

ПСИХОЛОГИЧЕСКИЕ ИССЛЕДОВАНИЯ В ОБРАЗОВАНИИ

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THE RELATIONSHIP BETWEEN PSYCHOLOGICAL STRESS AND MINDFULNESS AMONG OUTSTANDING STUDENTS IN THE SCHOOL BASIC STAGE

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Abstract. *Introduction.* Outstanding students frequently experience psychological stress in many facets of their lives, which impedes their capacity for self-expression, self-control, and problem-solving. It negatively impacts both their physical and mental health in several ways. On the other hand, it has been discovered that mindfulness practices improve physical and sensory well-being and help with stress and anxiety management.

Aim. The present research aimed to find out how much psychological stress outstanding students at the primary stage experienced and how that stress is related to mindfulness.

Methodology and research methods. A total of 232 kids between the ages of 10 and 14 were involved in the study; they were specifically chosen based on their academic records. Students have to meet the selection requirements with grades higher than 90% in every subject. A questionnaire including a 50-item psychological stress measure with three-point Likert ratings and a mindfulness scale was used to collect data.

Results. According to the research outcomes, outstanding students had high levels of mindfulness and low levels of psychological stress. There is a negative correlation between psychological stress and mindfulness. Additionally, there were no appreciable gender differences in the study measures of mindfulness or psychological stress.

Scientific novelty. Based on the study findings, psychological stress negatively affects outstanding students' physical and mental health and surges their levels of fatigue, tension, and poor focus. It also underlined how psychological stress is detrimental to the students' psychological health. Accordingly, it is recommended to practise mindfulness as a helpful tactic for managing students' psychological stress and keeping students from feeling overburdened. Achieving mental health is vital for students in all domains of their lives.

Practical significance. The study provides valuable insights and practical recommendations for stakeholders. It suggests the development of psychological and educational counselling programmes that incorporate mindfulness strategies for outstanding students. It also emphasises the need for proactive planning and the implementation of strategies to mitigate psychological stress in students while addressing their developmental and curative needs. The study results can assist researchers and educators in designing educational and counselling programmes catering to outstanding students' psychological, social and educational needs. Furthermore, the results can help teachers understand the intricate relationship between mindfulness and psychological stress. Specifically, cultivating acceptance as an attitude can directly contribute to reducing psychological stress, making it essential for teachers to guide students in practising mindfulness as a stress management tool.

Keywords: primary stage, Jordan, mindfulness, outstanding students, psychological stress.

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СВЯЗЬ МЕЖДУ ПСИХОЛОГИЧЕСКИМ СТРЕССОМ И ОСОЗНАННОСТЬЮ СРЕДИ ВЫДАЮЩИХСЯ УЧЕНИКОВ НА ОСНОВНОМ ЭТАПЕ ШКОЛЬНОГО ОБРАЗОВАНИЯ

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Аннотация. *Введение.* Выдающиеся ученики часто испытывают психологический стресс во многих аспектах своей жизни, что ограничивает их способность к самовыражению, самоконтролю и решению проблем. Это негативно влияет как на их физическое, так и на психическое здоровье по нескольким причинам. Также было обнаружено, что практика осознанности улучшает физическое и сенсорное благополучие и помогает справиться со стрессом и тревогой.

Цель. Целью этого исследования было выяснить, какой психологический стресс испытывают выдающиеся иорданские ученики на начальном этапе школьного образования и как этот стресс связан с осознанностью.

Методология, методы и методики. В исследовании приняли участие 232 ребенка в возрасте от 10 до 14 лет; они были выбраны специально на основе их академических достижений. Ученики должны соответствовать отборочным требованиям и иметь оценки выше 90 % по каждому предмету. Для сбора данных использовалась анкета, включающая в себя опросник психологического стресса из 50 пунктов с трехбалльной оценкой Лайкерта и шкалу осознанности.

Результаты. Согласно исследованию, выдающиеся ученики имели высокий уровень внимательности и низкий уровень психологического стресса. Существует отрицательная корреляция между психологическим стрессом и внимательностью. Кроме того, не было выявлено заметных гендерных различий в показателях внимательности или психологического стресса.

Научная новизна. Согласно результатам исследования, психологический стресс негативно влияет на физическое и психическое здоровье выдающихся учеников, повышает их уровень утомляемости и напряжения, снижает концентрацию внимания. Кроме того, подчеркнуто, насколько вреден такой стресс для психологического здоровья учеников. Соответственно, ученикам рекомендуется практиковать осознанность как полезную тактику управления психологическим стрессом и предотвращения чувства перегруженности учащихся. Достижение психического здоровья жизненно важно для учеников во всех сферах их жизни.

Практическая значимость. Исследование предоставляет ценную информацию и практические рекомендации для заинтересованных сторон. Также исследование предлагает разработку программ психологического и образовательного консультирования, включающих стратегии осознанности для выдающихся учащихся. Подчеркивается необходимость упреждающего планирования и реализации стратегий по смягчению психологического стресса у учащихся при одновременном удовлетворении их потребностей в развитии и профилактической помощи. Результаты исследования могут помочь исследователям и преподавателям в разработке образовательных и консультативных программ, отвечающих психологическим, социальным и образовательным потребностям выдающихся учеников. Кроме того, результаты могут помочь учителям понять сложную взаимосвязь между осознанностью и психологическим стрессом. В частности, развитие принятия как отношения может напрямую способствовать снижению психологического стресса, поэтому учителям крайне важно направлять учащихся на практику осознанности как инструмента управления стрессом.

Ключевые слова: начальная ступень, Иордания, осознанность, выдающиеся ученики, психологический стресс.

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RELACIÓN EXISTENTE ENTRE EL ESTRÉS PSICOLÓGICO Y LA CONCIENCIA EN ALUMNOS SOBRESALIENTES DE LA ETAPA BÁSICA DE LA EDUCACIÓN ESCOLAR

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Abstracto. *Introducción.* Los alumnos sobresalientes suelen experimentar estrés psicológico en muchos aspectos de sus vidas, lo que limita su capacidad para expresarse, autocontrolarse y resolver problemas. Esto impacta negativamente tanto en su salud física como mental por varias razones. También se determinó que la práctica de la conciencia plena mejora el bienestar físico y sensorial y ayuda a controlar el estrés y la ansiedad.

Objetivo. El propósito de este estudio ha sido discernir cuánto estrés psicológico experimentan los estudiantes jordanos destacados durante su educación primaria y cómo este estrés se relaciona con la atención plena.

Metodología, métodos y procesos de investigación. En el estudio participaron 232 niños de 10 a 14 años; fueron seleccionados específicamente en función de sus logros académicos. Los alumnos deben cumplir con los requisitos de elegibilidad y lograr calificaciones superiores al 90% en cada materia. Para la recolección de datos se utilizó un formulario que constaba de un cuestionario de estrés psicológico de 50 ítems con calificación Likert de 3 puntos y una escala de atención plena.

Resultados. Según el estudio, los alumnos sobresalientes tenían altos niveles de atención plena y bajos niveles de estrés psicológico. Existe una correlación negativa entre el estrés psicológico y la atención plena. Además, no hubo diferencias de género significativas en las medidas de atención plena o angustia psicológica.

Novedad científica. Según los resultados del estudio, el estrés psicológico afecta negativamente la salud física y mental de los alumnos sobresalientes, aumenta su nivel de fatiga y tensión y reduce la concentración. También destaca cuán perjudicial es el estrés para la salud psicológica de los estudiantes. En consecuencia, se anima a los alumnos a practicar la atención plena como una táctica útil para gestionar el estrés psicológico y evitar que se sientan abrumados. Lograr la salud mental es vital para los estudiantes en todos los ámbitos de sus vidas.

Significado práctico. El estudio proporciona información valiosa y recomendaciones prácticas para las partes interesadas. El estudio también sugiere el desarrollo de programas de asesoramiento psicológico y educativo que incorporen estrategias de atención plena para estudiantes sobresalientes. Se enfatiza la necesidad de una planificación e implementación proactivas de estrategias para mitigar el malestar

психологическое в учащихся и одновременно решать их потребности в профилактике и развитии. Результаты исследования могут помочь исследователям и педагогам разработать образовательные программы и программы консультирования, удовлетворяющие психологические, социальные и образовательные потребности учащихся с высоким уровнем способностей. Кроме того, результаты могут помочь учителям понять сложную взаимосвязь между осознанностью и психологическим стрессом. В частности, развитие осознанности как attitude может непосредственно способствовать снижению психологического стресса, что является фундаментальным, поскольку учителя могут направлять учащихся на практику осознанности как инструмента управления стрессом.

Palabras claves: уровень начальной школы, Иордания, осознанность, учащиеся с высоким уровнем способностей, психологический стресс.

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Introduction

As stress affects individuals differently, its symptoms may vary from person to person, often resulting in various psychological and physical disorders of varying degrees and types [1, 2]. The continuous exposure of students, especially outstanding ones, to psychological stress, may hinder their normal mental and physical activities, making it difficult to confront and manage. This can exceed their capabilities, impeding their goal achievement and satisfaction of needs and exposing them to psychological disorders that may hinder their well-being and mental health. Additionally, psychological stress typically hampers the progress of outstanding students towards excellence and academic achievements [4–6]. The study of mindfulness, its impact on students' lives, and its role in developing skills for selecting new and significant stimuli are worthy of exploration. Mindfulness is considered one of the essential strategies in education that contributes to raising students' achievement levels by aiding in the development of concentration, self-monitoring, and critical decision-making skills [7–10].

Modern human life, encompassing social, cultural, intellectual, and technological developments, has led to instability and psychological imbalance, resulting in various psychological disorders, including psychological stress [11–13]. Psychological stress threatens an individual's health and well-being, impacting all aspects of their psychological being [14–16]. Moreover, the adverse effects of psychological stress, such as reduced psychological and social adaptability, poor performance and achievement, difficulty carrying out daily activities, low motivation, and feelings of nervousness and psychological exhaustion, significantly influence an individual's life [17–19].

C. Graver & P. White [20] and H. Selye [21] pointed out that our response to psychological stress and distress can be detrimental. Negative responses occur when the duration of psychological stress and the resulting emotions are prolonged and

not positively addressed. H. Selye [21] noted that everyone experiences psychological stress and possesses a certain amount of psychological energy to cope. However, excessive stress disrupts physical balance [11]. Continuous exposure to and repeated experiences of stress have adverse effects on an individual's life [14]. Psychological stress refers to an individual's response to environmental variables and life events. It involves the individual's evaluation of events, situations, and emotional, behavioural, and physiological responses [19]. Psychological stress manifests as tension, pain, and discomfort from various life events. It is a state of physical fatigue and exhaustion in response to realistic or anticipated psychological pressures [17], leading to an impaired ability to respond effectively. The accompanying emotional and physiological disturbances affect an individual's personality [22].

Psychological Stress

Psychological stress often places individuals in an unstable situation, potentially resulting in adverse effects and undesirable consequences for their lives and society. The most significant impacts include:

- Firstly, psychological stress may lead to detachment from reality and immersion in a world of imagination, disrupting an individual's thinking and reasoning [23].

- Secondly, psychological stress can affect interpersonal relationships and the ability to build connections with friends, colleagues, students, teachers, or the general public, depending on the person's role or occupation [24–26].

- Thirdly, psychological stress has adverse effects on an individual's physical well-being, as many physical ailments may be manifestations of the psychological state experienced by the individual [27].

- Finally, it negatively impacts work productivity and creativity as individuals may lose their ability to maintain balance and effectively utilise their energy and potential [25, 28].

The sudden transition of school students to e-learning due to the spread of the COVID-19 pandemic represents a significant source of psychological stress. Students face various psychological pressures related to their concerns about their academic future, achievement, and lack of familiarity with distance learning processes.

Mindfulness

Mindfulness has been associated with psychological well-being and is a potential remedy for common forms of psychological distress, such as anxiety, fear, worry, and anger [29]. It is a form of meditation that helps individuals gain control over their thoughts and impulsive behaviours [30]. Mindfulness enhances student ability to focus on one task at a time, preventing distractions from simultaneously thinking about multiple tasks they need to accomplish [31]. It involves accepting new ideas, as individuals often form opinions based on initial impressions and stick to them even when contradictory evidence arises [32–34]. Being open to accepting new ideas often comes from multiple sources that mentally stimulate individuals [35, 36]. Mindful thinkers do not limit themselves to a single perspective or approach

to problem-solving; they can notice similarities and differences between seemingly contrasting concepts and ideas [37].

Furthermore, mindfulness helps students avoid distractions by increasing self-awareness and letting thoughts flow [38, 39]. It is also an effective method for reducing the adverse effects associated with psychological stress [11]. D. Nawaz [37] emphasised that mindfulness is a vital and fundamental requirement for various mental processes, such as memory, perception, and thinking. It involves carefully examining positive expectations and thoughts.

Mindfulness entails paying attention to the present moment, improving sensory and physical well-being, and aiding in coping with stress, anxiety, and depression. T. L. Giluk [40] discovered that mindfulness is crucial to reducing psychological stress. It helps develop concentration and self-monitoring skills, improves academic performance, facilitates decision-making, and promotes flexibility and openness towards oneself and others. Additionally, it enhances current and future performance [41, 42]. Mindfulness is one of the most effective ways to manage stress, preventing individuals from losing control and increasing their focus while transitioning between ideas more smoothly [43].

Moreover, mindfulness enhances an individual's creative abilities, allowing them to unleash their hidden thoughts and ideas that may have been suppressed by negative thoughts [35]. It counteracts these negative thoughts and unlocks one's creative potential [31]. It is the ability to focus solely on the present moment without allowing past fears to restrict thoughts and creativity [44]. With mindfulness, awareness may be improved, and individuals may struggle with memory, leading to mistakes in thinking processes or behavioural implementation [41]. L. Napora [45] found a positive correlation between mindfulness and cognitive aspects of academic achievement.

Several studies, including N. Al-Harbi's research [46], have shown that mental alertness plays a role in alleviating psychological stress among students. Mental alertness acts as a protective factor against stressful situations, particularly in the educational environment. Therefore, students need to possess a high level of mental alertness, which enables them to perform their duties efficiently, solve problems, and cope with psychological stress. Thus, this study is crucial as it examines the relationship between psychological stress and mental alertness among primary school students.

Outstanding students are individuals with high intelligence and mental abilities [47], who demonstrate outstanding creativity and academic achievements compared to their peers [48]. They are gifted and talented students with remarkable aptitudes and abilities, often scoring an intelligence quotient (IQ) of 140 or higher, as measured by the Stanford Structured Intelligence Scale [49]. Interest in studying outstanding students, especially in developed countries, has increased [50–51] with the seminal work by F. M. Terman on educational solutions for gifted students, and the long-term effects of extraordinarily bright people. Our knowledge of giftedness, talent development, and the variables influencing the academic and professional paths of very bright people has greatly benefited from his work [52].

Investing in developing outstanding students is crucial to utilising their excellence and directing them towards fields where they can contribute to society in the future [53]. These students possess specific traits and characteristics in terms of physical, mental, social, and emotional aspects, and identifying their challenges helps create an appropriate environment for their support and development [49].

Due to the limited research in the Arabic literature focusing on the variables under study and the significance of the topic, there is an urgent need for a study that sheds light on outstanding students and investigates the potential psychological stress disorders they may experience. The findings of such a study can inform educational institutions as they develop tailored educational programmes that meet this group of students' unique needs. Therefore, the researchers were driven to study the relationship between psychological stress and mindfulness among outstanding students, given the importance of the topic and the valuable contributions this category can make to society when guided and nurtured to enhance their competencies, capabilities, and creativity, ultimately fostering their well-being and compatibility. The study aimed to answer the following research questions:

What is the level of psychological stress and mindfulness among outstanding students in primary school in Jordan?

Are there statistically significant differences in the level of psychological stress and mindfulness among outstanding students in the primary school according to gender?

Is there a statistically significant correlation between psychological stress and mindfulness among outstanding students in the primary school?

Literature Review

A. Al-Sumary [23] studied the level of psychological stress among outstanding students in Syrian schools and how to confront it. The study results showed that the level of psychological stress among outstanding students was low, and the most essential strategy students used to cope with stress was social support. Similarly, the study by H. Guldemond et al. [54] indicated that gifted students with high and medium talent have fewer emotional problems than their typical peers and demonstrate better-coping mechanisms for psychological stress.

The study by X. Chen et al. [55] investigated academic and psychological stress among gifted and talented students in China and found low academic and psychological stress levels among this group. A. Alyan's study [56] also aimed to examine academic and psychological stress among gifted and talented students in Iraqi schools, revealing moderate psychological stress among students with no gender differences. N. Najwani's research [57] focused on academic psychological stress among gifted and talented students at Sultan Qaboos University, showing moderate mindfulness among post-basic education students with no differences based on gender, grade, age, or achievement level.

S. Al-Khatatneh's study [58] demonstrated the effectiveness of a mental alertness training programme in reducing psychological stress and improving the

lifestyle of students in Jordan. The study by M. Shaheen and A. Rayyan [59] found a high level of mindfulness among students at the College of Educational Sciences at Al-Quds Open University, with a positive correlation between mindfulness and problem-solving skills. N. Weinstein et al. [60] discovered the therapeutic effects of mindfulness in treating psychological stress and tension.

R. J. Sternberg et al. [61] explored the concept of mindfulness and concluded that it encompasses three features: cognitive ability, personal trait as a continuous behaviour, and cognitive style. They also highlighted how individuals lacking mindfulness may lose their openness to new experiences and struggle to adapt to new situations. M. Ala'a [62] investigated the level of psychological stress among outstanding university students in Syrian universities and found low psychological stress levels but low self-control as well. M. Ali [63] studied the psychological problems caused by COVID-19 and their relationship to learning stress among Sultan Qaboos University students, revealing moderate psychological problems among the sample. B. Salah [64] found a correlation between psychological resilience and stress resulting from COVID-19 among University students. Previous studies have shown that mindfulness promotes awareness, improves attention, memory, and cognitive processes, reduces distraction and stress, and enhances learning readiness, academic achievement, attention, concentration, self-reflection practises, and psychological well-being in education [65, 66].

Methodology

The study utilised a descriptive-analytical-correlational approach to examine the phenomenon and explore the surrounding circumstances. The approach involved defining reality, collecting facts, and analysing various aspects.

The Population and Sample of the Study

The study population consisted of outstanding students at the primary stage from 28 government schools in Irbid, Jordan, for the academic year 2020–2021. The population comprised 655 academically distinguished students. The study sample included 232 outstanding students from the primary stage (146 males and 86 females), aged between 10 and 14 years. The sample was purposefully selected based on academic records, with criteria including the highest marks (between 98 and 100%) in all subjects within each class. Two students were selected from each class (grades 1–6) from the 28 primary schools (Table 1).

Table 1

The demographic characteristics of the study sample

Grade	Male	Female	Number
4	23	17	40
5	31	15	46
6	27	19	46
7	33	11	44
8	32	24	56
Total	146	86	232

Data Collection

A questionnaire consisting of two scales was administered to collect data: The Psychological Stress Scale and the Mindfulness Scale. The psychological stress scale was developed after reviewing relevant theoretical literature and existing measurement scales used in previous studies. The final version of the scale comprised 50 items and was graded on a Likert scale with three levels: “I do not suffer from this problem” (1); “I suffer from this problem to a slight degree” (2); and “I suffer from this problem to a severe degree” (3). The scale was reviewed by eight experts in psychological counselling, mental health, measurement, and evaluation. They provided their feedback and comments, and the scale was approved, confirming its validity and appropriateness for the study.

The reliability of the psychological stress scale was assessed by administering it to a pilot sample of 25 male and female students outside the study sample. The scale stability was evaluated using two methods: (i) re-application (T-test) based on Pearson’s correlation coefficient, resulting in a Pearson stability coefficient of 0.852; and (ii) Cronbach’s coefficient alpha, which yielded a value of 0.901. All values were statistically significant at the 0.01 significance level. The correlation coefficients between each item score on the Psychological Stress Scale and the scale total score ranged from 0.72 to 0.53, indicating acceptable correlations between the items.

The mindfulness scale was reviewed by seven experts in psychological counselling, mental health, measurement, and evaluation. Their feedback and comments confirmed the validity and appropriateness of the scale for the study. The stability of the mindfulness scale was assessed by administering it to a pilot sample of 25 male and female students outside the study sample. The stability was evaluated using two methods: (i) re-application (T-test) based on Pearson’s correlation coefficient, resulting in a Pearson stability coefficient of 0.893; and (ii) Cronbach’s coefficient alpha, which yielded a value of 0.901. All values were statistically significant at the 0.01 significance level. The correlation coefficients between each item score on the Mindfulness Scale and the scale total score ranged from 0.69 to 0.43, indicating acceptable correlations between the items.

Statistical Analysis

The collected data was processed using the Statistical Package for Social Sciences (SPSS). Various statistical procedures were applied, including Pearson’s correlation coefficient, Cronbach’s alpha, mean, standard deviation, and one-way analysis of variance (ANOVA), to explore differences in responses among the sample members.

Results and Discussion

The results are presented according to the research questions, including the levels of psychological stress and mindfulness among outstanding students in primary schools in Jordan, as indicated in Table 2.

Table 2

Means, standard deviations, and t-test results

Variables	Mean	SD	DF	Calc. T	Sig.	Degree
Psychological stress	1.21	1.41	229	14.21	0.001	Low
Mindfulness	3.46	1.32		15.02		High

It is evident from Table 2 that the level of psychological stress among the outstanding students was low, with an average of 1.21. Additionally, the level of mindfulness reached a high degree, with a mean of 3.46.

Level of Psychological Stress and Mindfulness According to Gender

To examine whether there are statistically significant differences in the level of psychological stress and mindfulness among outstanding students based on gender, means, standard deviations, and the T-test were calculated. The results are presented in Table 3.

Table 3

Means, deviations, and T-test according to gender

Variable	Gender	No.	Mean	St.Div	T-value	Freedom degree	Sig.
Psychological stress	Male	145	2.03	1.41	0.353	229	0.000
	Female	86	2.11	1.33			
Mindfulness	Male	145	3.48	0.87	0.324		
	Female	86	3.41	1.14	0.353		

It is evident from Table 3 that there were no statistically significant differences in the level of psychological stress and mindfulness due to the gender variable. This implies that the level of psychological stress and mindfulness among outstanding students was at the same level, and there were no significant differences between them.

The Correlation between Psychological Stress and Mindfulness

Pearson’s correlation coefficient and statistical significance were calculated to explore the relationship between psychological stress and mindfulness. The results are presented in Table 4, indicating the correlation between the sample ratings on the psychological stress scale and their ratings on the items of the mindfulness scale.

Table 4

Sample ratings on the items of the psychological stress scale and the mindfulness scale

Mindfulness scale items		
Psychological stress scale items	Pearson	- 0.786
	Sig.	0.001

It can be seen from Table 4 that there was a statistically significant negative correlation between psychological stress and mindfulness, with a significance value of 0.001, indicating a strong relationship. The Pearson correlation coefficient was - 0.786, further supporting the significant negative correlation.

Regression Analysis

A simple regression coefficient equation was employed to assess mindfulness predictive ability to reduce psychological stress among outstanding students in the primary schools. Psychological stress is the dependent variable, while mindfulness is the independent variable. The results of the regression analysis are displayed in Table 5.

Table 5

The results of a simple standard regression analysis to predict psychological stress through mental alertness

Variable	Regression value correlation coefficient (R)	Square determination coefficient R ²	Degree of freedom	F-value	Sign. level
Mindfulness	0.564	0.341	230	101.54	0.000

It is apparent from Table 5 that mental alertness has a statistically significant effect on predicting the reduction of psychological stress among students. This shows the presence of the predictive ability of mental alertness in reducing the level of psychological stress. The calculated t-value reached 101.54. To examine the extent of the relationship between the mental alertness variable and the reduction of psychological stress, the b-coefficient (regression coefficient) and the calculated t-value was calculated. These results are shown in Table 6.

Table 6

The extent to which the perceived mental alertness variable reduces psychological stress among students

Variable	β. coefficient	Impact degree (regression coefficient)	Calculated (t) value	Sign.
Mindfulness	0.418 -	0.403	14.98	0.000

The study findings show that outstanding students had high levels of mindfulness (mean of 3.46) and low levels of psychological stress (mean of 1.21). This may be ascribed to the extraordinary aptitudes of these students, which include high IQs, excellent problem-sensing and problem-solving skills. Prominent learners typically exhibit distinct cognitive processes, including the capacity for inferential reasoning and divergent thinking. They are also distinguished by their adaptability, quick thinking, and aptitude for digesting information. These skills enable people to address, evaluate, analyse, and positively cope with psychological stressors [67].

Students' psychological stress levels can be reduced due to the places they live in and the school they attend. Encouraging equity, empathy, and justice in the classroom along with letting students make decisions helps them blossom academically and

psychologically. When students feel psychologically secure, stable, and relaxed, they are more driven to achieve and flourish. Accordingly, their psychological stress levels are reduced [68]. Furthermore, a welcoming and encouraging school climate promotes goodwill and understanding between students and the administration. Students may learn a variety of subjects in this environment and develop the skills they need to succeed. It enhances their capacity for self-awareness, problem-solving skills, and mental health [53].

According to F. Lu et al. [29], mindfulness can lessen the negative consequences of perceived stress, including burnout syndrome, anxiety, and depression. Students that are mentally well are better able to handle psychological stress, according to H. Guldmond et al. [54]. This implies that outstanding students have unique qualities and attributes because of their high academic status and robust mental faculties, which allow them to manage psychological stress well. Furthermore, excellent students are motivated to succeed by supportive home surroundings and favorable academic environments, which support their psychological stability and security [68].

Additionally, the study found no statistically significant differences in the level of psychological stress or mindfulness based on gender. This can be attributed to the similar school conditions and community environments experienced by both male and female students and their comparable mental abilities and strategies for managing psychological stress. The study by D. H. Abbott et al. [69] found no gender differences among outstanding students in behavioural, emotional, or academic pressures.

The results have also shown a statistically significant negative correlation between psychological stress and mindfulness. This shows that students with higher mindfulness scores experienced lower levels of psychological stress. Mindfulness practices show that they reduce stress and tension, help individuals focus, and redirect their attention from internal fears to the external world. Mindfulness similarly improves cognitive performance and the ability to learn, complete tasks, and navigate stressful situations [4, 70]. Mindfulness supports students, fostering self-confidence, resilience, and healthy problem-solving skills, in due course reducing psychological stress and promoting overall well-being [70].

The global context of the COVID-19 pandemic has impacted on individuals, particularly students. The varying effects of the pandemic, including different levels of psychological stress, precautionary measures and societal factors, may influence the experience of psychological stress in different communities. Consequently, it is crucial to study mindfulness and its impact on student's lives and their ability to select and prioritise stimuli. Mindfulness is an essential educational strategy to improve student achievement by improving concentration, and decision-making skills. Besides, the results highlight the importance of mental alertness in facilitating adaptive psychological functioning. These findings align with previous studies demonstrating a positive association between mindfulness and mental health. This suggests that mindfulness training can have positive psychological effects. Mental alertness equips students with the necessary skills to manage stress, reduce psychological distress, and improve

performance. It plays a vibrant role in stress management and enhances psychological resilience and conflict resolution [60].

Conclusions, Recommendations, and Limitations

The study findings revealed that outstanding students had a low level of psychological stress and a high level of mindfulness. Also, there was a negative correlation between psychological stress and mindfulness. This indicates that higher levels of mindfulness were associated with lower levels of psychological stress. Additionally, there were no significant differences in psychological stress or mindfulness observed based on gender. Acknowledging that exposing outstanding students to psychological stress can harm their physical and mental health is essential. It can increase fatigue, tension, and difficulty concentrating, impacting their overall well-being. Therefore, promoting mindfulness is crucial, as it is a valuable tool for managing psychological stress and preventing students from feeling overwhelmed. Mental health should be prioritised across all aspects of students' lives.

Based on the study findings, it is recommended to develop psychological and educational counselling and guidance programmes focusing on mindfulness strategies tailored explicitly for outstanding students. These programmes should address preventive, developmental, and therapeutic approaches to alleviating psychological stress among students. The results of this study can guide researchers and educators in implementing educational and counselling programmes that cater to outstanding students' psychological, social, and educational needs.

Teachers also play a pivotal role in helping outstanding students manage stress by promoting mindfulness practices. Understanding the intricate relationship between mindfulness and psychological stress can assist teachers in guiding students effectively. Facets of mindfulness that promote acceptance and non-judgmental attitudes have direct relevance to reducing psychological stress. Hence, teachers must support students in cultivating mindfulness as a means of stress management.

Despite the valuable insights obtained from this study, there are certain limitations to consider. Firstly, the study sample consisted of 232 students aged between 10 and 14 years, specifically selected based on their outstanding academic performance. Therefore, the findings apply primary school to outstanding students and may not be generalisable to the overall student population. Secondly, the study was conducted in primary schools in Jordan, limiting the generalisability of the results to other geographical contexts. Finally, the data was collected during the coronavirus (COVID-19), thus psychological problems arising from the emerging situation could be different from other situations.

Ethical Considerations

Ethical considerations were carefully adhered to throughout the study. The Ethics Committee approved the research protocol, and written informed consent was obtained from all participants.

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