrieved from http://userpage.fu-berlin.de/~gesund/skalen/Allgemeine_Selbstwirksamkeit/allgemeine_selbstwirksamkeit.htm
- Kaslow, D. C., Quakyi, I. A., Syin, C., Raum, M. G., Keister, D. B., Coligan, J. E., McCutchan, T. F., & Miller, L. H. (1988). A vaccine candidate from the sexual stage of human malaria that contains EGF-like domains. *Nature*, 333(6168), 74–76. <https://doi>.
- Kaufman, J., Wymbs, N. F., Montalvo-Ortiz, J. L., Orr, C., Albaugh, M. D., Althoff, R., O'Loughlin, K., Holbrook, H., Garavan, H., Kearney, C., Yang, B. Z., Zhao, H., Peña, C., Nestler, E. J., Lee, R. S., Mostofsky, S., Gelernter, J., & Hudziak, J. (2018). Methylation in OTX2 and related genes, maltreatment, and depression in

children. *Neuropsychopharmacology: official publication of the American College of Neuropsychopharmacology*, 43(11), 2204–2211.

Kaupp, J.W., Rapoport-Hubschman, N. & Spiegel, D. (2005). Psychosocial treatment. In L. JL, *Textbook of psychosomatic medicine*. Washington DC.

Kazdin, A. E. (1979). Imagery elaboration and self-efficacy in the covert modeling treatment of unassertive behavior. *Journal of Consulting and Clinical Psychology*, 47, 725–733.

Keegan, E., & Holas, P. (2009). Cognitive-behavior therapy. Theory and practice. In R. Carlstedt (Ed.), *Integrative Clinical Psychology, Psychiatry and Behavioral Medicine* (pp. 605-630). New York: Springer Publications. Retrieved from https://www.researchgate.net/publication/259574814_Cognitive-behavior_therapy_Theory_and_practice

Kemp, G., Smith, M., & Segal, J. (2023). *Learning Disabilities and Disorders*. Retrieved from <https://www.helpguide.org/articles/autism-learning-disabilities/learning-disabilities-and-disorders.htm>.

Kenett, Y. N., Beaty, R. E., & Medaglia, J. D. (2018, October 15). A Computational Network Control Theory Analysis of Depression Symptoms. *Personality Neuroscience*. Retrieved from <https://www.cambridge.org/core/journals/personality-neuroscience/article/computational-network-control-theory-analysis-of-depression-symptoms/2DBA8844BDBB6050E9C90527D83EC902>

Kisely, S.R., Campbell, L.A., Skerritt, P., Yelland, M.J. (2010). *Psychological interventions for symptomatic management of nonspecific chest pain in patients with normal coronary anatomy (Review)*. *The Cochrane Collaboration*. Published by John Wiley & Son.

Klappa, P. (2019). (2019, January 8). *Cohen's d effect size paired t test [Video file]*. Retrieved from <https://www.youtube.com/watch?v=K6GRHelAOYw>

Kratzer, A., Luttenberger, K., Karg-Hefner, N., Weiss, M., & Dorscht, L. (2021, August 21). Boulderling psychotherapy is effective in enhancing perceived self-efficacy in

- people with depression: results from a multicenter randomized controlled trial. *BMC Psychol.* Retrieved from <https://bmcpyschology.biomedcentral.com/articles/10.1186/s40359-021-00627-1>
- Kraus, C., Castrén, E., Kasper, S., & Lanzenberger, R.. (2017). Serotonin and neuroplasticity - Links between molecular, functional and structural pathophysiology in depression. *Neuroscience and biobehavioral reviews*, 77, 317–326.
- Kuehlwein, K. T., & Rosen, H. E. (1993). *Cognitive therapies in action: evolving innovative practice*. San Francisco: Jossey-Bass.
- Lengua, j. Liliana & Kovacs, Erica. (2005). Bidirectional associations between temperament and parenting and the prediction of adjustment problems in middle childhood. *Journal of Applied Developmental Psychology*, 26. 21-38.
- Lewinsohn, P. M. (1975). The behavioral study and treatment of depression in Progress in behavior modification. *Elsevier*, 19-64.
- Lopez-Garrido, G. (2020, Agu 09). Self-Efficacy Theory. Retrieved from <https://www.simplypsychology.org/self-efficacy.html>
- Lorenzo-Blanco, E. I., Unger, J. B., Baezconde-Garbanati, L., Ritt-Olson, A., & Soto, D. (2012). Acculturation, enculturation, and symptoms of depression in Hispanic youth: the roles of gender, Hispanic cultural values, and family functioning. *Journal of youth and adolescence*, 41(10), 1350–1365.
- Maddux, J. E. (1999). Expectancies and the social cognitive perspective: Basic principles, processes, and variables. In K. I., *How expectancies shape experience* (pp. 17-40). Washington, DC: American Psychological Association.
- Maddux, J. E., & Meier, L. J. (1995). *Self-efficacy and depression*. In *Self-efficacy, adaptation, and adjustment: Theory, research, and application*. Boston, MA: Springer US.
- Mahlon B. Dalley, David N. Bolocofsky, Mark B. Alcorn & Clifford Baker. (1992). Depressive Symptomatology, Attributional Style, Dysfunctional Attitude, and

- Social Competency in Adolescents with and Without Learning Disabilities. *School Psychology Review*, 21.
- Mahoney, M. J., & Arnkoff, D. B. (1978). Cognitive and self-control therapies. In S. L. (Eds.), *Handbook of psychotherapy and behavior change: An empirical analysis* (pp. 689–722). New York: Wiley.
- Mammarella, I. C. (2016). Anxiety and depression in children with nonverbal learning disabilities, reading disabilities, or typical development. *Journal of learning disabilities*.
- Manghirmalani, P., More, D., & Jain, K. (2012). A fuzzy approach to classify learning disability. *International journal of advanced research in artificial intelligence*, 1(2), 1-7.
- Mattar, S. L., & Thabet, A. (2005). *Identify the prevalence of mental health of labor children in the Gaza Strip*. Retrieved from <https://dspace.alquds.edu/bitstreams/921cbf1b-cc21-4e6a-8ea5-f511e32990f8/download>
- Maughan, Barbara & Rowe, Richard & Loeber, Rolf & Stouthamer-Loeber, Magda.. (2003). Reading Problems and Depressed Mood. *Journal of abnormal child psychology*, 31. 219-29..
- Mental Help. (2022). Cognitive Theories of Major Depression – Aaron Beck. Retrieved from <https://www.mentalhelp.net/depression/cognitive-theories/>
- Mizen, L., & Cooper, S. (2012, November). Learning disabilities. *Medicine*, pp. 619-622. Retrieved from <https://www.sciencedirect.com/science/article/abs/pii/S1357303912001764>
- Moloud, R., Saeed, Y., Mahmonir, H. & Asl Rasool, G.. (2022). Cognitive-behavioral group therapy in major depressive disorder with focus on self-esteem and optimism: an interventional study. *BMC Psychiatry*, 22, 6.
- Moloud, R., Saeed, Y., Mahmonir, H. et al.. (2022). Cognitive-behavioral group therapy in major depressive disorder with focus on self-esteem and optimism: an

- interventional study. *BMC Psychiatry* 22, 299 (2022).
<https://doi.org/10.1186/s12888-022-03918-y>.
- Molteni, R. C. (2020). Reduced function of the serotonin transporter is associated with decreased expression of BDNF in rodents as well as in human.
- Moore, C. (2022, Jul 28). Albert Bandura: Self-Efficacy for Agentic Positive Psychology. *Positive Psychology*. Retrieved from <https://positivepsychology.com/bandura-self-efficacy/>
- Moore, Z. (2009). Theoretical and Empirical Developments of the Mindfulness-Acceptance-Commitment (MAC) Approach to Performance Enhancement. *Journal of Clinical Sport Psychology*, 3. 10.1123/jcsp.3.4.291.
- Moreau, D., & Waldie, K. (2016). Developmental Learning Disorders: From Generic Interventions to Individualized Remediation. *Frontiers in psychology*, 6. Retrieved from <https://doi.org/10.3389/fpsyg.2015.02053>
- Muktamath, V. U., Hegde, P. R., & Chand, S. (2021). Types of Specific Learning Disability. *Learning Disabilities - Neurobiology, Assessment, Clinical Features and Treatments*. Retrieved from Intech Open. <https://doi.org/10.5772/intechopen.100809>
- Mullen, S. (2018). Major depressive disorder in children and adolescents. *The mental health clinician*, 8(6), 275–283. Retrieved from <https://doi.org/10.9740/mhc.2018.11.275>
- Multon, K. D. (1991). Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation. *Journal of Counseling Psychology*, 38(1), pp 30-38.
- Nakao, M., Shirotaki, K., & Sugaya, N. (2021, Oct. 3). Cognitive–behavioral therapy for management of mental health and stress-related disorders: Recent advances in techniques and technologies. *BioPsychoSocial Medicine*. doi:<https://doi.org/10.1186/s13030-021-00219-w>
- National Collaborating Centre for Mental Health (U. (2010).

- National Institute for Health and Care Excellence. (2009). *DSM-5 Criteria: Major Depressive Disorder*. Retrieved from https://floridabhcenter.org/wp-content/uploads/2021/03/MDD_Adult-Guidelines-2019-2020.pdf
- Nehra, D. K., Sharma, N., Kumar, P., & Nehra, S. (2013, January). Cognitive Behavior Therapy: An Overview. In S. N. Rattan, & H. Deepi (Eds.), *Mental Health Risk and Resources* (pp. 271 - 313). Global Vision Publishing House, Delhi. Retrieved from https://www.researchgate.net/publication/237358832_Cognitive_Behaviour_Therapy_An_Overview
- NHIS. (2015). Retrieved from Data Release (cdc.gov).
- Nolen-Hoeksema, S. (1987). Sex differences in unipolar depression: Evidence and theory. *Psychological Bulletin*.
- Novati, A., Hulshof, H. J., Granic, I., & Meerlo. (2012). Chronic partial sleep deprivation reduces brain sensitivity to glutamate N-methyl-d-aspartate receptor-mediated neurotoxicity. *Journal of sleep research*, 21(1), 3-9.
- Oken, M.F., Mooney, A. & Peters, B.. (2015). Supporting communication for patients with neurodegenerative disease. *Neurorehabilitation*, 37. 69-87.
- Oud, M., Winter, L. d., Vermeulen-Smit, E., Bodden, D., Nauta, M., Stone, L.,... Stikkelbroek, Y. (2019, January 16). Effectiveness of CBT for children and adolescents with depression: A systematic review and meta-regression analysis. *European Psychiatry*, pp. 33-45. Retrieved from <https://www.cambridge.org/core/journals/european-psychiatry/article/effectiveness-of-cbt-for-children-and-adolescents-with-depression-a-systematic-review-and-metaregression-analysis/D1D82E21388A16EB077D02A24366F689>
- Pandey, D., & Agarwal, V. (2014). E-commerce transactions: An empirical study. *International journal of advanced research in computer science and software engineering*, 4(3).

- Pandy, R. (2012). *Learning Disabilities and Self-Esteem*. Retrieved from <https://opus.govst.edu/cgi/viewcontent.cgi?article=1126&context=capstones>
- Pariante, M. (2017). Why are depressed patients inflamed? A reflection on 20 years of research on depression, glucocorticoid resistance and inflammation. *European neuropsychopharmacology. the journal of the European College of Neuropsychopharmacology*, 2.
- Pavlov, I. (1927). *Conditioned Reflexes: An Investigation of the Physiological Activity of the Cerebral Cortex*. Trans. and ed. G. V. Anrep. London: Oxford University Press Peres.
- Rachman, S. (2015). The evolution of behaviour therapy and cognitive behaviour therapy. *Behaviour research and therapy*, 64, 1–8.
- Rao, S. (2003). Neuropsychological aspects of learning disabilities. In P. Karanth and J. Rozario (eds.), *Learning Disabilities in India: Willing*.
- Rector, N. A. (2014). The expanding cognitive-behavioural therapy treatment umbrella for the anxiety disorders: disorder-specific and transdiagnostic approaches.. *Canadian journal of psychiatry*. , 59(6).
- Rehm, L. P. (1977). A self-control model of depression. *Behavior Therapy*, 8(5), 787–804.
- Reynolds, C. (1987). Flocks, Herds, and Schools: A Distributed Behavioral Model. *ACM Siggraph Computer Graphics*, 21, 25-34.
- Rezaei, A., & Mousanezhad, J. (2020). The contributions of attentional control components, phonological awareness, and working memory to reading ability. *Journal of psycholinguistic research*, 49, 31-40.
- Robinson, S., Weiss, J. A., Lunskey, Y., & Ouellette-Kuntz, H.. (2016). Informal support and burden among parents of adults with intellectual and/or developmental disabilities. *Journal of Applied Research in Intellectual Disabilities*, 29(4), 356-365. Retrieved from <https://www.familienhandbuch.de/babys-kinder/behinderung/arten/Lernbehinderung.php>

- Rohner, R. P., & Khaleque, A. (2003). Reliability and Validity of the Parental Control Scale: A Meta-Analysis of Cross-Cultural and Intracultural Studies. *Journal of Cross-Cultural Psychology*, 34(6), 643–649.
- Rosenthal, R. C. (1994). Parametric measures of effect size.. *The handbook of research synthesis*, 621(2), 231-244.
- Roth, D.A., Eng, W. and Heimberg, R.G. (2002). *Cognitive behavior therapy in Encyclopedia of Psychotherapy*. Elsevier Science (USA).
- Sadock,, B. J., & Sadock, V. A. (2003). (2003). *Kaplan and Sadock's Synopsis of Psychiatry: Behavioural sciences/clinical psychiatry*. Philadelphia: Lippincott, Williams and Wilkins.
- Salk, R. H., Hyde, J. S., & Abramson¹, L. Y. (2017, Apr 27). Gender Differences in Depression in Representative National Samples: Meta-Analyses of Diagnoses and Symptoms. *Psychological bulletin*, pp. 783–822. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5532074/>
- Sandro, M. (2020). Neural Correlates in Learning Disabilities. In *Learning Disabilities - Neurological Bases, Clinical Features and Strategies of Intervention*. doi:10.5772/intechopen.86684
- Schroeder, D. A., & Graziano, W. G. (2015). The field of prosocial behavior: An introduction and overview. In In D.Schroeder & W. G. Graziano (Eds.), *The Oxford Handbook of prosocial behavior*.
- Schunk, D. H., & DiBenedetto, M. K. (2021, July 14). Self-Regulation, Self-Efficacy, and Learning Disabilities. In S. Misciagna (Ed.), *Learning Disabilities - Neurobiology, Assessment, Clinical Features and Treatments*. Retrieved from <https://www.intechopen.com/chapters/78359>
- Schunk, D. H., & Ertmer, P. A. (2000). Self-regulation and academic learning: Self-efficacy enhancing interventions. In *Handbook of self-regulation* (pp. 631-649). Burlington, MA: Academic Press.

- Schwarzer, R., & Jerusalem, M. (1995). (1995). Generalized self-efficacy scale. J. Weinman, S. Wright, & M. Johnston Measures in health psychology: A user's portfolio. *Causal and control beliefs*, 35, 37.
- Seyed, S., Salmani, M., Motahari Nezhad, F., & Noruzi, R. (2017). Self-efficacy, achievement motivation, and academic progress of students with learning disabilities: A comparison with typical students. *Middle East Journal of Rehabilitation and Health*, 4(2).
- Shah, P. (2019). The Relationship between Anxiety, Depression and Self-esteem in Adolescents with Learning Disability. *Indian Journal of Mental Health*, pp. 368-376. Retrieved from https://indianmentalhealth.com/pdf/2019/vol6-issue4/Review_Paper_12.pdf
- Silver, A. A., & Hagin, R. A. (2002). *Disorders of Learning in Childhood*. New York: John Wiley and Sons.
- Simons, R.L., Miller, M.G. (1987). Adolescent Depression: Assessing the Impact of Negative Cognitions and Socioenvironmental Problems,. *Social Work*, (32) 4,326–330,.
- Skinner, B. F. (1953). *Science and human behavior*. Macmillan.
- Smith, N., Hill, R., Marshall, J., Keaney, F., & Wanigaratne, S. (2014). (2014). Sleep-related beliefs and their association with alcohol relapse following residential alcohol detoxification treatment. *Behavioral and cognitive psychotherapy*, 42(5), 593-604.
- Szilvia, J., Tünde, H.-M., & Erzsébet, R. (2013). Getting to know students and student groups - students who require special attention. mentorhalo. Retrieved from http://www.jgypk.hu/mentorhalo/tananyag/Tanulk_s_tanulcsoportok_megismerse_-_kiemelt_figyelmet_ignyl_tanulk/index.html
- Tang, M, Fouad, N A and Smith, P L. (1999). (1999). Asian American's career choices: A path model to examine their career choices. *Journal of Vocational Behavior*, 54,142-157.

- TAVARES, T., DREVETS, W. C., & SAHAKIAN, B. J. (2003, September). Cognition in mania and depression. *Psychological Medicine*, pp. 959 - 967.
- Taylor, K. M. (1983). Applications of self-efficacy theory to the understanding and treatment of career indecision,. *Journal of Vocational Behaviour*, 22, 63-81.
- Unwin, G. T. (2016). Effectiveness of cognitive behavioural therapy (CBT) programmed for anxiety or depression in adults with intellectual disabilities: A review of the literature. *Research in Developmental Disabilities*, 51, 60-75.
- Van Duijvenbode, N., VanDerNagel, J. E., Didden, R., Engels, R. C., Buitelaar, J. K., Kiewik, M., & de Jong, C. A. (2015). Substance use disorders in individuals with mild to borderline intellectual disability: current status and future directions. *Research in Developmental Disabilities*, 38, 319-328.
- Verma, J. P., & Abdel-Salam, A. S. (2019). *Testing statistical assumptions in research*. John Wiley & Sons.
- Watson, J.B. & Raynor, R. (1920). Conditioned emotional responses. *Journal of Experimental Psychology*, 3, 1-14.
- Weishaar, M. (1996). Developments in cognitive therapy: 1960-1995,. In W. D. (ed.), *Developments in Psychotherapy*:. Historical Perspectives. London: Sage.
- Weisz, J. R., McCarty, C. A., & Valeri, S. M. (2006). (2006). Effects of psychotherapy for depression in children and adolescents: a meta-analysis. *Psychological bulletin*, 132(1), 132-149. Retrieved from <https://doi.org/10.1037/0033-2909.132.1.132>
- Wenzel, A., Brown, G.K., & Karlin, B.E. (2011). *Cognitive Behavioral Therapy for Depression in Veterans and Military Servicemembers: Therapist Manual*. Washington, DC: U.S. Department of Veterans Affairs.
- WHO. (2016). *World Health Statistics*. Retrieved from <https://www.who.int/docs/default-source/gho-documents/world-health-statistic-reports/world-health-statistics-2016.pdf>

- Wiener, J., & Tardif-Williams, C. Y. (2004). Social and Emotional Functioning of Children with Learning Disabilities: Does Special Education Placement Make a Difference? *Learning Disabilities Research and Practice*, pp. 20-32. doi:10.1111/j.1540-5826.2004.00086.x
- Williams, C. J., & Garland, A. (2002). Identifying and challenging unhelpful thinking: a Five Areas approach. *Advances in Psychiatric Treatment*, 8.
- Wines, M. (2002). *Dyslexia*. *Midwestern State University*. Retrieved from https://msutexas.edu/academics/education/dyslexia/_assets/files/dyslexia-facts.pdf.
- World Health Organization. (2011).
- World Health Organization. (2012).
- Wright-Strawderman, C., & Watson, B. L.. (1992). The Prevalence of Depressive Symptoms in Children with Learning Disabilities. *Journal of Learning Disabilities*, 25(4), 258–264.
- Young, S., Hollingdale, J., Absoud, M., Bolton, P., Branney, P., Colley, W., & Woodhouse, E. (2020). Guidance for identification and treatment of individuals with attention-deficit/hyperactivity disorder and autism spectrum disorder based upon expert consensus. *BMC medicine*, 18(1), 146. Retrieved from <https://doi.org/10.1186/s12916-020-01585-y>
- Zimmerman, B. J., & Schunk, D. H. (2003). Albert Bandura: The scholar and his contributions to educational psychology. In B. J. Zimmerman, & D. H. Schunk, *Educational psychology: A century of contributions* (pp. 431–457). Mahwah, NJ: Lawrence Erlbaum.
- Zubler, J. (2021). Learning Disabilities & Differences: What Parents Need To Know. Healthy Children Org. Retrieved from <https://www.healthychildren.org/English/health-issues/conditions/learning-disabilities/Pages/Learning-Disabilities-What-Parents-Need-To-Know.aspx>

Appendixes

Appendix A

Table

Table A.1

Testing the normality of the responses in self-efficacy in the pre-test and post-test for the experimental group by the Shapiro-Wilk test (n = 6)

Test type	Shapiro-Wilk test		
	Statistic	df	Sig.
Pre-test (n = 6)	.833	6	.113
Post-test (n= 6)	.838	6	.121

Table A.2

Means and standard deviations of self-efficacy for the pre-test and post-test of the experimental group

Dependent variables	Pre-test		Post-test	
	Mean	S.D.	Mean	S.D.
self-efficacy	12.00	1.89	21.00	3.35

Table A.3

The results of paired samples t-Test of the differences between pre-test and post-test of self-efficacy in the experimental group

Dependent variables	Mean _D	SD _D	T-value	Df	Sig.	Effect size
self-efficacy	-9.00	2.76	-7.99	5	.000**	2.80

**($p < .01$).

Table A.4

Testing the normality of the responses in depression in the post-test a by the Shapiro-Wilk test (n = 6).

Group type	Shapiro-Wilk test		
	Statistic	Df	Sig.
Control group (n = 6)	.827	6	.101
Experimental group (n= 6)	.880	6	.214

Table A.5

Means and standard deviations of depression in the post-test according to group type, gender, and age.

Independent variable		Mean	S.D.
Group type	Control group	19.50	1.22
	Experimental group	8.00	2.60
Gender	Male	11.17	6.15
	Female	16.33	5.82
Age	12 years old	16.17	5.27
	13 years old	11.33	6.77

Table A.6

Three-way ANCOVA results of differences in depression in the post-test according to group type, gender, and age.

Independent variable	Sum of squares	df	Mean square	F-value	Sig.	Eta squared (η^2)
Group type	299.99	1	299.99	84.17	.000**	.923
Gender	0.188	1	0.188	0.053	.825	.007
Age	1.00	1	1.00	0.281	.613	.039
Group type*gender	0.02	1	0.02	0.006	.943	.001
Group type*age	6.22	1	6.22	1.71	.248	.255
Pre-test	8.95	1	8.95	2.51	.157	.264

**($p < .01$).

Table A.7

Testing the normality of the responses in self-efficacy in the post-test a by the Shapiro-Wilk test ($n = 6$).

Group type	Shapiro-Wilk test		
	Statistic	Df	Sig.
Control group (n = 6)	.828	6	.102
Experimental group (n= 6)	.838	6	.121

Table A.8

Means and standard deviations of self-efficacy in the post-test according to group type, gender, and age.

Independent variable		Mean	S.D.
Group type	Control group	14.67	2.80
	Experimental group	21.00	3.35
Gender	Male	19.17	4.17
	Female	15.83	5.60
Age	12 years old	14.67	4.54
	13 years old	20.50	5.01

Table A.9

Three-way ANCOVA results of differences in self-efficacy in the post-test according to group type, gender, and age.

Independent variable	Sum of squares	df	Mean square	F-value	Sig.	Eta squared (η^2)
Group type	124.11	1	124.11	21.02	.006**	.808
Gender	12.07	1	12.07	2.04	.212	.290
Age	17.28	1	17.28	2.93	.148	.369
Group type*gender	1.70	1	1.70	0.288	.614	.054
Group type*age	0.03	1	0.03	0.005	.946	.001
Pre-test	60.48	1	60.48	10.25	.024*	.672

**($p < .01$).

Table A.10

The adjusted means and standard errors of self-efficacy in the post-test according to group type

Independent variable		Mean	S.E.
Group type	Control group	13.63	1.14
	Experimental group	21.13	1.11

Appendix B

The CBT group program to reduce depression and improve self-efficacy among students with learning disabilities

The First Session (60 minutes):

a. The main objective:

The first session is an opening session aimed at providing participants with an overview of the group therapy program and building the relationship between the researcher and the students in a relaxed manner by establishing intimacy and focusing on the confidentiality principle.

b. The minor objectives:

- Getting participants to know the researcher and to know each other.
- Informing participants of the program sessions dates, duration, and location.
- Showing the importance of the group program, its benefits, and its subjects and procedures.
- Develop group rules and encourage commitment and cooperation.
- Getting to know the objectives and expectations of the members that they hope to achieve through the group program.
- Getting to know scientists, writers, and inventors, who were talented in various fields despite their learning difficulties to be models for participants.

c. The procedures and activities:

- The researcher welcomed the group members, introduced herself to them, and clarified her role during the program. Then she applied an activity entitled “Ice Breaker Ball” to make students feel comfortable from the start and to create an atmosphere of humor and fun that for helping them to know each other.
- Then the researcher explained the program’s goal, steps, and stages, the researcher discussed the group members about their expectations and what they hope to achieve during their participation in the program. After that, the researcher and the participants set some norms for the group to inform students how they were

expected to engage with and treat each other, therefore the students identified things they should do when engaging with others in the group such as active listening, keeping privacy, and treating others kindly and respectfully.

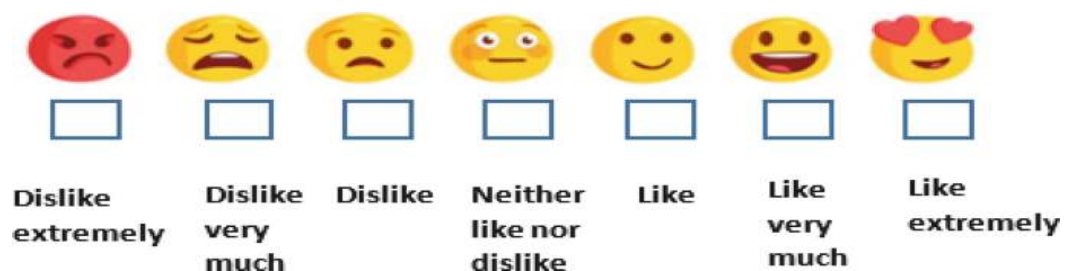
- Then the researcher asked the students to define and explain learning disabilities, after that she presented a conclusion about what participants shared. Then the researcher made a presentation of scientists, writers, and inventors who were talented in various fields despite their learning difficulties to be models for students with learning disabilities.
- At the end of the first session, the researcher summarized what happened in the session, thanked the group members for their attendance and interaction, and reminded them of the date of the next session.

d. Techniques and tools:

In the first session, different CBT techniques were employed like physical and moral reinforcement, lecturing and psychoeducation, discussion, modeling, and giving homework. Furthermore, in order to achieve the objectives of the first session, many tools were utilized; LCD, laptop, flip chart, flip chart papers, pens, pencils, psychological and emotions cards, a small ball, and some gifts.

e. Evaluation:

The interaction of participants in the first session was relatively good. However, the participants showed signs of tension, but the researcher tried to make them feel safe, accepted, welcomed, and comforted by involving them in funny attractive activities. Moreover, the researcher asked the participants to evaluate the session using a seven-point scale by the following emoji faces. Most of the participants selected options between (like to like extremely). Finally, the researcher assigned homework for the participants to think about their strengths.



The Second Session (60 minutes):

a. The main objective:

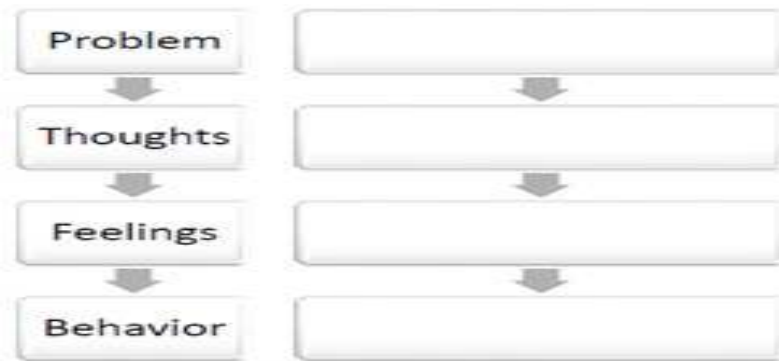
The second session aimed at helping students with learning disabilities to know the types of irrational thinking and cognitive distortions.

b. The minor objectives:

- Helping participants to know types of irrational thinking and cognitive distortions.
- Assisting participants to identify irrational thoughts, their risks, and how to deal with.
- Increasing participants' awareness of the linkage between thoughts, emotions, and behaviors.
- Helping participants discover the impact of irrational thinking and cognitive distortions on their adjustment.
- Developing participants' sense of automatic thoughts, assumptions, and core thoughts.

c. The procedures and activities:

- The researcher welcomed the group members and thanked them for their commitment and interest in attending, and then she reviewed the previous homework assignment and presented some gifts to students who worked well.
- She moved on to present a brief lecture on the role of ideas in the formation of emotions and behaviors.
- After that, she presented and criticized some irrational thoughts/beliefs and their risks to mental health.
- The researcher asked the participants to think aloud and explain their thoughts in order to touch their internal dialogue and self-talk to be more aware of types of thoughts/ beliefs and cognitive distortions. This activity helped the students to perceive and analyze their self-talk, especially negative ones. The following worksheet was used.



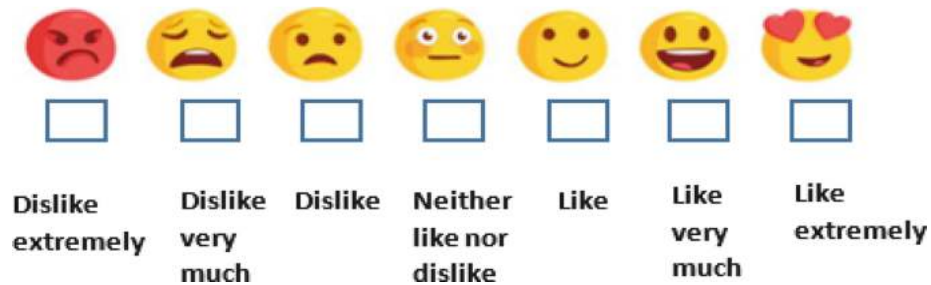
- Then the researcher distributed to participants cards written on some irrational beliefs of Albert Ellis and some cognitive distortions of Aaron Beck, and four cards were chosen to be discussed. Those cards contained the following ideas:
 - To be valuable, it is essential to be very competent and realize great achievements in all possible areas.
 - It is terrible that things do not go the way we planned them.
 - Ali walked down the street he thought to himself “Everyone can tell that I’m a loser” (Arbitrary interpretation / arbitrary inference).
 - Laila got a (C-) on a piece of homework, thought to himself “I’m going to fail everything”, and feels hopeless (Overgeneralization).
- The other irrational beliefs and cognitive distortions remained as homework in which individuals were asked for discussing and disputing them as they learned during the session.
- At the end of the second session, the researcher summarized what happened in the session, thanked the group members for their attendance and interaction, and reminded them of the date of the next session.

d. Techniques and tools:

In the second session, different CBT techniques were employed like physical and moral reinforcement, lecturing and psychoeducation, discussion, giving feedback, and homework. Furthermore, in order to achieve the objectives of the second session, many tools were utilized; LCD, laptop, flip chart, flip chart papers, pens, pencils, psychological and emotions cards, and some gifts.

e. Evaluation:

The interaction of participants in the second session was very good. The signs of tension reduced. Moreover, the researcher asked the participants to evaluate the session using a seven-point scale by the following emoji faces. Most of the participants selected options between (like very much to like extremely). Finally, the researcher assigned homework for the participants to think about their strengths.



The Third Session (60 minutes):

a. The main objective:

The third session aimed at training participants to confront negative thoughts that take their power away.

b. The minor objectives:

- Reducing anxiety and pessimism among the participants.
- Training participants to replace negative thoughts with positive ones.

c. The procedures and activities:

- The researcher welcomed the group members and thanked them for their commitment and interest in attending, and then she reviewed the previous homework assignment and presented some gifts to students who worked well.
- Then she moved on to present a brief lecture about identifying negative thoughts during different situations and occasions, their causes and conditions, giving some examples from reality, and how to stop negative thoughts and replace them with positive ones.
- After that, she presented and criticized some irrational thoughts/beliefs and their risks to mental health.

- The researcher asked the participants to give examples of their negative thoughts and their impacts emotionally and behaviorally. Then she encouraged them to suggest positive and effective thoughts. The following worksheet was used to train the participants to reconstruct their thinking.

Where were you?	Emotion or feeling	Negative automatic thought	Evidence that supports the thought	Evidence that does not support the thought	Alternative thought	Emotion or feeling

- Finally, the researcher assigned homework for the participants to stop their negative thoughts and replaced them with positive ones using the previous worksheet.
- At the end of the third session, the researcher summarized what happened in the session, thanked the group members for their attendance and interaction, and reminded them of the date of the next session.

d. Techniques and tools:

In the third session, different CBT techniques were employed like physical and moral reinforcement, lecturing and psychoeducation, discussion, giving feedback, cognitive reframing and restructuring, and giving homework. Furthermore, in order to achieve the objectives of the third session, many tools were utilized; LCD, laptop, flip chart, flip chart papers, pens, pencils, psychological and emotions cards, and some gifts.

e. Evaluation:

The interaction of participants in the third session was very good. The participants interacted effectively. Moreover, the researcher asked the participants to evaluate their satisfaction during the session using a five-point scale by the following figure. Most of the participants selected options between (good to excellent). Finally, the researcher assigned homework for the participants to stop their negative thoughts and replacing them with positive ones.



The Fourth Session (60 minutes):

a. The main objective:

The fourth session aimed at introducing the concepts of self-efficacy, depression, and their impacts on mental health.

b. The minor objectives:

- Helping the participants to be aware of personal factors and resources that increase their perceived self-efficacy.
- Assisting the participants to discover the role of negative thought and cognitive distortions in developing and maintaining emotional problems such as depression and anxiety.
- Helping the participants to get to know about depressive symptoms.

c. The procedures and activities:

- The researcher welcomed the group members and thanked them for their commitment and interest in attending, and then she reviewed the previous homework assignment and presented some gifts to students who worked well.
- Then she moved on to present a brief lecture about perceived self-efficacy, its sources, how to increase it, and its consequences on performance.

- Then she moved on presenting how low self-efficacy could develop depressive symptoms, the nature of depression, its risks, and how to reduce it through changing negative thoughts or irrational beliefs.
- After that, using the below worksheets, the researcher asked the participants to give examples of the consequences of self-efficacy and depression on individual functioning, and how influence them emotionally and behaviorally.

Low self-efficacy	Consequences	High self-efficacy	Consequences

Depression thoughts	Consequences	Challenging thoughts	Consequences

- Finally, the researcher assigned homework for the participants to determine situations that made them feel depressed or have low self-efficacy and how to overcome that by changing thoughts or beliefs.
- At the end of the fourth session, the researcher summarized what happened in the session, thanked the group members for their attendance and interaction, and reminded them of the date of the next session.

d. Techniques and tools:

In the fourth session, different CBT techniques were employed like physical and moral reinforcement, lecturing and psychoeducation, discussion, giving feedback, and giving a homework. Furthermore, in order to achieve the objectives of the fourth session, many tools were utilized; LCD, laptop, flip chart, flip chart papers, pens, pencils, psychological and emotions cards, and some gifts.

e. Evaluation:

The interaction of participants in the fourth session was very good. The participants interacted effectively. Moreover, the researcher asked the participants to evaluate their satisfaction during the session using a five-point scale by the following figure. Most of

the participants selected options between (good to excellent). Finally, the researcher assigned homework for the participants to think about their strengths.



The Fifth Session (60 minutes):

a. The main objective:

The fifth session aimed at providing participants with strategies to reduce negative feelings and sadness.

b. The minor objectives:

- Providing participants with strategies to reduce negative feelings and sadness such as relaxation, and systematic desensitization.

c. The procedures and activities:

- The researcher welcomed the group members and thanked them for their commitment and interest in attending, and then she reviewed the previous homework assignment and presented some gifts to students who worked well.
- Then she moved on to show a short video about relaxation technique, after that she presented a brief lecture about muscle relaxation and systematic desensitization techniques, how to apply them practically, their consequences on mood and thinking process, and their benefits physically and psychologically including a sense of well-being, decreasing muscle tension and blood pressure, and reducing fatigue, sadness, and anxiety. Moreover, she explained muscle relaxation and

systematic desensitization advantages regarding improving sleeping quality, and organizing memory, which in turn affect positively academic performance for students with learning disabilities.

- Then she moved on to apply the muscle relaxation technique to all participants. Furthermore, she moved to apply the systematic desensitization technique to female students who felt anxious in the classroom.
- Finally, the researcher assigned homework for the participants to apply the muscle relaxation technique to real situations, or when they feel anxious or sad.
- At the end of the fifth session, the researcher summarized what happened in the session, thanked the group members for their attendance and interaction, and reminded them of the date of the next session.

d. Techniques and tools:

In the fifth session, different CBT techniques were employed like physical and moral reinforcement, lecturing and psychoeducation, discussion, giving feedback, modeling, applying muscle relaxation and systematic desensitization techniques, and giving a homework. Furthermore, in order to achieve the objectives of the fifth session, many tools were utilized; LCD, laptop, flip chart, flip chart papers, pens, pencils, psychological and emotions cards, and some gifts.

e. Evaluation:

The interaction of participants in the fifth session was excellent. The participants interacted effectively and enthusiastically. Moreover, the researcher asked the participants to evaluate their feelings during the session using a four-point scale in the following figure. All of the participants selected the happy option. Finally, the researcher assigned homework for the participants to apply the muscle relaxation technique to real situations, or when they feel anxious or sad.

Green	Yellow	Blue	Red
			
Happy	Worried	Sad	Angry
Today I feel...			
<input type="text"/>			

The Sixth Session (60 minutes):

a. The main objective:

The sixth session aimed at increasing self-efficacy among the participants.

b. The minor objectives:

- Increasing self-efficacy, social competencies, and skills among the participants.
- Encouraging participants to express their-selves freely and without hesitation.

c. The procedures and activities:

- The researcher welcomed the group members and thanked them for their commitment and interest in attending, and then she reviewed the previous homework assignment and presented some gifts to students who worked well.
- Then she moved on to present a brief lecture about role-playing strategy, its position in CBT, identifying situations in which role-playing is used, how to conduct its exercises in terms of identifying the situation, describing details, assigning roles, and acting out. In addition, how apply them practically, its benefits on improving solving-problems skills, raising self-confidence, developing communications and social skills, and increasing assertiveness.
- Then she moved to apply the role-playing strategy in two situations, those were:
 - The bakery: This scenario required students to play the roles of baker and consumers. Where baker tries to sell his/her products such as cakes, bread, and biscuits, and he/ she is supposed to promote his/her products by convincing consumers by focusing on qualities and prices. Students could reverse or exchange the roles in order to allow the participants to develop their assertiveness.
 - The hospital: One of the participants plays the role of the patient, another participant plays the role of the doctor who prescribes the appropriate treatment for the patient, and a third participant plays the role of the nurse who helps the doctor, and then they exchange roles among themselves.
- At the end of the sixth session, the researcher summarized what happened in the session, thanked the group members for their attendance and interaction, and reminded them of the date of the next session.

d. Techniques and tools:

In the sixth session, different CBT techniques were employed like physical and moral reinforcement, lecturing and psychoeducation, discussion, role-playing, cognitive reframing and restructuring, and giving homework. Furthermore, in order to achieve the objectives of the sixth session, many tools were utilized; LCD, laptop, flip chart, flip chart papers, pens, pencils, psychological and emotions cards, and some gifts.

e. Evaluation:

The interaction of participants in the sixth session was excellent. The participants interacted effectively and enthusiastically. This session was one of the most distinctive and enjoyable sessions. Where the researcher touched the creativity of the participants during the role-playing, and she was surprised by their performance. The participants were very entertained, and the researcher encouraged, strengthened, and gave them appropriate compliments on their wonderful performance. Where the goals of enhancing their self-confidence and their belief in their self-efficacy were achieved in the sixth session. Even shy participants quickly got excited when they were encouraged and given appropriate reinforcements. This activity contributed to the participants' feeling of happiness, where the importance of teamwork was emphasized.

Moreover, the researcher asked the participants to evaluate their feelings during the session using a four-point scale in the following figure. All of the participants selected the happy option. Finally, the researcher assigned homework for the participants to write about their feelings when they behave assertively.



The Seventh Session (60 minutes):

a. The main objective:

The seventh session aimed at teaching participants skills to deal with feelings.

b. The minor objectives:

- Assisting students with learning disabilities to distinguish different feelings and emotions in different situations.
- Training participants to describe their thoughts and feelings easily and clearly.

c. The procedures and activities:

- The researcher welcomed the group members and thanked them for their commitment and interest in attending, and then she reviewed the previous homework assignment and presented some gifts to students who worked well.
- Then she moved on to identify situations that provoke some feelings and link them to the thoughts that precede them. Then the researcher explained how to link feeling to behavior, focusing on the thoughts that caused these feelings and led to this behavior. Then each participant chose one of the emotions' cards, and the researcher asked them to mention if they experienced such feelings while they were with other people, whether at school, home, or any other place, that to ask themselves the following questions: What did you think? what did you do? what result did you get? and was the result positive or negative? The following worksheet was used.

Situation	Thoughts	Emotions	Behaviors

- At the end of the seventh session, the researcher summarized what happened in the session, thanked the group members for their attendance and interaction, and reminded them of the date of the next session.

d. Techniques and tools:

In the seventh session, different CBT techniques were employed like physical and moral reinforcement, lecturing and psychoeducation, discussion, cognitive reframing and restructuring, and giving homework. Furthermore, in order to achieve the objectives of the seventh session, many tools were utilized; LCD, laptop, flip chart, flip chart papers, pens, pencils, psychological and emotions cards, and some gifts.

e. Evaluation:

The interaction of participants during the presentation of the lecture was weak. However, at the end of the session, the participants interacted effectively and enthusiastically. Moreover, the researcher asked the participants to evaluate their satisfaction during the session using a five-point scale by the following figure. Most of the participants selected options between (good to excellent). Finally, the researcher assigned homework for the participants to write down or use symbols for an annoying situation that occurs to them frequently, and to identify thoughts that preceding feelings and behavior.



The Eighth Session (60 minutes):

a. The main objective:

The eighth session aimed at providing participants with the strategy of meditation to reduce negative feelings and sadness.

b. The minor objectives:

- Assisting participants to reduce their negative feelings and facing tension.
- Teaching participants the strategy of meditation.

c. The procedures and activities:

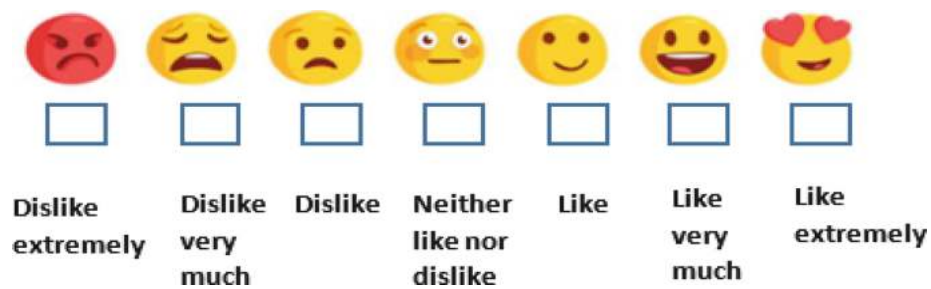
- The researcher welcomed the group members and thanked them for their commitment and interest in attending, and then she reviewed the previous homework assignment and presented some gifts to students who worked well.
- Then she moved on to present a brief lecture about meditation in terms of its function, benefits, and how to apply. Moreover, the researcher explained the role of meditation in increasing the individual's ability to control his/her imagination in a positive way by focusing attention on thoughts, which in turn change his emotions. For the eighth session, the researcher used Zen (Zazen) technique and explained how to apply this method in meditation.
- At the end of the eighth session, the researcher applied Zen technique to all participants, summarized what happened in the session, thanked the group members for their attendance and interaction, and reminded them of the date of the next session.

d. Techniques and tools:

In the eighth session, different CBT techniques were employed like physical and moral reinforcement, lecturing and psychoeducation, discussion, modeling, and giving homework. Furthermore, in order to achieve the objectives of the eighth session, many tools were utilized; LCD, laptop, flip chart, and flip chart papers.

e. Evaluation:

The interaction of participants in the eighth session was very good. The signs of tension reduced after applying the meditation strategy. Moreover, the researcher asked the participants to evaluate the session using a seven-point scale by the following emoji faces. Most of the participants selected options between (like very much to like extremely). Finally, the researcher assigned homework for the participants to apply Zen technique in their homes.



The Ninth Session (60 minutes):

a. The main objective:

The ninth session aimed at training participants to learn problem-solving skills.

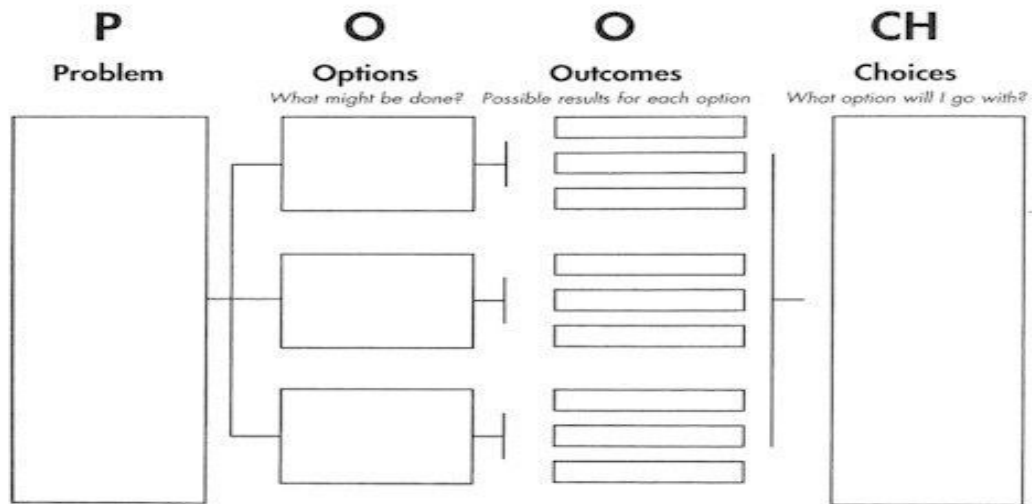
b. The minor objectives:

- Teaching participants problem-solving steps.
- Assisting participants to apply problem-solving skills in their daily lives.

c. The procedures and activities:

- The researcher welcomed the group members and thanked them for their commitment and interest in attending, and then she reviewed the previous homework assignment and presented some gifts to students who worked well.
- Then she asked the participants about their situational life experiences and how they usually face problems. After that, the researcher explained problem-solving steps in terms of identifying and defining the problem, generating possible solutions, evaluating alternatives, deciding on a solution, implementing the solution, and evaluating the outcome.

- Then she presented a scenario to illustrate the problem-solving procedures and its effectiveness in facing problems. After that, the researcher asked the participants to use the below worksheet to learn problem-solving strategy.



- At the end of the ninth session, the researcher summarized what happened in the session, thanked the group members for their attendance and interaction, and reminded them of the date of the next session.

d. Techniques and tools:

In the ninth session, different CBT techniques were employed like physical and moral reinforcement, lecturing and psychoeducation, discussion, problem-solving strategy, worksheet, and giving homework. Furthermore, in order to achieve the objectives of the ninth session, many tools were utilized; LCD, laptop, flip chart, and flip chart papers.

e. Evaluation:

The interaction of participants in the ninth session was very good. They understood the problem-solving strategy very well and applied it effectively. Moreover, the researcher asked the participants to evaluate their satisfaction during the session using a five-point scale in the following figure. Most of the participants selected options between (good to excellent). Finally, the researcher assigned homework for the participants to apply solving-problem strategy in their daily lives.



The Tenth Session/ The Final Session (60 minutes):

a. The main objective:

The tenth session aimed at conducting the post-tests.

b. The minor objectives:

- Discussing participants in the CBT group program’s pros and cons.
- Knowing the extent to which the objectives of the CBT group program have been achieved.
- Summarizing the most important ideas from the preceding sessions.
- Measuring depression and perceived self-efficacy level.

c. The procedures and activities:

- The researcher welcomed the group members and thanked them for their commitment and interest in attending, and then she reviewed the previous homework assignment and presented some gifts to students who worked well.
- Then she reminded them that this session is the last. After that, she addressed and discussed with the participants what happened in the preceding sessions.
- The researcher asked the participants to show their opinions about what they reached and what was benefited from. The researcher emphasized the need to maintain and commit to what they learned from the CBT group program sessions in order to achieve mental health.

- Then the post-test was conducted and thanks were given for their efforts and desire for positive change, and small gifts were presented to the participants.

d. Techniques and tools:

In the tenth session, different CBT techniques were employed like physical and moral reinforcement, lecturing and psychoeducation, and discussion, Furthermore, in order to achieve the objectives of the tenth session, many tools were utilized; LCD, laptop, flip chart, flip chart papers, and some gifts (chocolate).

e. Evaluation:

The interaction of participants in the tenth session was excellent. Furthermore, the post-test was applied.

Appendix C

Assessment Tools

الطالب/المحترم/ة

تقوم الباحثة بدراسة بعنوان " فاعلية برنامج علاجي سلوكي معرفي في خفض الاكتئاب وتحسين الكفاءة الذاتية لدى الطلاب ذوي صعوبات التعلم "، وذلك استكمالاً للحصول على درجة الماجستير في تخصص علم النفس الاكلينيكي، جامعة النجاح.

ولتحقيق أهداف هذه الدراسة قامت الباحثة بتجهيز أدوات الدراسة والتي يرجى قراءة كل فقرة منها والإجابة عليها وذلك بتحديد الاجابة المناسبة، علماً بأنه لا توجد إجابة صحيحة وأخرى خاطئة، فالإجابة الصحيحة هي التي تعبر عن رأيك بصدق وصراحة، وستُحاط إجابتك بالسرية التامة ولا تُستخدم إلا لأغراض البحث العلمي فقط، لذا أرجوا منكم الإجابة عليها بكل موضوعية ودقة.

شاكراً لكم حُسن تعاونكم.

الباحثة: ميار عثمانة.

بإشراف: د.فايز محاميد.

د.فاخر الخليلي.

أولاً: المعلومات الأساسية:

الاسم:

الجنس:

العمر:

التحصيل:

ثانياً المقياس:

أمامك مجموعة من الأسئلة تتعلق بما تشعر/ي به في خلال الأسبوع الماضي من فضلك ضع علامة صح في الخانة الصحيحة .

لا	بعض الاحيان	دائماً	البند
			ما زلت أنظر للأشياء في حياتي كما تعودت عليها
			أنام جيداً.
			أشعر بأنني سوف أبكي.
			أحب أن أخرج في الشارع للعب.
			أرغب في الهروب بعيداً.
			أتمتع بطاقة كبيرة.
			تصيبني آلام في المعدة.
			أستمتع بالأكل.
			أستطيع القيام بخدمة نفسي.
			أشعر بأن الحياة لا تساوي شيئاً.
			أفعل الأشياء بشكل جيد.
			استمتع بعمل الأشياء كما كنت في السابق.
			أحب التحدث مع أهلي ومع الآخرين.

لا	بعض الاحيان	دائماً	البند
			أحلم أحلام مزعجة.
			أشعر بالوحدة الشديدة.
			من السهولة أن أبتهج.
			أشعر بالتعاسة لدرجة لا تطاق.
			أشعر بالملل.

أمامك عدد من العبارات التي يمكن ان تصف أي شخص، اقرأ كل عبارته، وحدد مدى انطباقها عليك بشكل عام، وذلك بوضع إشارة صح في الخانة الصحيحة.

دائماً	غالبا	نادرا	لا	البند
				عندما يقف شخص ما في تحقيق هدف اسعى اليه، فاني قادر على إيجاد الوسائل المناسبة لتحقيق مبتغاي.
				اذ ما بذلت من الجهد كفاية، فاني سأنجح في حل المشكلات الصعبة.
				من السهل على تحقيق اهدافي ونواياي.
				اعرف كيف اتصرف مع المواقف غير المتوقعة.
				اعتقد بأنني قادر على التعامل مع الاحداث حتى لو كانت هذه مفاجئة لي.
				اتعامل مع الصعوبات بهدوء، لأنني أستطيع الاعتماد على قدراتي الذاتية.
				مهما يحدث فاني أستطيع التعامل مع ذلك.
				أجد حلا لكل مشكلة تواجهني.
				اذ ما واجهني امر جديد، فاني اعرف كيفية التعامل معه.
				أمتلك أفكارا متنوعة حول كيفية التعامل مع المشكلات التي تواجهني.



جامعة النجاح الوطنية
كلية الدراسات العليا

فاعلية برنامج علاج سلوكي معرفي في خفض الاكتئاب وتحسين
الكفاءة الذاتية لدى الطلبة ذوي صعوبات التعلم

إعداد

ميّار عصام عدنان عثمانة

إشراف

د. فايز محاميد

د. فاخر الخليلي

قدمت هذه الرسالة استكمالاً لمتطلبات الحصول على درجة الماجستير في علم النفس الإكلينيكي،
من كلية الدراسات العليا، في جامعة النجاح الوطنية، نابلس، فلسطين.

2023

فاعلية برنامج علاج سلوكي معرفي في خفض الاكتئاب وتحسين الكفاءة الذاتية لدى الطلبة ذوي صعوبات التعلم

إعداد

ميّار عصام عدنان عثمانة

إشراف

د. فايز محاميد

د. فاخر الخليلي

المخلص

خلفية الدراسة: صعوبات التعلم هي نوع من حالات النمو العصبي. وفقاً للدليل التشخيصي والإحصائي للاضطرابات العقلية (DSM-5)، تشمل الجوانب الأساسية أوجه القصور في مهارات التعلم، والتي يمكن أن تؤدي إلى انخفاض الكفاءة الذاتية واليأس في المستقبل.

أظهرت الأبحاث السابقة أن العلاج السلوكي المعرفي يحسن الكفاءة الذاتية ويقلل من الاكتئاب لدى الطلاب الذين يعانون من صعوبات التعلم. نتيجة لذلك، كان الغرض من هذه الدراسة هو التحقيق في تأثير العلاج المعرفي السلوكي على الحد من الاكتئاب وزيادة الكفاءة الذاتية بين الطلاب الذين يعانون من صعوبات التعلم.

منهج الدراسة: تم تقييم الطلاب الذين يعانون من صعوبات التعلم من قبل المتخصصين بالمدرسة، وتم اختيار عينة عشوائية للمجموعتين الضابطة والتجريبية. تضمنت 12 طفلاً يعانون من صعوبات التعلم تتراوح أعمارهم بين 12-13 عاماً. تم استخدام الطريقة شبه التجريبية مع تصميم مجموعة ضابطة قبل الاختبار البعدي للمجموعتين الضابطة والتجريبية، بينما تم تطبيق برنامج Cognitive Behavioral Therapy (CBT) على المجموعة التجريبية. في غضون ذلك، لم تتلق المجموعة الضابطة أي تدخل. تم إجراء اختبارات أولية واختبارات لاحقة للمجموعتين لتقييم الاكتئاب والكفاءة الذاتية قبل وبعد التقديم للبرنامج العلاجي، وتمت مقارنة الدرجات وتحليلها.

النتائج: أظهرت النتائج أن العلاج المعرفي السلوكي فعال في تطوير الكفاءة الذاتية وتقليل مستوى الاكتئاب لدى الأطفال ذوي صعوبات التعلم، بناءً على نتائج قياس مستوى الاكتئاب والفعالية الذاتية لدى الأطفال الذين يعانون من صعوبات التعلم، والذي كان يستخدم كإجراء مسبق قبل تطبيق البرنامج للأطفال ذوي صعوبات التعلم وكإجراء بعد التدخل العلاجي.

التوصيات: تقود نتائج البحث إلى النظر في كفاءة العلاج المعرفي السلوكي وأهمية استمراريته في خفض الاكتئاب وزيادة الكفاءة الذاتية لدى الطلاب ذوي صعوبات التعلم، ويمكن استخدامه لتدريب المعلمين والمرشدين التربويين في المدارس وتوجيههم. وارشاد الآباء في تطوير خطة تدخل العلاج المعرفي السلوكي للأطفال الذين يعانون من صعوبات التعلم.

الكلمات المفتاحية: الكفاءة الذاتية، صعوبات التعلم، الاكتئاب، العلاج السلوكي المعرفي (CBT)