

THE IMPACT OF A COUNSELING PROGRAM BASED ON MINDFULNESS ON SELF-DEVELOPMENT AMONG STUDENTS WITH SPECIFIC LEARNING DISORDER IN JORDAN

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The study aimed to examine the effectiveness of a counseling program based on mindfulness in the self-development of students with specific learning disorders in Jordan, where the researcher used the experimental curriculum, and the study sample consisted of (50) Students sixth-grade students with specific learning disorders distributed to two pilot groups (25) students, the other female officer (25) students, and the study tools included the mindfulness-based counseling program (by the researcher) and the measure of self-development (by the researcher), and the test was used (T) for independent samples to test the study hypotheses where the results showed statistically significant differences between the average scores of experimental group members and control group members in the dimensional measurement of the self-development scale in favor of experimental group members and significant differences between the pre- and post-test scores of the experimental group on the self-development scale, favoring the post-test results. No statistically significant differences were found between the post-test and follow-up test scores of the experimental group on the self-development scale. The study recommended several recommendations, the most important of which was the dissemination by Jordan's Ministry of Education of the use of mindfulness-based counseling programs for the self-development of persons with specific learning disorders in all its schools.

Keywords: Training Program; Mindfulness; Specific Learning Disorder; Jordan.

INTRODUCTION

Individuals in society strive to develop themselves to keep up with the rapid societal transformations they experience, ensuring continuity and adaptation. This ensures the ongoing acquisition and effective use of knowledge and skills. Self-development equips individuals to address environmental challenges and seize growth opportunities (Al-Sayed, 2021). Students in general, and students with specific learning disorders in particular, need to pay attention to many aspects that are important and essential for self-development, related to their skills, abilities, and social life. This means that individuals must develop

and improve themselves in order to increase their potential and enhance their skills. The school is considered one of the most important institutions that provide individuals with the experiences, skills, and knowledge that allow them to interact with the environment they live in (Al-Khouli, 2020).

Self-development for students with specific learning disorders is considered one of the most important foundations for their improvement due to its clear and significant impact on enhancing their performance and acquiring necessary skills, resulting in a qualitatively beneficial education. We have also noticed a great interest in training programs that focus on self-improvement and development for students in general (Avcu&Ayverdi, 2020). This framework confirms that scientists and researchers believe that the process of acquiring self-development skills at various counseling stages has a positive impact on students' achievement and knowledge acquisition. Many issues, including achievement, are linked to the high level of self-development skills they possess. This helps the individual interact sensitively with their environment, remain open to valuable information, be aware of multiple perspectives, and develop problem-solving skills (Al-Fail, 2020).

Due to the positive impact of mindfulness on students in general, as it provides them with the ability to understand what is happening within them in terms of thoughts and to recognize their emotions, it is essential for daily life as it enhances an individual's ability to generate multiple and diverse solutions, and thus has a significant impact on individuals' mental health (Al-Ansari, 2019).

When a student has a deficiency in mindfulness, it negatively affects all aspects of their life, especially their cognitive performance. On the other hand, if mindfulness is high, it enhances the ability to influence the psychological horizon, which refers to building and understanding the meanings and underlying motivations behind an individual's thoughts. This helps the individual interact with their environment with a high degree of sensitivity, openness to valuable information, awareness of multiple perspectives, and problem-solving skills (Al-Noor, 2019).

Based on the above, and in light of the increasing research evidence demonstrating the importance of mindfulness and its positive effects on students, providing mindfulness-based training programs to help students with specific learning disorders develop themselves offers a qualitatively and promising approach, especially with the success of these programs in addressing students' problems.

Statement of the Problem

Researchers have observed, through their work in the field of special education categories, including students with specific learning disorders, a deficiency in self-development among students with specific learning disorders, which causes them numerous problems. Despite the researchers' efforts in studying self-development and its positive effects on the learning process, students with specific learning disorders often face many difficulties in various aspects such as continuous learning, positive thinking, time management, effective communication with others, and the ability to endure and manage stress, which hinders their self-development.

Through their review of counseling literature and previous studies on the topic of mindfulness, the researchers found significant interest in the uses of mindfulness as an independent variable affecting many counseling and psychological variables. For example, the study by Tawfiq (2023) examined the effectiveness of a mindfulness-based program in improving self-efficacy and mood regulation, and the study by Oguntuase& Sun (2022) explored the effectiveness of a mindfulness-based program in increasing resilience and self-confidence among student football players. Other studies have also addressed the impact of mindfulness on various psychological and non-psychological variables. The idea of a counseling program based on mindfulness came from the fact that it is a type of awareness practice that provides students with opportunities to develop themselves. Therefore, the purpose of this study is to examine the impact of a counseling program based on mindfulness on self-development among students with specific learning disabilities in Jordan.

Study Questions

1. To what extent are there statistically significant differences in self-development among members of the experimental group before and after the implementation of the mindfulness-based counseling program?
2. Are there statistically significant differences between the experimental group and the control group in self-development after applying the counseling program based on mindfulness?

3. Are there statistically significant differences between the post-test and follow-up measurements in self-development among the experimental group members after the completion of the counseling program?

Study Objectives

The current study aims to identify the impact of a counseling program based on mindfulness in self-development among students with specific learning disabilities in Jordan.

Significance of the Study

The importance of the study lies in achieving the following theoretical and practical aspects:
Theoretical significance:

The theoretical significance lies in the study's provision of theoretical information in various research fields related to mindfulness and self-development among students with specific learning disorders, who constitute a considerable percentage in regular schools in Jordan. They are a very important group in need of significant care and attention, including conducting research and studies by researchers and specialists.

Practical significance:

The importance of the applied study lies in the preparation of a counseling training program based on mindfulness and a self-development scale for students with specific learning disorders. The study's results also assist decision-makers and relevant authorities in developing training programs for students with specific learning disorders. Additionally, the findings and recommendations provided by this study open up research areas for those interested in and studying in this field.

Study Limitations

The generalization of the results of the current study is determined by the following limitations:

- Human limits: The study was limited to a sample of students with specific learning disabilities in the Mafraq Governorate in Jordan.
- Temporal boundaries: The current study was conducted in the second semester of the 2024 academic year.
- Spatial boundaries: The current study was conducted in the two education directorates affiliated with the Mafraq Governorate, which are (Mafraq District Directorate and, North Western Badia Directorate).
- Objective boundaries: They represent the impact of a counseling program based on mindfulness on self-development among students with specific learning disabilities in Jordan.

Terminological and Procedural Definitions

Self-development: It is defined as a set of skills in which the student develops their abilities and potential, relying on themselves to enhance and develop their skills, achieving self-efficacy for sustainable development (Al-Ansari, 2020). It is operationally defined by the score obtained by students with specific learning disabilities on the self-development scale prepared by the researchers.

Mindfulness: It is defined as a psychological concept that refers to the skill of adaptive coping with stressful events through self-regulation of attention towards present experiences, openness, and acceptance of the present experience (Baer et al., 2019).

It is operationally defined as a strategy aimed at guiding and assisting students with specific learning disorders to pay attention to the experiences and feelings they are currently going through and to accept them without making any judgments or decisions.

The counseling program is based on mindfulness: a set of organized activities, exercises, and steps that include observation skills, action, conscious description, self-awareness, awareness of emotions and thoughts, self-acceptance, and time management. These are conducted under the supervision of researchers over a specified period and aim to develop self-improvement among a sample of students with specific learning disabilities.

Students with specific learning disorder: They are students who have neurodevelopmental disorders, indicating a persistent difficulty that hinders the ability to learn or use academic skills related to reading, writing, spelling, and mathematics, and the disorder is identified no later than six months after the onset of

symptoms in children (Awda& Al-Natour, 2022). It is operationally defined as students who have been diagnosed with average or above-average intelligence and show weakness in one academic area without any disability, and who study in learning difficulty rooms in regular schools.

PREVIOUS STUDIES

Khalifa (2023) conducted a study aimed at identifying the efficacy of a mindfulness-based program in improving self-regulation among students. The study sample consisted of 55 male and female students with learning disabilities in the Helwan area of the Arab Republic of Egypt. Participants were randomly assigned to experimental and control groups. The results showed positive outcomes in favor of the experimental group in both the post-test and follow-up measurements.

Schulte and Trautwein (2022) conducted a study aimed at identifying the effect of a mindfulness-based phone program on reducing stress and improving self-regulation among students. The study sample consisted of 64 students, using a quasi-experimental design and dividing them into two groups: an experimental group and a control group. The study results showed that the mindfulness-based program delivered online and via phone significantly reduces stress and improves self-regulation among students.

Al-Samman (2022) conducted a study aimed at identifying the efficacy impact of a mindfulness-based program in increasing self-control and improving social behavior among students with attention deficit. The researcher used a quasi-experimental method with experimental and control groups. The study sample consisted of 14 students from Asyut Governorate. The study results showed that the program was effective in favor of the experimental group in both post-test and follow-up measurements.

Yenter (2018) conducted a study aimed at determining the impact of a set of mindfulness-based activities on self-regulation among elementary school students. The study sample consisted of 28 male and female students at the Montessori International School. Using an experimental method with both experimental and control groups, the study results showed a positive impact of the activity program on the students, improving their self-regulation, productivity, and behavior.

Hammad (2018) conducted a study aimed at identifying the effectiveness of a training program for developing mindfulness in enhancing self-regulation skills and reducing attention deficits among students with learning difficulties. The researcher used a quasi-experimental method with experimental and control groups. The study sample consisted of 76 students in the Arab Republic of Egypt. The results showed a positive correlation between mindfulness and self-regulation, and a negative correlation between mindfulness and attention difficulties. The results indicated a statistically significant improvement in mindfulness, self-regulation, and attention levels in favor of the experimental group in both the post-test and follow-up applications.

Al-Najjar (2021) conducted a study aimed at revealing the effectiveness of a mindfulness-based training program in improving self-disclosure among middle school students who are victims of school bullying. The researcher used a quasi-experimental method with an experimental group and a control group. The study sample consisted of 60 students from the Al-Mahalla area. The study results showed the effectiveness of the training program in favor of the experimental group in both the post-test and follow-up measurements.

METHOD AND PROCEDURES

The quasi-experimental method was used through the design of two groups (experimental and control) to investigate the effect of a counseling program based on mindfulness on self-development among students with specific learning disabilities in Jordan.

Study Population and Sample

The study population consisted of all sixth-grade students with specific learning disabilities enrolled in learning difficulty rooms in the Mafraq Governorate. The study sample comprised 50 students selected intentionally for the 2024 academic year, divided equally into two groups: one experimental and the other control, with 25 students in each group. They were chosen from sixth-grade students only to ensure homogeneity between the two groups.

The Study Tools

Self-Development Scale

The study tool consisted of a self-development scale that the researchers developed after reviewing counseling literature and related previous studies. The questionnaire was composed of two parts: the first part addressed the general data related to the study sample in terms of age and the education directorate, and the second part consisted of (20) items ranked according to the five-point Likert scale (very high degree, high degree, moderate degree, low degree, very low degree).

Credibility of the Tool

To verify the validity of the tool, the researchers presented the tool in its initial form to (10) specialized university professors to judge the appropriateness of the items and the correctness of the language. All the reviewers' comments were taken into account. To extract the construct validity indicators of the tool, the correlation coefficients of the scale items with the total score were extracted from a pilot sample outside the study sample, consisting of 10 students. The correlation coefficient here represents an indicator of validity for each item in the form of a correlation coefficient between each item and the total score. The correlation coefficients of the items with the tool as a whole ranged between 0.40-0.78, as shown in Table 1.

Table (1): Correlation coefficients between paragraphs and the overall score

Paragraph number	Correlation coefficient with the tool	Paragraph number	Correlation coefficient with the tool	Paragraph number	Correlation coefficient with the tool
1	.66(**)	8	.73(**)	15	.57(**)
2	.64(**)	9	.55(*)	16	.66(**)
3	.66(**)	10	.62(**)	17	.56(*)
4	.67(**)	11	.77(**)	18	.74(**)
5	.66(**)	12	.66(**)	19	.56(**)
6	.76(**)	13	.74(**)	20	.41(*)
7	.71(**)	14	.72(**)		

*Statistically significant at the 0.05 significance level.

**Statistically significant at the 0.01 significance level.

Stability of the study tool:

To ensure the reliability of the study tool, it was verified using the test-retest method by applying the scale and reapplying it after two weeks on a group outside the study sample consisting of 10 students with specific learning disorders. Then, the Pearson correlation coefficient between their scores from both administrations was 0.92. The reliability coefficient was also calculated using the internal consistency method according to Cronbach's alpha, which was 0.90, and these values were considered adequate for this study.

The counseling program is based on mindfulness

- The general objective of the program: The counseling program based on mindfulness aims to train a sample of students with specific learning disorders on some mindfulness techniques to improve their self-development.

- The specific objectives of the program: They include increasing the ability of students with specific learning disorders to practice mindfulness techniques, such as meditation, body scan, relaxation, and sensory awareness.

- The importance of the counseling program:

The importance of the mindfulness-based counseling program is evident in helping students with specific learning disabilities understand the role mindfulness plays in their self-development and adopt effective mindfulness strategies.

The foundations of the counseling program:

The psychological and counseling foundations: These are addressed by considering the individual differences among students with specific learning disorders in the experimental group, and their characteristics. The program also ensures that the general objective is clear and direct.

Social Foundations: By paying attention to each individual in the experimental group without any discrimination, respecting and appreciating them, and not focusing on their needs or presenting them as problems, while considering some individual and group activities and procedures.

Physiological Foundations: This was achieved by not requiring the experimental group members to perform any tasks or duties beyond their capabilities and focusing on tasks that match their physical abilities and characteristics, while providing an opportunity for physical relaxation and ensuring that each member of the group achieves optimal relaxation. This contributes to training in mindfulness techniques and methods for self-development among the experimental group members.

Program preparation:

The counseling program was prepared and constructed through:

- Reviewing the theoretical literature and previous studies that addressed the topic of mindfulness.
- Familiarizing oneself with the foundations and principles of mindfulness and methods for training in it.
- Focusing and relying on mindfulness in preparing the program through some techniques aimed at improving self-development, and basing the counseling program sessions on several techniques such as meditation, body scan, relaxation, and sensory awareness.

The tools used in the sessions: Many tools were used, such as a mobile phone to play Quranic verses in a beautiful and calm voice.

The techniques and methods used in the program: The researchers used a set of techniques and methods in the sessions, which included: dialogue and discussion, imitation, and modeling.

Evaluation of the counseling program: The researchers in the current study relied on pre-evaluation by applying the study tool to two groups (experimental and control) before implementing the program, and post-evaluation by applying the study tool after executing the counseling program, followed by applying the self-development scale to the members of the experimental group one month after the program's completion.

Duration: The counseling program included (16) sessions, implemented over two months at a rate of two sessions per week, with each session lasting (45) minutes.

Study procedures

The process of preparing this study went through several stages, which are as follows:

- Reviewing the literature on the subject, preparing the tool and the counseling program, and evaluating them.
- The researchers obtained official approval from the Education and Teaching Directorates in the Mafrq Governorate to administer the tool to students with specific learning disorders.
- The researchers contacted the school principals and scheduled meetings with them.
- The researchers applied the study tools to the selected students and collected the necessary data to achieve the study's objectives.
- The researchers analyzed the study data to answer the research questions, interpret the results, and make recommendations.

Statistical Analysis

The researchers analyzed the data after its collection, where this quantitative data was subjected to analysis using the statistical software (SPSS). The means and standard deviations were extracted, and the (T) test for independent groups was conducted.

RESULTS AND DISCUSSION

The results address the first research question: Are there statistically significant differences within the experimental group members in self-development before and after applying the counseling program based on mindfulness? To answer this question, the differences between the mean scores of the experimental group in self-development before and after the implementation of the counseling program based on mindfulness were analyzed using a paired samples *t*-test. Table (2) illustrates this.

Table 2: Differences between the average scores of the experimental group students In self-development before and after implementing the program (N=25)

Variables	Before the program M	the counseling Std. Deviation	After the program M	the counseling Std. Deviation	Degrees of freedom	Level of significance	Test(T) of
Self-development	93.09	6.89	100.09	2.90	24	statistically significant **	

**Statistically significant at the 0.01 significance level

The results of this study aligned with the findings of studies conducted by Khalifa (2023), Al-Samman (2022), Yenter (2018), Hamad (2018), and Al-Najjar (2021), which indicated the effectiveness of the mindfulness-based training program in both the pre-test and post-test measurements in favor of the experimental group. The results related to answering the second question: Are there statistically significant differences between the experimental group and the control group in self-development after applying the counseling program based on mindfulness? To answer this question, the differences between the mean scores of the experimental group in self-development after applying the counseling program based on mindfulness were calculated using the independent samples t-test, as shown in Table 3.

Table 3: Differences between the average scores of the experimental group students In self-development before and after implementing the program

Variables	The experimental group (N=25) M	Std. Deviation	The control group (N=25) M	Std. Deviation	value (T)	Degrees of freedom	Level of significance	(T) Test
Self-development	100.09	2.90	96.15	4.04	3.02	48	statistically significant **	

**Statistically significant at the 0.01 significance level

Table 3 shows clearly that there are statistically significant differences at the (0.01) level between the experimental and control groups in self-development in favor of the experimental group after applying the counseling program based on mindfulness, indicating an improvement in the performance of the experimental group and their self-development compared to the control group's performance, which remained unchanged. Researchers attribute this to the fact that the experimental group students who were exposed to the mindfulness-based counseling program benefited from the sessions implemented through the program, compared to the performance of the control group students whose performance did not change as they did not receive any activities, training, methods, or techniques from the diverse counseling program that could bring about changes and have a clear impact. The results of this question were consistent with the findings of the studies by Khalifa (2023), Al-Samman (2022), Hamad (2018), and Al-Najjar (2021), which indicated statistically significant differences between the mean scores of the experimental and control groups after the application of the program in favor of the experimental group. There are no studies whose results differ from the current study's findings.

The results related to answering the third question: Are there statistically significant differences between the post-test and follow-up in self-development among the experimental group members after the counseling program? To answer this question, the differences between the mean scores of the experimental group in the post-test of the mindfulness-based counseling program and the follow-up measurement after one month of the post-test were calculated using the paired samples t-test. Table (4) illustrates this.

Table 4: Differences between the average scores of the experimental group students In self-development between post-measurement and follow-up measurement of the program (N=25)

Variables	Post-measurement M	Std. Deviation	Tracking measurement M	Std. Deviation	Test (T) Degrees of freedom	Level of significance
Self-development	100.09	2.90	499.9	2.78	24	Not statistically significant

Table (4) shows that there are no statistically significant differences between the mean scores of the experimental group students in self-development in the post-test and follow-up assessment one month following the conclusion of the program. This indicates the continued effectiveness of the mindfulness-based counseling program in enhancing self-development among students with specific learning disorders and the persistence of its impact after the program's completion. This is attributed to the influential role of the counseling program sessions in the experimental group, as well as the continued application of the techniques and exercises that the students were trained on after the program ended.

The results of this question agreed with the findings of the studies by Khalifa (2023), Al-Samman (2022), Hamad (2018), and Al-Najjar (2021), which indicated that there were no statistically significant differences between the mean scores of the experimental group in the post-test and follow-up measurements. There are no studies whose results differ from the current study's findings.

CONCLUSION

This study investigated the effectiveness of a counseling program grounded in mindfulness techniques in enhancing self-development among sixth-grade students with specific learning disorders in Jordan. The findings revealed statistically significant improvements in the self-development levels of students in the experimental group compared to their peers in the control group, following the implementation of the program. Furthermore, the absence of statistically significant differences between the post-test and follow-up scores indicates the sustained impact of the program beyond its immediate application. These outcomes affirm the positive role of mindfulness-based counseling in equipping students with specific learning disorders with the cognitive and emotional tools necessary for self-awareness, emotional regulation, and adaptive functioning. The consistent alignment of these results with previous literature underscores the replicable effectiveness of mindfulness interventions across diverse educational and cultural contexts. In light of the findings, the study contributes valuable empirical support for integrating mindfulness-based approaches into special education practices. It advocates for the broader adoption of such programs within school systems to promote the holistic development of students facing learning challenges. The results also encourage further exploration of mindfulness-based interventions across different disability categories and developmental variables, fostering a more inclusive and supportive educational environment.

Based on the findings, it is recommended to conduct more mindfulness-based studies with other categories such as intellectual disabilities, psychological disabilities, attention deficit hyperactivity disorder, and other disabilities, and addressing other variables such as the impact of early intervention programs based on mindfulness. The Ministry of Education in Jordan has issued a circular to use mindfulness-based counseling programs for self-development for students with specific learning disabilities in all its schools, and to organize training programs based on mindfulness for teachers, counseling counselors, and parents of students with specific learning disabilities. Counseling programs based on mindfulness for students with specific learning disorders should be an essential part of the counseling process within special education programs, taking into account the inclusion of foundations, principles, and applications that help students acquire the maximum possible practices related to developing their mindfulness, such as attention, awareness, and others.

REFERENCES

- Al-Ansari, Rafeeda. (2020). The level of satisfaction with training programs in developing self-Improvement skills among students at Taibah University, *Journal of Educational and Psychological Sciences, National Research Center, Gaza*, 36(4), 25-45.
- Al-Ansari, Khawla. (2019). Mindfulness and its relationship with the Big Five personality traits among graduate students in the Department of Social Work at Umm Al-Qura University, *Journal of the Faculty of Education, Assiut University*, Vol. 35, No. 6, pp. 221-246.
- Avcu, Y. E., & Ayverdi, L. (2020). *Examination of the computer programming self-efficacy's prediction towards the computational thinking skills of the gifted and talented students*. International Journal of Educational Methodology, 6(2), 258–269. <https://doi.org/10.12973/ijem.6.2.258>
- Baer, R., Smith, G., Hopkins, J., Krietemeyer, J., & Toney, L. (2019). *Using self-report assessment methods to explore facets of mindfulness*. Assessment, 13(1), 27–44. <https://doi.org/10.1177/1073191105283504>

- Hamad, Mohammed. (2018). The effectiveness of a training program for developing mindfulness in enhancing self-regulation skills and reducing attention deficits among students with learning difficulties, *Scientific Journal, Faculty of Education*, 34(6), 45-115.
- Khalifa, Mai. (2023). The effectiveness of a mindfulness-based training program in academic self-regulation among teacher-students with learning disabilities, *Journal of Educational and Social Studies, Helwan University*, 29(3), 49-62.
- El-Khouli, Hisham. (2020). The effectiveness of a program for learning self-regulated mindfulness strategies on the ability assessments of low-achieving students in light of classical and modern theories. *Journal of the Faculty of Education, Kafr El-Sheikh University*, 20(2), 91-183.
- Al-Samman, Marwa. (2022). The effectiveness of a mindfulness-based program in increasing self-control and improving social behavior among students with attention deficit, *Educational Journal, Assiut University*, 1(103), 86-146.
- Al-Sayed, Ahmed. (2021). The effectiveness of a mindfulness-based counseling program in enhancing self-efficacy among gifted middle school students. *Journal of Psychological Counseling, King Faisal University*, 1(65), 189-233.
- Ouda, Amino Al-Natour, Mayada. (2022). The level of visual perception skills among a sample of students with specific learning difficulties enrolled in resource rooms in Jordan, *Scientific Journal of the Faculty of Education, Assiut University*, 2 (38), 110 – 140.
- Al-Fail, Helmy. (2020). An educational program based on the principles of empowering learning environments to enhance creative self-efficacy and reduce test anxiety among low-achieving gifted elementary school students. *Egyptian Journal of Psychological Studies*, 30(107), 176-244.
- Al-Najjar, Fatima. (2021). The effectiveness of a mindfulness-based training program in improving self-disclosure among middle school students who are victims of school bullying, *Educational Journal, Sohag University*, 2(92), 535-608.
- Al-Noor, Ahmed. (2019). Mindfulness and metacognitive thinking as predictors of metacognitive skills among students of the Faculty of Education, Jazan University, *Journal of the Faculty of Education, Assiut University*, 35(3), 556-587.
- Oguntuase, B., & Sun, Y. (2022). Effects of mindfulness training on resilience, self-confidence and emotion regulation of elite football players: The mediating role of locus of control. *Asian Journal of Sport and Exercise Psychology*, 2(3), 198–205. <https://doi.org/10.1016/j.ajsep.2022.12.001>
- Schulte, F., & Trautwein, F. (2022). App-based mindfulness meditation reduces perceived stress and improves self-regulation in working university students: A randomized controlled trial. *Applied Psychology: Health and Well-Being*, 14(4), 1151–1171. <https://doi.org/10.1111/aphw.12328>
- Yenter, J. (2018). Mindfulness and its effects on self-regulation in a lower elementary classroom (Master's thesis). Saint Catherine University.