The Relationship Between Mindfulness Level and Some Demographic Variables Among Students of University

Lamia A. Aladsani¹

Abstract

This study aimed to reveal the levels of mindfulness among the study participants and to examine the differences in the levels of mindfulness among the participants according to three demographic variables, namely gender, type of college, and academic level, and the interactions between these variables. In total, 275 university students in the Kingdom of Saudi Arabia participated in the study. Using a random sample, data were collected using a mindfulness scale. Based on the results of the study, it can be concluded that the participants had an average level of mindfulness. The findings also revealed no differences in mindfulness attributable to gender, type of college, or academic level or the interactions between all these variables. The study's results can provide benefits by increasing young people's awareness of the importance of alertness and presence of mind for a healthy life, in addition to generating interest in organizing training programs inside or outside universities, aimed at improving students' levels of mindfulness and providing intensive training.

Keywords: Mindfulness, Presence of Mind, Awareness of Feelings, Undistracted Attention, University Students.

Introduction

Mindfulness has been an important element of Buddhist culture and some spiritual practices for centuries. It is not only a practice but also a characteristic and a state of being. It comprises self-regulation of attention as well as maintenance of curiosity, openness, and acceptance (Keng et al., 2011). Mindfulness captures a quality of consciousness characterized by clarity and vividness of current experience and functioning and thus stands in contrast to the mindless, less "awake" states of habitual or automatic functioning that are common to many individuals. Mindfulness may be important in disengaging individuals from automatic thoughts, habits, and unhealthy behavior patterns (Ryan & Deci, 2000).

Mindfulness-based training can improve mental health, effectively mitigate the negative psychological symptoms, and especially help restore the well-being of the most vulnerable individuals (Matiz et al., 2020). Additionally, it contributes to a decrease in stress levels and an increase in self-compassion, awareness, and sleep quality (Gray, 2021). Considered a preventive strategy in educational contexts, mindfulness has led to significant changes in the following variables: psychological (e.g., decreased depressive symptoms), psychosocial (e.g., increased social skills), and physiological (e.g., improved blood pressure) (Álvaro et al., 2015).

Finally, we note that mindfulness helps young people move *from* automatic reactions to situations *to* deliberate responses and *from* impulsiveness and haste *to* calmness and balance. It also has positive effects on individuals.

Literature Review

Mindfulness is a practice that allows the individual to objectively observe their thoughts and feelings without judging them, which helps them to deal with these in a more positive and healthy way, reduce stress and negative emotions, and improve self-control and decision-making abilities (Abo Hamza et al., 2023). When mindfulness is practiced, disturbing sensations, cognition, affect, and experiences are viewed from a broader perspective as passing events in the mind (Brantley & Kabat-Zinn, 2003). Mindfulness is defined as the ability to bring one's attention to experiences occurring in the present moment, with complete acceptance and without judgment (Konichezky et al., 2022). And there are two main points to consider during

¹Department of Psychology, College of Education, King Faisal University, Alhassa, Saudi Arabia, Email: laaladsani@kfu.edu.sa

mindfulness practices. First, it involves focusing one's attention on the present moment and current experiences. Second, accepting one's thoughts and feelings in a non-judgmental way. Rather than critiquing or analyzing their internal experiences (Reina & Kudesia, 2020).

For example, in speaking with a friend, a person can be highly attentive to the communication between them and sensitively aware of the perhaps subtle emotional tone underlying it (Brown & Ryan, 2003). Mindfulness can also take many forms (e.g., breathwork, For example, in speaking with a friend, a person can be highly attentive to the communication between them and sensitively aware of the perhaps subtle emotional tone underlying it (Brown & Ryan, 2003). Mindfulness can also take many different forms (e.g., breathwork, noticing thoughts or paying attention to sensory information) and can be practiced in groups, as part of a retreat, as an adjunct to therapy, or individually (Sigmon et al., 2023).

Mindfulness consists of three components: attention, intention, and attitude. *Attention* refers to the ability to focus on the stimuli encountered in the present moment. Since there are many stimuli in the environment, the mind naturally filters and selects which stimuli to focus on. From a mindfulness perspective, attention involves openly observing both the internal processes (thoughts, emotions) and external phenomena occurring in the here and now. As the second component of mindfulness, *intention* helps a person discern which of these present-moment experiences to direct their attention towards. Mindfulness requires not just passive observation, but an intentional decision about what to focus on and what to do about it, and Finally, mindfulness is characterized by a particular attitude -one of patience, compassion, acceptance, and curious exploration. This attitude shapes how the individual attends to and interacts with their present-moment experiences (Aşık & Albayrak, 2021).

Five distinct aspects of mindfulness have been conceptualized (Baer et al., 2008): The first is observing, which involves noticing or attending to one's internal experiences, such as sensations, thoughts, and emotions, as well as external phenomena like sights, sounds, and smells. sounds, and smells. The second aspect is describing, which refers to labeling internal experiences with words. The third facet is acting with awareness, which means fully attending to and engaging in one's current activities and can be contrasted with behaving mechanically while attention is focused elsewhere (often called automatic pilot). The fourth element is nonjudging of inner experience, which entails adopting a non-evaluative stance toward one's thoughts and feelings, rather than criticizing or analyzing them. Finally, the fifth aspect is nonreactivity to inner experience. This is the tendency to allow one's thoughts and emotions to come and go, without getting caught up in or carried away by them. These five distinct but interrelated facets - observing, describing, acting with awareness, nonjudging, and nonreactivity - together comprise the multifaceted construct of mindfulness.

Higher levels of mindfulness are associated with emotional intelligence, self-regulated behavior, self-esteem, optimism, positive emotions, life satisfaction, self-compassion, happiness, vitality, self-actualization, autonomy, competence, and sense of fulfillment (Baer et al., 2006; Brown & Ryan, 2003; Hollis-Walker & Colosimo, 2011). Low levels of mindfulness are related to depression, anxiety such as social anxiety, difficulty in modulating one's emotions, negative affect, and absent-mindedness (Baer et al., 2006; Brown & Ryan, 2003; Malik & Perveen, 2023).

Mindfulness plays a major role in reducing stress, depression, and other psychological and physical symptoms, such as feelings of anxiety, illness, and chronic pain. It also decreases emotional pain, improves psychological well-being, and contributes to enhancing sleep quality (Carmody & Baer, 2008; Ferszt et al., 2015; Reilly, 2020). Mindfulness exercises perform a key role in a person's ability to control and express one's anger (El Aoufy et al., 2023). Other functions include developing and enhancing creativity among adolescents, especially in a state of high conscientiousness (Huang et al., 2023). Additionally, mindfulness indirectly affects performance in academic skills, such as comprehension and fluency by honing cognitive skills (Felver et al., 2023).

Mindfulness also contributes to reducing the use of smart devices, as it is negatively related to smartphone addiction,, as indicated in the results of Kayis's (2022) study. As we note, young people are currently addicted to using smart devices. Given the importance of mindfulness in the lives of individuals and its

contribution to achieving psychological and emotional stability and balance and mental health in general, we conducted this study.

In concluding the presentation of the theoretical aspect of the concept of mindfulness, we point some Muslims' lack of acceptance of this concept, considering that it focuses on meditation while silencing the mind and robbing the meanings or Stripping and robbing each passing thought of its meaning. Stepping out of the circle of disagreement, we can take from this concept only what does not conflict with the Islamic religion.

This study was conducted to determine the levels of mindfulness among young people.

We searched for answers to the following questions:

- What are the levels of mindfulness among the study participants?
- Are there statistically significant differences in mindfulness, depending on gender, department, academic Level, or the interactions between them?

Summary of Previous Studies

The results of Ahmadi and colleagues' (2014) study revealed no significant correlation between the level of mindfulness and age, gender, religion, race, family, and educational background. The field of study had no effect on this level. However, there was a correlation between the level of mindfulness and health condition.

Rosini and colleagues' (2017) study, whose participants comprised 42 male and female university students, indicated that higher levels of mindfulness were associated with better lifestyle habits, lower levels of stress, and reduced negative affect. Their findings also showed the effectiveness of mindfulness in achieving personal well-being. Bagheri and Gharehbaghi's (2019) study, whose subjects were 250 students from the Islamic Azad University in Iran, indicated a positive correlation among alertness, happiness, and a healthy lifestyle.

The results of Youssef's (2022) study, involving a sample of (238) students, showed statistically significant differences between the average scores of the sample, according to the gender variable (male or female), on the mindfulness scale, in favor of males. However, there were no statistically significant differences between the scores of the two scales according to academic specialization (literary or scientific). Ahmad and colleagues' (2022) study, which had 185 male and female student participants, showed an average level of mindfulness among the students. There were no statistically significant differences in the participants' levels of mental awareness, based on the variables (academic year and gender) used in the study.

In their study, Fuentes et al. (2022) aimed to analyze the relation between mindfulness and psychological well-being among university students and to find gender differences in the variables. The sample consisted of 380 participants. The results revealed that mindfulness promoted optimal psychological functioning and alleviated discomfort. Regarding gender differences, an increase in mindfulness was found in the group of women, indicating their enhanced readiness for increased psychological well-being compared to that of men.

Tuteja and Dhaliwal (2023) examined meditational practices and mindfulness among the youth who had experienced a breakdown of their normal routines after the outbreak of the COVID-19 pandemic. The authors conducted a psychometric assessment of 392 business management students from two higher education institutes in Northern India. The study's results revealed the majority of the respondents' medium level of mindfulness, with no significant differences based on gender or education.

Method and Materials

Method

We relied on the comparative descriptive approach due to its suitability to the research objectives and questions.

Study Sample

The sample consisted of 275 participants based on three key variables: gender, department, and academic level. Females comprised 53.3% of the sample, while males constituted 46.7%. Regarding departmental affiliation, the distribution was fairly balanced, with 51.5% belonging to the science department and 48.5% to the humanities department. In terms of academic level, a diverse representation across different educational stages was found, ranging from diploma (1.5%) to master's (23.0%) and PhD (1.5%).

Va	riable	Frequency	Percent
Gender	Female	146	53.3
	Male	129	46.7
	Total	275	100.0
Department	Science department	142	51.5
	Humanities	133	48.5
	department		
	Total	275	100.0
Academic level	Diploma	4	1.5
	First year	72	26.3
	Second year	19	6.6
	Third year	38	13.9
	Fourth year	36	13.1
	Fifth year	39	14.2
	Master's	63	23.0
	PhD	4	1.5
	Total	275	100.0

Table 1 Demographic Characteristics of The Participants

Outcome Measures

Brown and Ryan (2003) created a scale to measure mindfulness awareness and attention regarding situations encountered in the present moment. The scale initially comprised 184 items, approximately equally split between those reflecting direct and indirect assessments of mindfulness. The number of items was reduced through five stages using several exclusion criteria, until the scale reached its final form, consisting of 15 items. The items were distributed across cognitive, affective, physical, interpersonal, and general domains. The six response options were rated on a Likert scale, ranging from 1 (almost always) to 6 (almost never), with a high score indicating a high degree of alertness. The authors Brown and Ryan (2003) calculated the psychometric properties based on a sample of 313 university students, where the Cronbach's alpha reliability coefficient was 0.84. Calculating the validity of the test for the mindfulness scale showed positive correlations with each from the Life Satisfaction Scale and the MMS mindfulness scale but negative correlations with each anxiety scale and depression scale.

The statistical results (Table 1) indicate robust internal consistency for the instrument, as evidenced by a high Cronbach's alpha coefficient for both Part 1 (α = .828), consisting of eight items, and Part 2 (α = .830), comprising seven items. Furthermore, the substantial correlation between the two parts (r = .811) suggests a strong association between the items. The Spearman-Brown (SB) coefficient, employed to estimate reliability in case of splitting a test into two halves, demonstrated a strong level of reliability for both equal and unequal lengths (SB equal length = .896; SB unequal length = .896). Additionally, the Guttman Split-Half coefficient, a measure of internal consistency, was 0.895. The overall test value of Cronbach's alpha coefficient for 15 items was 0.905.

Cronbach's alpha	Part 1	Value	.828
		N of items	8ª
	Part 2	Value	.830
		N of items	7b
	Total N of iter	ms	15
Correlation between forms			.811
Spearman-Brown coefficient	Equal length		.896
	Unequal lengt	.896	
Guttman Split-Half coefficient			.895

Table 2 Reliability Statistics - Split-Half Method

Table 2 presents item-level psychometric properties for a scale assessing mindfulness, revealing insights into each item's contribution to the overall reliability of the instrument. Items demonstrate moderate to high corrected item-total correlations, indicating their relevance to the latent construct. The squared multiple correlations for most items were substantial, indicating their shared variance with the overall scale. Cronbach's alpha values, though consistently high, show robust internal consistency. These findings collectively suggest the instrument's high reliability and consistency in measuring the intended constructs. Figure 1 illustrates one principal component because of the "elbow" at the second eigenvalue. Since there is only one principal component and the variables have weak correlations among them, we conclude that the variables are correctly defined.

Figure 1 Discriminant Validity

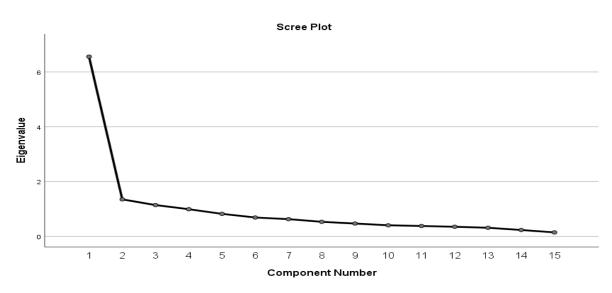


Table 3	Internal	Consistency	Validity

Items	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Squared multiple correlation	Cronbach's alpha if item deleted
1. I could be experiencing some	57.04	207.336	.647	.571	.897
emotion and not be conscious of					
it until some time later.					

				<u>manısm.co.uk/joe/e</u> //doi.org/10.62754/j	
2. I break or spill things because	55.68	219.250	.479	.366	.902
of carelessness, not paying					
attention, or thinking of					
something else.					
3. I find it difficult to stay focused	56.49	208.901	.592	.494	.899
on what's happening in the					
present.	5657	205.206		470	007
4. I tend to walk quickly to get	56.57	205.396	.655	.478	.896
where I'm going without paying attention to what I experience					
along the way.					
5. I tend not to notice feelings of	56.09	209.875	.617	.553	.898
physical tension or discomfort	50.07	207.075	.017		.070
until they really grab my attention.					
6. I forget a person's name almost	56.09	217.110	.403	.342	.906
as soon as I've been told it for the	00.07				
first time.					
7. It seems I am "running on	56.10	203.592	.728	.623	.894
automatic" without much					
awareness of what I'm doing.					
8. I rush through activities	55.90	214.740	.509	.451	.902
without being really attentive to					
them.	F () (212 (()	1.6.6	5.40	004
9. I get so focused on the goal I	56.46	212.664	.466	.549	.904
want to achieve that I lose touch					
with what Iam doing right now to get there.					
10. I do jobs or tasks	56.16	208.224	.657	.740	.896
automatically, without being	50.10	200.221	1007	., 10	.070
aware of what I'm doing.					
11. I find myself listening to	56.39	211.242	.526	.457	.901
someone with one ear, doing					
something else at the same time.					
12. I drive places on "automatic	56.04	203.425	.736	.613	.893
pilot" and then wonder why I					
went there.					
13. I find myself preoccupied	57.16	209.048	.588	.543	.899
with the future or the past.	5 (00	201.202	710	(12)	004
14. I find myself doing things	56.22	201.202	.719	.643	.894
without paying attention. 15. I snack without being aware	55.67	209.108	.559	.487	.900
that I'm eating.	55.07	209.100	.559	.40/	.900
uiat I III Caulig.					

Results

What Are the Levels of Mindfulness Among the Study Participants?

Table 4 furnishes a comprehensive summary of the descriptive statistics for the overall scores. The overall mindfulness score is moderate or at a middle level. The overall average score of mindfulness for the complete sample is 60.0, with a standard deviation of 13.2 and minimum and maximum scores of 15.0 and 90.0, respectively, suggesting a moderate level of variability in the dataset. Females have a slightly higher mean score (61.1) compared to males (58.8), indicating a subtle gender difference in mindfulness. The participants from the science department and from the humanities department exhibit mean scores of 61.1 and 58.8, respectively. The academic level reveals nuanced variations across different educational stages.

Notably, PhD students have the highest mean score of 70.5, followed by fourth-year students (62.5), while diploma students have the lowest mean score of 50.7. The standard deviations across the academic levels suggest varying degrees of dispersion around the mean.

	Variable	Mean	SD	Min	Max
Total		60.0	13.2	15.0	90.0
Gender	Female	61.1	13.6	15.0	90.0
	Male	58.8	12.7	15.0	85.0
Department	Science department	61.1	13.1	15.0	90.0
	Humanities department	58.8	13.2	15.0	87.0
Academic level	Diploma	50.7	20.4	32.0	73.0
	First year	59.1	11.4	28.0	82.0
	Second year	57.0	13.6	36.0	81.0
	Third year	60.0	16.2	15.0	86.0
	Fourth year	62.5	13.1	34.0	87.0
	Fifth year	59.9	11.9	28.0	86.0
	Master's	60.6	13.4	15.0	90.0
	PhD	70.5	13.2	62.0	90.0

Table 4 Levels of Mindfulness Among the Study Participants

Are There Statistically Significant Differences in Mindfulness, Depending on Gender, Type of College, Academic Level, or the Interactions Between These variables?

Gender

Table 5 displays the results of the t-test, which examined the differences in the variable of interest (gender). Due to the nonsignificant p-value (greater than the conventional alpha level of 0.05), we accept the null hypothesis. Therefore, we conclude that there is no statistically significant mean difference between males and females.

Table 5 Differences in Mindfulness Between Genders

Variable	T-test	P-value	Mean difference	Standard error difference	95% Confidence interval of the difference	
					Lower	Upper
Gender	1.440	0.151	2.30	1.60	84432	5.44042

Type of College

For the second variable (college), the t-test statistic is -1.45, with a p-value of 0.149. The mean difference between the participants from the science department and from the humanities department is -2.31, and the standard error of this difference is 1.59. The 95% confidence interval for the mean difference ranges from -5.44456 to 0.83090. As the p-value exceeds the 0.05 threshold, it indicates no significant mean difference between the participants from the two departments.

Table 6 Differences in Mindfulness Between Departments (Science and Humanities Students)

Variable	T-test	P-value	Mean	Standard error	95% confid	ence interval of the
			difference	difference	difference	
					Lower	Upper

				DOI: <u>https://doi.org/10.62754/joe.v3i5.3897</u>					
college	-1.45	0.149	-2.31	1.59	-5.44456	.83090			

Academic Level

Table 7 provides the results of an analysis of variance (ANOVA) for the academic level, breaking down the variance into between groups and within groups. The between-groups component represents the sum of squares (1254.530) attributed to the differences among the groups. This component has 7 degrees of freedom (df), and the mean square (variance) is 179.219. The F-statistic, a ratio of variances, is 1.049, with a corresponding p-value of 0.397. The nonsignificant p-value indicates no statistically significant difference between the group means. The within-groups component shows the sum of squares (46369.236) associated with individual differences within each group. This component has 266 df, and the mean square is 174.320. These values contribute to the overall variability in the data, showing the total sum of squares (47623.766) and the total df (273). Overall, the nonsignificant F-statistic and p-value for the between-groups component indicate that there is no compelling evidence to reject the null hypothesis of equal group means.

Table 7 Differences in Mindfulness Among Academic Levels

	Sum of squares	df	Mean square	F-test	P-value
Between groups	1254.530	7	179.219	1.049	0.397
Within groups	46369.236	266	174.320		
Total	47623.766	273			

Interactions Between Gender, Type of College, and Academic Level

Table 8 presents the results of a multiple analysis of variance (MANOVA), providing information on the sources of variance in the dependent variable based on different independent variables. The corrected model shows the sum of squares (5800.626) attributed to the model after accounting for other factors. The model has 27 df, resulting in a mean square of 214.838. The associated F-statistic is 1.268, with a p-value of 0.176. The nonsignificant p-value suggests that collectively, the independent variables (gender, department, and academic level) do not significantly explain the variability in the dependent variable.

Breaking down the model components, the intercept represents the sum of squares associated with the intercept term, and its highly significant F-statistic (5845.367, p < 0.001) indicates the overall significance. The subsequent rows represent the sum of squares and F-statistics for individual main effects and interaction terms, including gender, department, academic level, and interaction terms. None of the individual main effects or interactions appears to be statistically significant, as indicated by their respective p-values. The error represents the sum of squares for the unexplained variability in the model, with 247 df and a mean square of 169.426.

The R-squared value of 0.122 indicates that the independent variables account for 12.2% of the variance in the dependent variable, while the adjusted R-squared value (0.026) considers the number of predictors. Overall, the nonsignificant p-values for the model and its components suggest that the included independent variables do not collectively contribute significantly to explaining the variance in mindfulness.

Source	Sum of squares	df	Mean square	F	P-value
Corrected model	5800.626ª	27	214.838	1.268	.176
Intercept	990360.033	1	990360.033	5845.367	.000
Gender	371.028	1	371.028	2.190	.140
Department	457.604	1	457.604	2.701	.102

Table 8 Interactions Between Gender, Academic Level, and Type of College

DOI: https://doi.org/10.62754/joe.v3							
Academic level	1223.988	7	174.855	1.032	.409		
Gender * Department	96.213	1	96.213	.568	.452		
Gender * Academic level	1365.690	7	195.099	1.152	.332		
Department * Academic	1369.157	6	228.193	1.347	.237		
level							
Gender * Department *	916.945	4	229.236	1.353	.251		
Academic level							
Error	41848.342	247	169.426				
Total	1038009.000	275					
Corrected total	47648.967	274					
2	R squared = $.122$ (Ad	ljusted	R squared $= .026$)	•			

Discussion

This study's results indicate the participants' average level of mindfulness in general, which is consistent with the findings reported by Ahmad and colleagues' (2022) and Tuteja and Dhaliwal (2023). Perhaps we attribute the reason for this to the accelerated pace of life and the increase in psychological stress and tension, as confirmed by Bartlett and colleagues' (2021) and Rosini and colleagues' (2017) findings regarding the relation between mindfulness and the levels of stress to which an individual is exposed, especially in the youth stage when pressures increase. These demands include the individual's responsibilities related to completing one's studies, searching for a suitable job, starting a family, and trying to succeed in relationships, whether on the family, academic, or professional level.

As the researcher of this study believes that lifestyle in general, including the quality of sleep, nutrition, and general health habits, also maybe affects on mindfulness. As noted by Rosini et al. (2017), mindfulness is linked to good habits and a better lifestyle. Nonetheless, some of the psychological characteristics that distinguish the youth from older, more mature people are their high dynamism, haste, and impulsiveness in facing life situations, which contradict mindfulness, which, as we mentioned, is linked to calmness, balance, and the shift from quick and impulsive reactions to deliberate and thoughtful responses. This developmental phase is indicated by Garrigan and colleagues' (2018) study, which shows young people's tendency to act recklessly and quickly in situations they encounter, and such behaviors and actions are linked to the growth of the areas responsible for control in the brain during this stage of life.

Moreover, people's great preoccupation with using smart devices and its impact on their levels of concentration are known. Such factors reduce the opportunity to maintain mindfulness in the situations they face; as found in Kayis's study (2022), addiction to using smart phones is negatively related to mindfulness.

In answering the second research question, it has become clear that there is no statistically significant difference in the averages between the two gender groups. This result is consistent with those reported in several studies (Ahmadi et al., 2014; Ahmad et al., 2022; Tuteja & Dhaliwal, 2023) but contradicts other findings, which reveal a difference in mindfulness between the genders, one in favor of males (Youssef, 2022) and the other in favor of females (Fuentes et al., 2022).

Our study also shows no significant difference in mindfulness between the participants according to the college department to which they belonged (humanities or science), which supports the result of Youssef's (2022) study.

Regarding the academic level, doctoral students obtained the highest average score (70.5), followed by fourth-year students (62.5), while diploma students earned the lowest average score (50.7). However, these differences are considered minor and not statistically significant (consistent with the findings of Ahmadi et al., 2014; Ahmad et al., 2022; Tuteja & Dhaliwal, 2023).

The interactions between the independent variables also do not collectively contribute significantly to explaining the variance in mindfulness.

We discuss the results of the second research question in general since we notice no significant differences in mindfulness according to the key variables (gender, academic level, and type of study) and the interactions between all of these variables, which we can attribute to three reasons. The first reason constitutes inputs, specifically the quality of study, teaching strategies, and opportunities for development at the level of personal skills. Academic professionalism, the programs offered, and **miscellaneous** information have become equally available to all. With the advancement of culture and societies, emphasis is placed on enhancing gender parity in various fields, which may contribute to reducing the differences in the levels of mindfulness between males and females and among the various academic levels at the university.

The second reason involves practices, where several factors intervene and affect the level of alertness, regardless of the individual's gender, educational level, or type of specialization. These practices include maintaining healthy habits (e.g., adequate sleep, proper nutrition) and physical activities and staying away from drugs or excessive stimulants, as confirmed in a couple of studies. Bagheri and Gharehbaghi (2019) observed a relation between mindfulness and practicing healthy habits, considering sleep, food, health, healthy habits, work, leisure, time spent, social relationships, way of thinking, behavior, and feelings. Soriano-Ayala and colleagues' (2020) study revealed the relationship between mindfulness regarding healthy lifestyle behaviors and the possibility of using mindfulness as a treatment to improve lifestyle habits, such as healthy eating and adequate rest.

The third reason comprises the pressures of life that are experienced by everyone. For example, one of the pressures facing young men is earning an income. In Saudi society, men traditionally hold the greatest responsibility of providing for the needs of their families and searching for additional sources of income, which in itself represents a heavy pressure on them. However, women now compete with men in searching for jobs to achieve autonomy or provide financial and material support to their families, which makes both men and women face the same levels of stress, in turn affecting their mindfulness, as confirmed by research findings that low levels of stress, anxiety, and pressure are linked to a high level of mindfulness and vice versa (Bartlett et al., 2021; Malik & Perveen, 2023).

Conclusion

This study shows the participants' average level of mindfulness in general, with no significant differences in their levels of alertness due to gender, type of study, academic level, and the interaction between all of these variables. The study's results are consistent with those of some previous studies. During the application of the questionnaire, the study contributed to directing the participants' attention to the importance of mindfulness, as they expressed their admiration for this concept.

Study's Limitations

Our study has some limitations. Perhaps the most significant one is the disproportionate representation of the participants according to academic level since an abundant sample was not obtained at the diploma and doctoral levels. Additionally, it would have been better to add other variables related to social conditions (e.g., marital status, whether the participants have offspring and, if so, the number of their children), financial conditions, and suffering from chronic diseases. Other variables can also be added, such as a c a d e m i c d i s c i p l i n e a n d a c a d e m i c g r a d e.

Recommendations and Future Research

Attention must be paid to improving the level of mindfulness among young people by providing training programs and cognitive and psychological support activities inside and outside universities. Psychological counseling centers at universities can also be activated through seminars and meetings as workshop,

discussion groups, or support groups that aimed at teaching students the importance of focusing their minds on a positive outlook in life and being aware of their thoughts and feelings.

The following research areas are suggested for future studies:

the predictive ability of mindfulness in academic success of university students

a guidance program based on using good habits of the mind to improve the level of mindfulness

the mediating role of mindfulness in developing the relation between academic passion and academic excellence

Funding: This research was funded by the Deanship of Scientific Research at King Faisal University in Al-Ahsa, Kingdom of Saudi Arabia.

Acknowledgment:

This work was supported by the Deanship of Scientific Research, Vice Presidency for Graduate Studies and Scientific Research, King Faisal University, Saudi Arabia [Grant No. KFU241707]

References

- Abo Hamza, E., Yoon, A., Liu, L., Garg, A., Richard, Y., Frydecka, D., Helal, A., & Moustafa, A. (2023). The relationship between mindfulness and readiness to change in alcohol drinkers. International Journal of Environmental Research and Public Health, 20(9), Article 5690. http://dx.doi.org/10.3390/ijerph20095690
- Ahmad, M., Alkilany, G., Al-Qarra, S., & Mazahereh, J. (2022). Mindfulness level among students of individual and collective games course at the Faculty of Sports Science at the University of Jordan: A comparative study. Jordan Journal of Applied Science, Amman. 32(2), 159-175. https://doi.org/10.35192/jjoas-h.v32i2.325
- Ahmadi, A., Mustaffa, M., Haghdoost, A., & Alavi, M. (2014). Mindfulness and related factors among undergraduate students. Procedia Social and Behavioral Sciences, 159, 20–24. https://doi: 10.1016/j.sbspro.2014.12.321
- Álvaro, I., Valentina, G., Adolfo, J., Rojas, G., & Krause, M. (2015). Mindfulness-based interventions in secondary education: A qualitative systematic review [Intervenciones basadas en mindfulness en educación secundaria: Una revisión sistemática cualitativa]. Studies in Psychology, 36(3), 533–570. https://doi:10.1080/02109395.2015.1078553
- Aşık, E., & Albayrak, S. (2021). The effect of mindfulness levels on the life satisfaction of nursing students. Perspectives Psychiatric Care, 58(3), 1055–1061. https://doi.org/10.1111/ppc.12898
- Baer, R., Smith, G., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness.SAGE Journals Online and HighWire Press platforms. 13(1), 27-45. https://doi:10.1177/1073191105283504
- Baer, R., Smith, G., Lykins, E., Button, D., Krietemeyer, J., Sauer, S., Walsh, E., Duggan, D., & Williams, J. M. (2008). Construct validity of the five-facet mindfulness questionnaire in meditating and nonmeditating samples. SAGE Journals Online and HighWire Press platforms, 15(3), 329–342. https://doi: 10.1177/1073191107313003
- Bagheri, F., & Gharehbaghi, F. (2019). The relationship between mindfulness, happiness and healthy lifestyle. Caspian Journal of Health., 4(2), 44–48. https://doi:10.29252/cjhr.4.2.44
- Bartlett, L., Buscot, M.-J., Bindoff, A., Chambers, R., & Hassed, C. (2021). Mindfulness is associated with lower stress and higher work engagement in a large sample of MOOC participants. Frontiers in Psychology., 12, Article 724126, 1-11. https://doi.10.3389/fpsyg.2021.724126
- Brantley, J., & Kabat-Zinn, J. (2003). Calming your anxious mind: How mindfulness and compassion can free you from anxiety, fear, and panic. Oakland, CA : New Harbinger Publications. https://api.semanticscholar.org/CorpusID:142919758
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. Journal of Personality and Social Psychology, 84(4), 822–848. https://doi.org/10.1037/0022-3514.84.4.822
- Carmody, J., & Baer, R. A. (2008). Relationships between mindfulness practice and levels of mindfulness, medical and psychological symptoms and well-being in a mindfulness-based stress reduction program. Journal of Behavioral Medicine, 31(1), 23–33. https://doi:10.1007/s10865-007-9130-7
- El Aoufy, K., Pezzutto, A., Pollina, A., Rasero, L., Bambi, S., Bellando-Randone, S., Guiducci, S., Maddali-Bongi, S., & Matucci Cerinic, M. (2023). Systemic sclerosis patients experiencing mindfulness-based stress reduction program: The beneficial effect on their psychological status and quality of life. International Journal of Environmental Research and Public Health, 20(3), 2512. https://doi.org/10.3390/ijerph20032512
- Felver, J. C., Clawson, A. J., Ash, T. L., & Wang, Q. (2023). Effects of brief mindfulness practice on reading performance among racially minoritized adolescents. School Psychology. 2. https://doi: 10.1037/spq0000368

- Ferszt, G. G., Miller, R. J., Hickey, J. E., Maull, F., & Crisp, K. (2015). The impact of a mindfulness-based program on perceived stress, anxiety, depression and sleep of incarcerated women. International Journal of Environmental Research and Public Health, 12, 11594–11607. https://doi.org/10.3390/ijerph120911594
- Fuentes, A., Oyanadel, C., Zimbardo, P., González-Loyola, M., Olivera-Figueroa, L. A., & Peñate, W. (2022). Mindfulness and balanced time perspective: Predictive model of psychological well-being and gender differences in college students. European Journal of Investigation in Health, Psychology and Education. 12, 306–318. https://doi.org/10.3390/ejihpe12030022
- Garrigan, B., Adlam, A., & Langdon, P. (2018). Moral decision-making and moral development: Toward an integrative framework. Developmental Review, 49, 80–100. https://doi.org/10.1016/j.dr.2018.06.001
- Gray, L. (2021). Mindfulness in the college classroom and wellness promotion: The impact of mindfulness curriculum on self-reported health and well-being in university students. International Journal of Learning in Higher Education, 28(2), 99–109. https://doi:10.18848/2327-7955/CGP/v28i02/99-109
- Hollis-Walker, L., & Colosimo, K. (2011). Mindfulness, self-compassion, and happiness in non-meditators: A theoretical and empirical examination. Personality and Individual Differences, 50(2), 222–227. https://doi.org/10.1016/j.paid.2010.09.033
- Huang, J., Lu, A., Luo, J., Chen, G., Zhao, J., Zheng, M., & Tu, L. (2023). The impact of mindfulness on creativity among Chinese adolescents: A moderated mediation model [El impacto del mindfulness en la creatividad de los adolescentes chinos: Un modelo de mediación moderada]. Studies in Psychology, 44 (2-3), 376-406. https://doi:10.1080/02109395.2023.2251787
- Kayis, A. (2022). Mindfulness, impulsivity and psychological distress: The mediation role of smartphone addiction. British Journal of Guidance & Counselling, 50(5) 791–804. https://doi:10.1080/03069885.2022.2046255
- Keng, S., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. Clinical Psychology Review, 31(6), 1041–1056. https://doi:10.1016/j.cpr.2011.04.006
- Konichezky, A., Gliksberg, A., & Reicher-Atir, R. (2022). Mindfulness in psychotherapy: The experience of psychotherapists who incorporate mindfulness into their practice. Psychotherapy, 59(3), 332–338. https://doi.org/10.1037/pst0000394
- Malik, S., & Perveen, A. (2023). Mindfulness and anxiety among university students: Moderating role of cognitive emotion regulation. Current Psychology, 42, 5621–5628. https://doi.org/10.1007/s12144-021-01906-1
- Matiz, A., Fabbro, F., Paschetto, A., Cantone, D., Paolone, A. R., & Crescentini, C. (2020). Positive impact of mindfulness meditation on mental health of female teachers during the COVID-19 outbreak in Italy. Int. J. Environ. Res. Public Health, 17(18), Article 6450. https://doi.org/10.3390/ijerph17186450
- Reilly, P. (2020). Developing our students' level of mindfulness during these unprecedented times. Journal of University Teaching & Learning Practice, 17(5), 1-18. https://ro.uow.edu.au/jutlp/vol17/iss5/20
- Reina, C. S., & Kudesia, R. S. (2020). Wherever you go, there you become: How mindfulness arises in everyday situations. Organizational Behavior and Human Decision Processes, 159, 78–96. https://doi.org/10.1016/j.obhdp.2019.11.008
- Rosini, R. J., Nelson, A., Sledjeski, E., & Dinzeo, T. (2017). Relationships between levels of mindfulness and subjective wellbeing in undergraduate students. Modern Psychological Studies, 23(1), 1-23. https://scholar.utc.edu/mps/vol23/iss1/4
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psychologist, 55, 68–78.
- Sigmon, C. A. N., Park, S. Y., Bam, D., Rimel, S. E., & Boeldt, D. L. (2023). Feasibility and acceptability of virtual reality mindfulness in residents, fellows, and students at a university medical campus. Mayo Clinic Proceedings: Digital Health, 1(4), 467–475. https://doi.org/10.1016/j.mcpdig.2023.07.006
- Soriano-Ayala, E., Amutio, A., Franco, C., & Mañas, I. (2020). Promoting a healthy lifestyle through mindfulness in university students: A randomized controlled trial. Nutrients, 12(8), Article 2450. https://doi:10.3390/nu12082450
- Tuteja, S., & Dhaliwal, A. (2023). Impact of meditation on mindfulness among the young adults: The psychometric assessment of the Mindful Attention Awareness Scale. The Humanistic Psychologist. https://doi.org/10.1037/hum0000336
- Youssef, M. (2022). Psychological flourishing, its relationship with mindfulness and coping competence among a sample of faculty of education students. Correlative predictive study. Journal of Faculty of Education, Ain Shams University, 46(1), 421–512. 10.21608/JFEPS.2022.236881.