

Research Article

Cite this article: Al Alwan, A., Alhubaidah, J., & Alharbi, S. (2025). Mindfulness among University Students and Its Relationship to Their Psychological Hardiness. *Educational Process: International Journal*, 16, e2025189. <https://doi.org/10.22521/edupij.2025.16.189>

Received February 7, 2025

Accepted April 18, 2025

Published Online May 1, 2025

Keywords: Mindfulness, psychological hardiness, university student

Author for correspondence:

Ahmad AL Alwan

 alwan@hu.edu.jo

 the Hashemite University, Zarqa, Jordan

Mindfulness among University Students and Its Relationship to Their Psychological Hardiness

Ahmad Al Alwan , Jaber Alhubaidah , Saud Alharbi 

Abstract

Background/purpose. This study aimed to examine the mindfulness and psychological hardiness levels among university students and investigate the relationship between mindfulness and psychological hardiness.

Materials/Methods. In light of the research objectives, a sample of 1,050 male and female students studying at the College of Basic Education, Public Authority for Applied Education and Training, Kuwait, during the academic year 2024/2025 was selected using a simple random sampling method. Two scales were used for data collection: one measuring mindfulness and the other measuring psychological hardiness.

Results. The results showed that university students reported high levels of mindfulness ($\mu=3.66$) and psychological hardiness ($\mu=3.71$). There were differences in psychological hardiness and mindfulness levels due to gender and academic level. However, the study found no statistically significant differences in psychological hardiness and mindfulness levels due to gender, while significant differences were found due to academic level, favouring fourth-year students. A statistically significant positive correlation was found between mindfulness and psychological hardiness ($r=.66$). Finally, mindfulness explained 20.7% of the explanatory variance in psychological hardiness scores.

Conclusion. In light of these results, the researchers recommend future studies addressing the relationship between mindfulness and other variables, such as self-concept and academic self-efficacy among students.



OPEN ACCESS

© The Author(s), 2025. This is an Open Access article, distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted re-use, distribution, and reproduction, provided the original article is properly cited.

1. Introduction

As a result of the spread of the COVID-19 pandemic, many people have been exposed to numerous challenges, disorders and stress. It has impacted the lives of people worldwide. Citizens suffer from the social, physiological, and psychological effects of this pandemic. Specifically, stressors like COVID-19 can cause health problems. Some internal factors, such as mindfulness, psychological hardiness, self-efficacy, and optimism, have been found to impact the protection of psychological health positively. A person's hardiness and mindfulness can be considered two variables that reduce the negative effects of stress (Wu et al., 2024). Similarly, Seligman (2011) argued that psychologists should refocus on what makes life worth living by studying the factors that enhance well-being and happiness, such as mindfulness, self-efficacy, and hardiness. Through this perspective, he began developing the concept of "positive psychology," which aims to promote human capabilities, identify talents, and increase productivity and satisfaction in life.

Accordingly, mindfulness and positive psychology intersect in a way that guides individuals toward a more satisfying and joyful life. This intersection is based on the idea that the human mind, when trained to be deeply aware of its own processes, can be directed toward favourable outcomes (Vos et al., 2021). Mindfulness, which has its roots in ancient contemplative practices, has been adapted in contemporary psychology to help individuals remain grounded in the present moment, fostering a non-judgmental awareness of thoughts, feelings, and sensations. On the other hand, positive psychology, a relatively new field, aims to improve well-being by investigating and promoting the factors that enable individuals and communities to flourish. (Ivtzan et al., 2016).

Mindfulness has been identified as one of the most important factors affecting people's mental health (Belen, 2022). It allows people to face immediate situations promptly and without bias by consciously arising from focused attention (Malboeuf-Hurtubise et al., 2021). It helps people become aware of conditions and respond more effectively to stress (Vos et al., 2021).

Another factor considered essential in positive psychology is psychological hardiness. It is described as a personality style associated with maintaining a healthy lifestyle under stress (Kobasa, 1979). Existential approaches define hardiness as a combination of emotional and cognitive attitudes and behaviours required not only for survival but to enrich life throughout human development (Maddi, 2002). Furthermore, research has pointed out that psychological hardiness can reduce stress and improve mental health (Nooripour et al., 2022).

In educational contexts, students differ in their responses to academic setbacks depending on their level of hardiness. Students with low academic hardiness tend to exhibit more academic procrastination and higher levels of anxiety in their studies (Sepiadou & Metallidou, 2022). In contrast, those with high academic hardiness are happier, more motivated to learn (Abdollahi et al., 2018), better equipped to handle academic stress, more likely to achieve great academic success and demonstrate high levels of academic engagement (Kamtsios & Karagiannopoulou, 2020).

One of the primary reasons for studying mindfulness among university students is its potential impact on academic achievement. Numerous studies have shown that mindfulness practices can improve cognitive functioning and academic performance (McBride & Gresson, 2023). A study conducted by Schonert-Reichl et al. (2015) found that mindfulness training significantly improved executive functioning and working memory among students. Similarly, a meta-analysis by May et al. (2014) revealed that mindfulness interventions have a significant positive effect on academic achievement. These findings confirm that mindfulness is a vital factor in improving university students' cognitive functioning and academic performance.

In summary, like mindfulness, the hardiness factor should also be considered as a pivotal component that protects against stress and improves the students' academic performance.

Therefore, the researchers conducted this study to examine the levels of mindfulness and psychological hardiness among university students and the relationship between them.

1.1. Problem of the study

Mindfulness is a relatively new concept in psychological and counselling literature, despite its roots in Buddhism. Researchers have largely ignored it, although several studies have documented the positive effects of mindfulness on various psychological and behavioural variables (Alomari, 2023; Treves et al., 2023). In line with the recommendation of the American Psychological Association (APA), examining positive variables such as psychological hardiness and their effect on improving individuals' well-being is important. Researchers (Shahid et al., 2016; Yavuz & Dilmaç., 2020) have found that psychological hardiness improves positive psychological and behavioural variables and decreases negative ones. Additionally, some researchers have shown that mindfulness contributes to students' concentration and self-efficacy and enhances creative problem-solving (Stoops, 2005). Moreover, the results of a study conducted by Aladwan et al. (2025) indicated that 37% of university students had low levels of mindfulness and 35% had low levels of hardiness.

The present study addresses a problem that has emerged from the researchers' observations during their recent years of teaching academic courses. Many students display poor concentration in lectures, a clear weakness in their ability to follow up during classes, frequently forget to complete homework and often fail to bring necessary materials such as pens, notebooks, and calculators. This issue has been similarly observed by a group of fellow teachers as well. When asked about the reasons for these behaviours, students often cited forgetfulness or lack of attention during lectures. This problem has a direct negative impact on the academic performance and achievement of students.

Furthermore, previous studies have highlighted the significance of mindfulness and hardiness on students' academic performance and achievement (Oral & Karakurt, 2022; Yavuz & Dilmaç, 2020).

Based on the above, the current study was conducted to investigate the levels of mindfulness among university students and their relationship to psychological hardiness.

As a result, the problem of the study is summarized by answering the following questions:

- 1- What is the level of mindfulness among the students of the Faculty of Basic Education students in Kuwait?
- 2- What is the level of psychological hardiness among the Faculty of Basic Education students in Kuwait?
- 3- Are there statistically significant differences in mindfulness and psychological hardiness levels due to gender and academic level?
- 4- Is there a relationship between mindfulness and psychological hardiness among the Faculty of Basic Education students in Kuwait?

1.2. Importance of the study

The importance of this study stems from both its theoretical and practical contributions, as outlined below:

Theoretical importance: The significance of this study lies in its role as one of the few investigations revealing the levels of mindfulness and hardiness and the relationship between them among university students. It will contribute by providing an analysis and a theoretical framework on the concept of mindfulness and hardiness. Additionally, this study was conducted on a sample of university students, who represent a critical developmental stage; the transition from high school to university is full of complications, stresses, and challenges. Furthermore, when researching

mindfulness and hardiness, it becomes apparent that numerous studies have been carried out on mindfulness and hardiness separately. To the best of the researchers' knowledge, no prior study exists that combines the relationship between the two variables investigated here. Thus, this study aims to fill a gap in the literature, making it a valuable scientific contribution to the field.

The practical importance: This study will provide a basis for encouraging university teachers to pay attention to mindfulness and hardiness so that these concepts become focal points of interest in academic courses, such as critical thinking and creative thinking. This approach can enhance students' abilities to focus, which is reflected in their academic achievement. In addition, as faculty members, the researchers hope that this study will provide more information about both mindfulness and psychological hardiness, which may help counselling program developers design effective counselling paradigms based on the principles of mindfulness and hardiness as ancient meditation techniques capable of helping individuals improve their quality of life.

2. Literature Review

2.1. Mindfulness

Mindfulness is a contemporary concept that attracts the interest of many researchers in psychology and neuroscience. It refers to a state of awareness and full concentration on the present moment, where individuals can observe their thoughts and feelings without judgment. This practice relies on techniques such as meditation and deep breathing, which help individuals reduce stress and anxiety and enhance mental health. Furthermore, mindfulness was first introduced in therapeutic settings by Kabat-Zinn in 1979 with the mindfulness-based stress reduction program. This program aims to teach mindfulness as a skill to assist chronic pain patients in reducing their symptoms and managing stress associated with chronic illnesses. Mindfulness-based therapies are utilized to address a range of psychological issues, such as stress, depression, anxiety disorders, eating disorders, and social anxiety (Yavuz & Dilmaç, 2020).

Mindfulness is defined as the practice of conscious, non-judgmental awareness of the present moment. It originated in the Indian subcontinent around 2,500 years ago. Approximately four decades ago, with the pioneering works of Kabat-Zinn (2005), who integrated mindfulness into psychotherapy, the scientific application of mindfulness for health and well-being began to meet specific contextual needs (Feldman et al., 2021). Since then, and especially over the past decade, there has been growing academic interest in mindfulness, with increasing attention given to its applicability across various aspects of life (Barrios & Pitt, 2021).

In the same vein, mindfulness is a term that initially emerged from ancient Asian spiritual traditions, particularly Buddhism, as a means to attain freedom from human suffering. According to this perspective, human distress is inevitably rooted in the desire for things to be different from their current state, leading to an internal struggle between present reality and an idealized condition. This struggle is created and perpetuated by the non-accepting and judgmental nature of the human mind, which categorizes experiences as “good,” which should be pursued, and “bad,” which should be avoided and resisted (Ramadan et al., 2022).

Ji (2023) described mindfulness as an extraordinary ability that allows us to regain control and heal ourselves. Additionally, Mindfulness is the miracle that can quickly summon our scattered minds and restore them to a state of wholeness, enabling us to fully engage in every moment of our lives. Furthermore, Alomari (2023) mentioned that mindfulness is a mental state that enables individuals to focus on the present moment, their immediate environment, and the activities they are involved in, without being sidetracked by thoughts of the past or future. This state is commonly linked to meditation practices and includes accepting things as they are. Mindfulness, as noted by Bahrami et al. (2020), is a therapeutic process that focuses on purposeful, non-judgmental attention, along with

the acceptance and acknowledgment of experiences, living in the present moment, minimizing painful awareness and behaviours as much as possible, and encouraging individuals to reduce their struggle with thoughts and feelings.

As such, mindfulness is described as “paying attention intentionally, in the present moment” (Kabat-Zinn, 1994). It involves deliberately directing one’s awareness to the present, with a sense of curiosity, and openness of to both positive and negative experiences. The focus is on perceiving and accepting things as they are, rather than attempting to alter them. This intentional concentration of attention also fosters awareness of our habitual mental processes, often referred to as “auto-pilot mode” (Goretzki & Zysk, 2017).

According to Zhang et al. (2021), mindfulness is characterized by a continuous awareness of one's thoughts, feelings, physical sensations, and the surrounding environment in the present moment. To embrace mindfulness means cultivating qualities such as openness, a non-judgmental attitude, friendliness, curiosity, acceptance, compassion, and kindness. Moreover, mindfulness practices focus on directing attention to current perceptions, emotions, and thought processes, promoting non-judgmental observation and acceptance of whatever arises within oneself. These practices can take formal forms, such as focused breathing, seated meditation, mindful walking, and body scanning, or informal forms, like incorporating mindfulness into everyday activities.

Based on the above, mindfulness is founded on three essential aspects: awareness, progress, and authenticity. This means that an individual is aware of themselves, others, and the context. Progress involves building resilience and adaptability, while authenticity is reflected in the acceptance of oneself and others without judgment. The practice of mindfulness focuses on engaging all five senses: sight, hearing, feeling, smell, and taste (Verma, 2022). Shahid et al. (2016) confirmed that mindfulness can allow individuals to interrupt their usual automatic reactions, which are often harmful to themselves or others. It allows them to take a break, return to the present moment, focus on their breath, and rediscover their inner strength and hardness. This enables them to cope better, see their situation more clearly, and make wiser decisions about how to respond. It involves learning how to direct one's attention toward the experience as it unfolds, moment by moment, with curiosity and open acceptance.

Bishop et al. (2004) indicated that mindfulness includes two main elements. The first is self-regulation of attention, which involves maintaining focus on the present experience to become aware of the thoughts occurring in the mind. Orientation towards acceptance, openness, and curiosity during the current experience constitutes the second element of mindfulness. Shapiro et al. (2006) identified three components of mindfulness: attitude, intention, and attention. Attitude consists of acceptance, impartiality, and observation of the situation in hand. Intention refers to the choice to concentrate on the present, while attention reflects one's deliberate focus of mental effort to comprehend only the situation occurring at that moment. As mindfulness develops, individuals can learn to respond differently to events rather than judging them. Instead, they can opt to fully experience the present moment and act in accordance with what that moment demands. Through mindfulness, when confronting unpleasant emotions, individuals tend to think clearly with an attitude of compassion and acceptance, rather than trying to eliminate, suppress, avoid, or judge those feelings (Çelikler, 2017). Accordingly, mindfulness holds immense significance and is used in various therapeutic interventions in medical and psychological fields. Its main aim is to reduce stress and enhance self-acceptance. It is also considered a therapeutic tool for dealing with disabilities and disorders, and serves as an educational tool. Additionally, mindfulness enhances focus and self-confidence, giving individuals a sense of control over their environment and a deeper understanding of the meaning of life. It helps in emotional regulation by developing metacognitive awareness and improving attention skills. It has also been used as a preventive measure against depression (Alomari, 2023). Along the same line, mindfulness plays a crucial role in fostering cognitive flexibility and self-

awareness, which can help mitigate the negative effects of mind wandering and rumination. Focusing attention on present sensation allows individuals to develop a personality with less self-blame and judgment (Treves et al., 2023).

2.2. Psychological Hardiness

Psychological hardiness, another variable of this study, is characterised as a personality style or pattern linked to the ability to handle and manage stressors while selecting the most effective behaviours to overcome these stressors (Kobasa, 1979). Moreover, Psychological hardiness is a personality trait that can influence how individuals cope with stress and effectively assess challenging situations. Hardiness stems from a person's beliefs about themselves and their perspective on the world. As highlighted by (Saxena, 2015), hardiness -- also known as psychological hardness, personality hardness, or cognitive hardiness in literature -- is a personality style first introduced by Kobasa in (1979). Psychological hardiness is defined as a personality structure consisting of three interconnected general dispositions: commitment, control, and challenge. Using existence theories, he describes hardiness as a mixture of beliefs about self and the world, composed of three key components of hardiness: commitment, control, and challenge. A person with a strong sense of commitment recognizes the importance of their identity and the value of their actions (Jalali & Amarqan, 2015).

Psychological hardiness refers to an individual's awareness and acceptance of their psychological changes or pressures. It serves as a protective factor against the sensory and psychological effects of stress. It helps alter the cyclical relationship that starts with pressure and culminates in psychological exhaustion, a more advanced stage of stress (Telfah, 2022). Furthermore, psychological hardiness is described as a personality trait or tendency to maintain a relatively stable state of mind, and it consists of three interconnected components: (1) commitment vs. alienation, which reflects the ability to feel deeply engaged in life's activities; (2) control vs. powerlessness, which is one's belief that he/ she can influence or manage events as they occur; and (3) challenge vs. threat, which involves viewing change as an exciting opportunity for further growth and development (Nie et al., 2019). Along the same line, psychological hardiness is a fundamental element that contributes to quality of life and helps create a balance among its various dimensions. Individuals with low hardiness are more susceptible to negative impacts from harmful factors over time, whereas those with high hardiness appear to possess a natural or learnable resilience against stressors. Hardiness involves the ability to perceive external conditions and accurately make favourable decisions regarding oneself (Khaledian et al., 2016). Among various internal resources that individuals possess, psychological hardiness is considered a key solution for overcoming stressful situations. It is characterized by a positive attitude that enables a person to actively engage in controlling and addressing real-life challenges rather than avoiding them, viewing change simply as another obstacle to overcome (Hamid, 2020).

On the other hand, people with a high level of psychological hardiness tend to have a distinct view of themselves and their surroundings, fostering positive cognitive assessments, motivation, attitudes, and behaviours when faced with life's challenges. Consequently, they tend to experience fewer physical symptoms, lower anxiety levels, reduced neuroticism, and less rumination while also demonstrating greater mindfulness, enhanced coping abilities, and better overall health (Vaziri et al., 2021). Thus, individuals with high psychological hardiness tend to feel more committed to their work, perceive stressful situations and events as potential opportunities for growth, and feel more in control of life events and circumstances (Sandvik et al., 2015). People with psychological hardiness are capable of effectively addressing interpersonal problems and stress, often displaying curiosity and employing adaptive coping strategies to tackle challenges (Potard et al., 2018).

2.3. The relationship between mindfulness and psychological hardiness

In examining the literature review, it is clear that there is a strong relationship between mindfulness and psychological hardiness. Mindfulness helps individuals focus on what is happening to themselves and those around them, contributing to stress reduction and achieving inner peace. Mindfulness also enhances awareness of the body and emotions, which is important in critical situations. Additionally, studies indicate a correlation between mindfulness and other forms of psychological hardiness, suggesting that practicing mindfulness can help develop psychological hardiness by fostering awareness and adopting a non-judgmental perspective toward challenging situations (Czerwinski et al., 2021; Kowalski & Schermer, 2019).

Similarly, the relationship between these two positive variables is evident through the emphasis on mindfulness skills, which include the ability to be aware of emotions and accurately interpret related bodily sensations. Facing negative emotions rather than avoiding them in distressing situations is one of the key goals of mindfulness group therapy. Additionally, the use of techniques like mindfulness breathing in mindfulness group therapy helps increase self-awareness during crises, contributing to the ability to endure both short-term and long-term physical and emotional pain (Bai et al., 2022). Therefore, mindfulness enhances individuals' capacity to cope with stress and difficult situations, which in turn fosters psychological hardiness (Hadi et al., 2023).

The researchers reviewed a few prior studies pertaining to the study variables in this section. For example, in Konya, Ghasemi et al. (2019) investigated the role of spiritual well-being in the relationship between psychological hardiness and mindfulness among 561 university students selected using a convenient sampling strategy. The results showed a significant positive correlation between mindfulness and psychological hardiness. Additionally, a positive linear relationship was observed between spiritual well-being and both psychological hardiness and mindfulness. In another study, Dezhban et al. (2020) examined the relationship between Neuroticism and Hardiness on the one hand, and resiliency and mindfulness on the other, among a sample of 206 employees. The results indicated a statistically significant negative correlation between neuroticism on one hand and Hardiness and mindfulness on the other, while a positive statistically significant correlation was found between hardiness on one hand and resiliency and mindfulness on the other.

Furthermore, Nooripour et al. (2022) examined the role of mindfulness on the relationship between hardiness and COVID-19-related stress among 414 Iranian university students. Online self-report tools were used for data collection. The findings revealed a significant correlation between all studied variables and COVID-19 stress levels, with most correlations falling within a moderate range. Structural equation modelling demonstrated the significant overall effects of hardiness on COVID-19 stress, as well as the indirect and direct effects of hardiness on stress. These findings highlight the influential role of mindfulness in mitigating COVID-19 stress and enhancing psychological hardiness. Smith and Brown (2022) examined the mediating effect of mindfulness on the relationship between psychological hardiness and mental health among 500 college students. The results showed that mindfulness significantly mediated the hypothesized relationship, suggesting that higher levels of mindfulness strengthen the impact of psychological hardiness on mental well-being. The findings recommended integrating mindfulness-based interventions to enhance psychological hardiness among students. In addition, Abbasi et al. (2023) tested the effectiveness of developing mindfulness and spiritual based therapy to promote psychological hardiness and distress tolerance among 60 mothers of hard-of-hearing children. The results revealed that the combined mindfulness and spiritual therapy intervention significantly improved both psychological hardiness and distress tolerance in the experimental group compared to the control group. This study also showed the

potential of mindfulness to support mothers in coping with the emotional challenges of raising children with hearing impairments, thereby enhancing their psychological hardness.

3. Methodology

This section provides a detailed description of the study's methodology, population, sample, sampling technique, research tools, and procedures. Data analysis techniques are also presented in this section.

3.1. Study Design

The descriptive-analytical correlational design was employed in this study. Data were collected electronically via students' emails and social media tools such as WhatsApp, Facebook, and Instagram. The researchers sent messages to the targeted students, explaining the objectives of the study and assuring them that all information collected would be used solely for scientific research. At the end of the data collection phase, the data were statistically analyzed using the appropriate statistical procedures.

3.2. Study Population

The population of the study included all students enrolled in the bachelor's program of the basic education specialisation in the first semester during the academic year 2024/2025. The total number of these students was 18,073 students.

3.3. Study Sample

A simple random sampling method was employed to select the sampled respondents, totalling 1,050 university students (male and female), representing nearly 5 % of the study population. Table 1 presents a description of the sampled students based on their gender and academic level.

Table1. Description of the study sample

<i>Variable</i>	<i>Level /Category</i>	<i>Frequency</i>	<i>Percentage</i>
Gender	Male	452	43%
	Female	598	57%
	Total	1,050	%100
Academic level	First	240	22.8%
	Second	345	32.8%
	Third	295	28.2%
	Fourth	170	16.2%
	Total	1,050	%100

3.4. Instruments

Two instruments were used in this study:

Mindfulness Scale: Five Facets of Mindfulness Questionnaire (FFMQ), developed by Baer et al. (2006). It consisted of 39 items, distributed across five facets (subscales). The items are scored on a five-point Likert scale. The Mindfulness Scale was administered to a pilot sample of 30 students from the study population. These piloted students were not included in the main sample. Pearson coefficients were employed to identify the significance of the correlations between individual items and their respective domains, as well as between the domains and the total scale. It is important to

highlight that all correlation coefficients were found to be acceptable and statistically significant. As a result, none of the items were removed. Additionally, the correlation coefficients for each domain with the overall score, as well as the correlation coefficients between different domains, were calculated. The correlation coefficient values for the study tool domains with the overall tool exceeded 0.20, and the intercorrelation values among the domains were also above 0.70, which is suitable for achieving the study's objectives. To examine the intercorrelation coefficients among domains of the Mindfulness Scale, Pearson correlation was computed, as shown in Table 2.

Table2. The intercorrelation coefficients among the dimensions of the mindfulness scale

Domain	Observing	Describing	Acting with Awareness	Non-judging	Non-reactivity
Observing	-	.76**	.81**	.79**	.67**
Describing	-	-	.78**	.83**	.70**
Acting with Awareness	-	-	-	.81**	.73**
Non-Judging	-	-	-	-	.80**
Non-reactivity	-	-	-	-	-

***Significant at $\alpha=.05$*

Table 2 shows a significant positive correlation among all mindfulness domains. The correlation values among the mindfulness scale domains ranged between 0.70 and .83. In general, the correlations among the mindfulness scale domains were found to be meaningful, statistically significant, and consistent with the theoretical framework.

To test reliability of the questionnaire, test-retest reliability and Cronbach's alpha coefficient procedures were used. For the test-retest method, the questionnaire was administered twice to a pilot sample of 30 respondents with a two-week interval, and the Pearson correlation coefficient was calculated between both administrations of the scale. Internal consistency was also determined using Cronbach's alpha coefficient, as presented in Table 3.

1

Table3. Test-retest reliability coefficient and Cronbach's Alpha

Scale and its Subscales	Internal consistency	test-retest
Observing	0.82	0.79
Describing	0.86	0.83
Acting with Awareness	0.82	0.85
Non-judging	0.87	0.87
Non-reactivity	0.88	0.88
Mindfulness Scale	0.92	0.91

The results in Table 3 indicate that the Pearson correlation coefficient between the participants' scores during both administrations of the tool resulted in an overall reliability coefficient of 0.92. Additionally, the internal consistency reliability coefficient (Cronbach's Alpha) for the entire

questionnaire was 0.92, indicating a high level of reliability, while the test-retest reliability for the total scale was 0.91. These values were deemed appropriate for fulfilling the study's objectives and ensuring its results' credibility.

Psychological Hardiness Scale: The hardiness questionnaire developed by Kobasa (1989) is used to measure psychological hardiness. It consists of 49 items; each scored on a five-point Likert scale. Before administering the psychological Hardiness Scale (30), students who were excluded from the final sample were asked to respond to the final version of the scale. Pearson correlation coefficients were computed to determine the strength of the relationship between each item and its domain, as well as between each domain and the total scale score. It is important to note that all correlation coefficients were found to be acceptable and statistically significant. As a result, none of the items were removed. Additionally, the correlation coefficients between each domain and the overall score, as well as the correlation among the different domains, were calculated. The results show that the correlation coefficient between the study tool's domains and the overall tool exceeded 0.20, and the intercorrelation between the domains was also above 0.20, which is suitable for achieving the study's objectives.

Table4. Correlations between Items and Psychological Hardiness Scale

No.	Scale	No.	Scale	No.	Scale
1	.579	18	.745	35	.737
2	.629	19	.876	36	.777
3	.840	20	.786	37	.783
4	.635	21	.583	38	.747
5	.600	22	.748	39	.802
6	.692	23	.555	40	.588
7	.729	24	.767	41	.856
8	.479	25	.685	42	.538
9	.425	26	.486	43	.778
10	.736	27	.487	44	.679
11	.731	28	.671	45	.645
12	.749	29	.655	46	.854
13	.632	30	.778	47	.650
14	.779	31	.710	48	.697
15	.685	32	.716	49	.675
16	.653	33	.696		
17	.862	34	.758		

As presented in Table 4, the correlation values between each item and the total scale ranged from 0.379 to 0.854, all of which are significant. This indicates that none of the items were excluded from the scale.

Two methods were employed to verify the reliability of the study tool. The first method involved test-retest reliability, while the second utilized the Cronbach's alpha coefficient. For the test-retest method, the questionnaire was administered twice to a pilot sample of 30 respondents with a two-

week interval, and the Pearson correlation coefficient (reliability coefficient) was calculated between both administrations. In the second method, internal consistency was determined using Cronbach's alpha (α) coefficient. The results indicated that the Pearson correlation coefficient between the participants' scores during both administrations of the tool yielded an overall reliability coefficient of 0.86. Additionally, the internal consistency reliability coefficient (Cronbach's Alpha) for the entire tool was 0.88, indicating a high level of reliability. These values were deemed appropriate for fulfilling the objectives of the study and ensuring the credibility of its results.

3.5. Scoring of the study instruments

To calculate the total score for both scales, five alternatives were developed, and respondents selected the one that best reflected their opinion. The items were scored on a five-point Likert scale from "very rarely" to "most of the time" (1-5), representing the minimum and maximum possible scores on the inventory. The alternatives were scored as follows: 5 for "very high," 4 for "high," 3 for "moderate," 2 for "low," and 1 for "very low." To interpret the means for the items, domains, and overall tool, a statistical standard was established using the following formula:

Category range = (highest value - lowest value) $\div$ number of options.

Category range = $5 - 1 = 4 \div 3 = 1.33$, leading to the judgment criterion shown in Table 5.

Table 5. Statistical standard for determining the range of arithmetic averages.

Arithmetic average	Degree
Out of 1.00 less than 2.333	Low
Out of 2.333 less than 3.67	Moderate
Out of 3.67, less than 5	High

3.6. Statistical analysis:

To obtain the results of the study based on participants' responses to the mindfulness and psychological hardiness scales, data analysis was conducted. The data obtained in this research were analyzed using the Statistical Package for Social Sciences (SPSS) version 23. Both descriptive and inferential analyses were used during data analysis. Specifically, means (M) and standard deviations (SD) were used to answer the first and second questions. For the third question, means, standard deviations, Two- Way ANOVA, and Scheffe's test for comparisons according to academic level were employed. Finally, the Pearson correlation coefficient and multiple regression analysis were used to address the fourth question.

4. Results

4.1. Results of the First Question: What is the level of psychological hardiness among students of the Faculty of Basic Education in Kuwait?

To answer this question, mean scores and standard deviations were calculated based on the study sample's evaluations of the level of psychological hardiness among the students of the Faculty of Basic Education in Kuwait. Table 6 presents these results.

Table 6. Means and Standard Deviations for Respondents on Psychological Hardiness Scale

No.	Item	Mean	SD	Rank	Degree
4	I find that I often get deeply Involved in new tasks or projects.	4.09	1.127	1	High
22	I believe that trying is the first step to success	4.07	1.082	2	High
14	I am almost sure that tomorrow will be better	3.99	1.023	3	High

	even if today is bad				
13	I have a good sense of humour.	3.95	1.051	4	High
5	I'm one of those people who just keeps going no matter what happens.	3.94	1.059	5	High
9	I think I am not that of a person having too many personal goals in his life	3.93	1.105	6	High
10	I believe I can achieve my goals through hard work and persistence.	3.93	1.026	7	High
23	I have obvious objectives in my life, but don't have the energy to pursue them.	3.91	1.060	8	High
18	I am sure that I will achieve my goals eventually.	3.90	1.089	9	High
24	Sometimes life is just too much for me.	3.90	1.090	10	High
31	I enjoy competing against others.	3.90	1.057	11	High
17	I can manage the events in my life and do not leave things to chance.	3.89	1.096	12	High
32	I am able to reverse things to my side if things are going wrong in my life,	3.89	1.091	13	High
8	I am able to regain balance in my life when facing problems.	3.88	1.161	14	High
30	In general, I am an optimistic person.	3.87	1.046	15	High
26	I feel I can control my life.	3.86	1.079	16	High
11	I let negative events in my life interfere with my ability to complete my tasks.	3.84	1.069	17	High
27	I think I have the energy to handle negative event in my life.	3.84	1.035	18	High
19	I lead a very ordered, predictable life.	3.83	1.099	19	High
25	It is hard for me to cope with more than 1 on 12 problems at a time.	3.83	1.095	20	High
21	I believe fate plays a big part in a person's life.	3.82	1.148	21	High
33	I engage in some form of exercise on a regular basis.	3.82	1.241	22	High
44	I enjoy a challenge.	3.82	1.200	23	High
29	I become overwhelmed when being in new situations as I feel unable to handle things.	3.81	1.053	24	High
6	It's hard for me to keep at my work when the rest of my life is a mess.	3.78	1.119	25	High
7	I feel well connected with a community of people.	3.77	1.157	26	High
12	I tend to get sick more often than the average person. Window	3.75	1.147	27	High
20	Sometimes I just feel like giving up.	3.75	1.160	28	High
28	It often takes me an extraordinarily long time to recover from some surprise, shock or sadness.	3.75	1.126	29	High
16	When I am bothered by a problem, I have someone to turn to who will listen to me, give advice, etc.	3.74	1.149	30	High
35	I take difficult event as a chance for learning as they challenge by abilities.	3.74	1.177	31	High
15	I enjoy taking tests.	3.70	1.167	32	High

45	I become hopeless when things are not going as expected.	3.70	1.145	33	High
46	Stressful situations frequently make me ill.	3.69	1.183	34	High
34	I often find myself feeling sad.	3.53	1.197	35	High
49	I believe I give failures and setbacks in my life more than they are compared to others.	3.53	1.277	36	High
36	It takes me much time to stand on my feet when I experience a failure or a setback.	3.50	1.262	37	High
47	The statement "When the going gets tough, the tough get going describes me pretty well.	3.50	1.225	38	High
48	I regularly engage in actualities I enjoy.	3.50	1.270	39	High
37	I can't easily complete my tasks when being upset.	3.41	1.202	40	High
39	I have a strong network of friends.	3.41	1.207	41	High
38	I feel that I easily give up when things are not going as I planned.	3.40	1.259	42	High
40	If something goes wrong, I have a hard time forgetting about it and concentrating on present tasks.	3.40	1.370	43	High
1	It's difficult to get my work done as I have trouble with a friend or a colleague.	3.36	1.286	44	Moderate
3	I stop doing my school work when I'm unhappy in love.	3.36	1.322	45	Moderate
2	I tend to "fall apart" pretty easily.	3.30	1.310	46	Moderate
42	I do not give up easily even if things are not going my way because I believe tomorrow will be better.	3.30	1.346	47	Moderate
43	I don't like to take risks.	3.25	1.355	48	Moderate
41	I often develop the feeling that too many things are happening in my life and I can't deal with them.	3.20	1.301	49	Moderate
Psychological Hardiness		3.71	.564	High	

The item with the highest mean is item 4 ($\mu = 4.09$) with a standard deviation of 1.127. This suggests that participants are highly inclined to immerse themselves deeply in new tasks or projects, indicating a strong personal commitment and motivation to explore and challenge themselves. In contrast, item 41 has the lowest mean at 3.20 with a standard deviation of 1.301, showing that some participants frequently feel overwhelmed by life events. Overall, the total mean score for psychological hardiness is high, at 3.71 with a standard deviation of 0.564, reflecting participants' general confidence in their resilience and adaptability. Nonetheless, the presence of lower scores in some items highlights variations in resilience levels, suggesting that some individuals may benefit from additional coping strategies for better adaptation.

4.2. Results of the 2nd Question: What is the level of mindfulness among students of the Faculty of Basic Education in Kuwait?

Table 7 shows results related to students' responses on the Mindfulness Scale. Also, Figure 1 presents the ranking of each domain of the Mindfulness Scale.

Table7. Means and standard deviations of the study sample members' evaluations of the level of mindfulness among students of Faculty of Basic Education in Kuwait, organized in descending order based on the arithmetic mean.

No.	Domain	Mean	SD	Rank	Degree
4	Non-judging	3.93	.696	1	High
1	Observing	3.92	.624	2	High
5	Non-reactivity	3.82	.668	3	High
3	Acting with Awareness	3.33	.962	4	High
2	Describing	3.29	.971	5	Low
Mindfulness Scale		3.66	.585		High

Table 7 indicates a generally high level of mindfulness among participants, with an overall mindfulness scale mean of 3.66 and a standard deviation of 0.585. The highest-scoring domain is "Non-judging" (3.93, SD = 0.696), showing that participants tend to avoid making quick judgments about their thoughts or experiences, which is essential for cultivating mindfulness. "Observing" follows closely with a mean of 3.92 and a standard deviation of 0.624, suggesting that participants are highly aware of their surroundings and internal states. In contrast, the lowest mean is in the "Describing" domain (3.29, SD = 0.971), indicating that some individuals may find it challenging to articulate their experiences, which may slightly limit their overall mindfulness. Despite this, the results show a strong foundation in mindfulness practices across domains, with most domains rated as high, supporting the participants' general mindfulness competence

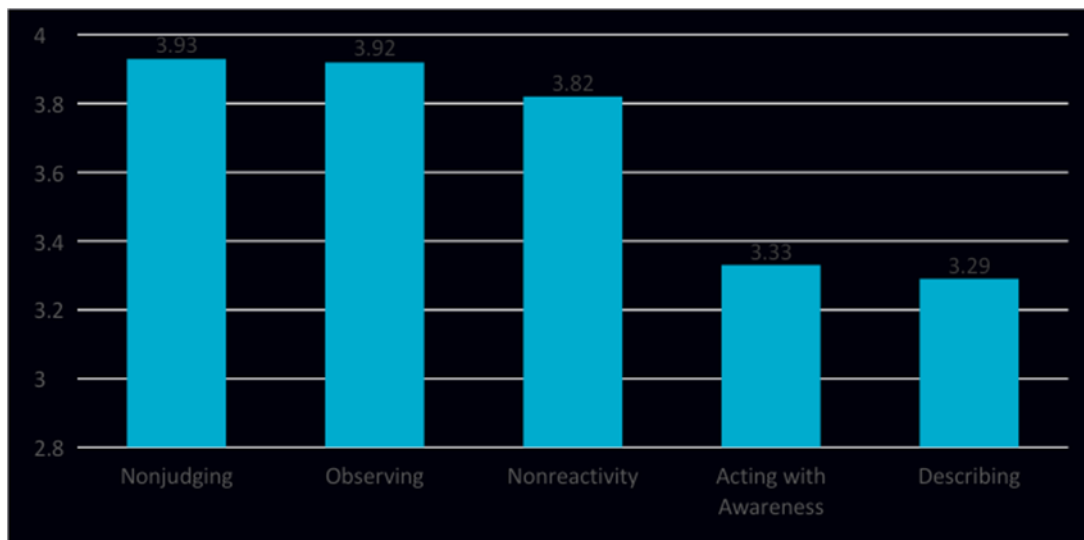


Figure1. Presents the ranking of each domain of the Mindfulness Scale

4.3. Answering the 3rd question: Are there statistically significant differences in psychological hardiness and mindfulness levels due to gender and academic level?

To answer this question, means (M) and standard deviations (SD) were employed to compare the responses of the students on the Psychological Hardiness and Mindfulness scales based on their gender and academic year, as shown in Table 8.

Table 8. Means and standard deviations according to study variables

Gender		Mindfulness Scale	Psychological Hardiness
Male	Mean	3.63	3.68
	N	428	428
	Std. Deviation	.607	.564
Female	Mean	3.67	3.73
	N	572	572
	Std. Deviation	.568	.564
Total	Mean	3.66	3.71
	N	1000	1000
	Std. Deviation	.585	.564

Table 8 shows differences between the mean scores of the study sample members' estimates of the degree of psychological hardiness and mindfulness levels due to gender and academic level, as detailed in Table 9.

Table 9. Analysis of variance for assessing psychological hardiness and mindfulness levels due to gender and academic year, according to the variables of the study

Academic level		Mindfulness Scale	Psychological Hardiness
First	Mean	3.51	3.49
	N	218	218
	Std. Deviation	.560	.542
Second	Mean	3.68	3.72
	N	345	345
	Std. Deviation	.570	.559
Third	Mean	3.70	3.80
	N	295	295
	Std. Deviation	.607	.570
Fourth	Mean	3.73	3.82
	N	142	142
	Std. Deviation	.582	.512
Total	Mean	3.66	3.71
	N	1000	1000
	Std. Deviation	.585	.564

As presented in Table 9, there are apparent differences between the mean scores of the study sample members' estimates of psychological hardiness and mindfulness levels due to gender and

academic level. To determine the statistical significance of these differences; a two-way analysis of variance was applied without interaction, as shown in Table 10.

Table 10. Analysis of variance for psychological hardiness and mindfulness levels due to gender and academic level

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Gender Hotelling's Trace=0.785 Sig. 0.57	Mindfulness Scale	.203	1	.203	.602	.438
	Psychological Hardiness	.269	1	.269	.882	.348
Academic year Wilks' Lambda value=.048 Sig.= .000	Mindfulness Scale	6.043	3	2.014	5.973	.000
	Psychological Hardiness	14.057	3	4.686	15.361	.000
Error	Mindfulness Scale	335.570	995	.337		
	Psychological Hardiness	303.525	995	.305		
Total	Mindfulness Scale	13715.367	1000			
	Psychological Hardiness	14086.723	1000			
Corrected Total	Mindfulness Scale	341.979	999			
	Psychological Hardiness	318.231	999			

It is noted from Table 10 that there are no statistically significant differences at the significance level ($\alpha = 0.05$) in psychological hardiness and mindfulness levels due to gender. However, the results indicate significant differences due to academic level. Scheffe analysis was computed, as shown in Table 11.

Table 11. Scheffe analysis according to academic level

Dependent Variable	(I) Academic Year	(J) Academic Year	Mean Difference (I-J)	Sig.
Mindfulness Scale	First	Second	-.17(*)	.008
		Third	-.19(*)	.004
		Fourth	-.22(*)	.007
	Second	First	.17(*)	.008
		Fourth	-.04	.903
		Third	.19(*)	.004
	Fourth	First	.22(*)	.007
		Second	-.23(*)	.000
	Psychological Hardiness	Third	-.31(*)	.000
		Fourth	-.32(*)	.000
		Second	.23(*)	.000
		Third	.31(*)	.000
		Fourth	.32(*)	.000

Table 11 shows significant differences between the fourth year and the first year, in favour of the fourth year, and between the third year and the first year, in favour of the third year. Additionally, there was a significant difference between the first year and the second year, in favour of the second year.

4.4. Answering the 4th question: Is there a relationship between psychological hardiness and mindfulness among students of the Faculty of Basic Education in Kuwait?

To answer this question, Pearson correlation was computed between psychological hardiness and mindfulness among the students of the Faculty of Basic Education in Kuwait, as shown in the Table 12.

Table 12. Pearson correlation between psychological hardiness and mindfulness among students of the Faculty of Basic Education in Kuwait

Domain	Correlation	Psychological Hardiness
Observing	Pearson Correlation	.447**
	Sig. (2-tailed)	.000
	N	1000
Describing	Pearson Correlation	.485**
	Sig. (2-tailed)	.000
	N	1000
Acting with Awareness	Pearson Correlation	.496**
	Sig. (2-tailed)	.000
	N	1000
Non-judging	Pearson Correlation	.453**
	Sig. (2-tailed)	.000
	N	1000
Non-reactivity	Pearson Correlation	.588**
	Sig. (2-tailed)	.000
	N	1000
Mindfulness Scale	Pearson Correlation	.662**
	Sig. (2-tailed)	.000
	N	1000

Table 12 illustrates significant positive correlations between various mindfulness domains and psychological hardiness. The "Mindfulness Scale" shows the strongest correlation with psychological hardiness at 0.662, indicating that higher overall mindfulness is associated with greater psychological resilience. The "Non-reactivity" domain follows closely with a correlation of 0.588, emphasizing the role of emotional composure in enhancing hardiness. Other notable correlations include "Acting with Awareness" 0.496, "Describing" 0.485, and "Non-judging" 0.453, all suggesting that greater mindfulness in these areas contributes to increased psychological hardiness. The "Observing"

domain, with a correlation of 0.447, further supports this trend, highlighting the importance of mindfulness practices in fostering resilience in individuals.

To identify the percentage of the variance explained by the mindfulness in predicting the variance of psychological hardiness, a stepwise multiple linear regression analysis was conducted to enter the predictor variables into the regression equation in the predictive model, as shown in Table 13.

Table 13. Summary of Multiple Regressions for Mindfulness Predicting Psychological Hardiness Scores

Predictive variable*	R	R ²	Adjusted R ²	β	F value	T value	β	P
Acting with Awareness	.392	.153	.153	.115	55.21	10.25	4.172	.000
Observing	.420	.182	.290	.124	39.29	10.01	4.025	.000
Describing	.445	.207	.270	.157	46.34	11.03	4.021	.000

* Dependent variable: psychological hardiness

As shown in Table 13, acting with awareness, observing, and describing are the variables included significantly in predicting psychological hardiness scores. Together, they explain 20.7% of the variance in psychological hardiness scores. The describing variable was the most predictive, explaining 15.3% of the variance, followed by observing, which explained 2.9% of the variance, and finally acting with awareness, which explained 2.7% of the variance. The percentage of explained variance for these variables was statistically significant at the level ($\alpha = 0.05$).

5. Discussion

The results showed that mindfulness levels were high. The highest-scoring domain is "Non-judging" ($M=3.93$, $SD = 0.696$), indicating that participants tend to avoid making quick judgments about their thoughts or experiences, which is essential for cultivating mindfulness. "Observing" followed closely with a mean of 3.92 and a standard deviation of 0.624, suggesting that participants are highly aware of their surroundings and internal states. In contrast, the lowest mean was in the "Describing" domain ($M=3.29$, $SD = 0.971$), indicating that some individuals may find it challenging to articulate their experiences, which may slightly limit their overall mindfulness. Despite this, the results demonstrate a strong foundation in mindfulness practices across domains, with most domains rated as high, supporting the participants' general mindfulness competence. This result differs from that reported by Ghasemi et al. (2019), who found the relationship between mindfulness and psychological hardiness to be at a moderate level.

Additionally, the results showed that the level of psychological hardiness was high. This suggests that some individuals may face certain challenges in psychological resilience when confronting life's difficulties. Overall, the total mean score for psychological hardiness was high ($M=3.71$, $SD=0.564$), reflecting participants' general confidence in their resilience and adaptability. This result differs from that reported by Ghasemi et al. (2019), which indicated a moderate relationship between mindfulness and psychological hardiness.

There were no statistically significant differences in psychological hardiness and mindfulness levels due to gender. This finding may be attributed to the fact that both male and female students share similar parenting styles, as well as social and academic experiences in their university studies. These factors have contributed significantly to their behavioural and psychological development, as manifested in their mindfulness and psychological hardiness levels, as shown in this study. However,

there were significant differences due to academic level, favouring fourth year students. This result is logical since students in this year have been exposed to several academic, personal, and social experiences that positively affected their psychological growth. They are more competent in handling problems faced during university life compared to first – and second-year students. This may account for the differences in mindfulness and psychological hardiness, which are indicators of personal and developmental maturity. This result differs from that reported by Dezhban et al. (2020), who found that mindfulness and psychological hardiness do not differ based on gender.

There was a statistically significant positive correlation between mindfulness and psychological hardiness. The findings also showed that the "Mindfulness Scale" had the strongest correlation with psychological hardiness ($r = 0.662$), indicating that higher overall mindfulness is associated with greater psychological hardiness. The "Non-reactivity" domain follows closely with a correlation of ($r = 0.588$), emphasizing the role of emotional composure in enhancing hardiness. Other notable correlations include "Acting with Awareness" ($r = 0.496$), "Describing" ($r = 0.485$), and "Non- judging" ($r = 0.453$), all suggesting that greater mindfulness in these areas contributes to increased psychological hardiness. The "Observing" domain, with a correlation of ($r = 0.447$), further supports this trend, highlighting the importance of mindfulness practices in fostering resilience. These results are consistent with those reported by and (Dezhban et al. 2020; Ghasemi et al. 2019), indicating a positive correlation between mindfulness and psychological hardiness.

6. Conclusion and Recommendations

Based on the results, the study recommends that those responsible for counseling programs in universities develop mindfulness - based counseling programs, especially in Oriental countries characterized by high level of religiosity. Furthermore, psychological hardiness is an important psychological variable that can help universities students succeed in their academic life and overcome social problems. Therefore, University counsellors should provide students with strategies, such as positive coping mechanisms, that may assist them in thriving during their university life. Finally, future research examining the relationship between mindfulness and other behavioural and psychological variables can shed light in the importance of these new variables in psychological and counseling literature.

7. Limitations

The study was conducted at one university in Kuwait. Replicating this study at other universities with similarly diverse populations could be beneficial. Additionally, the generalizability of the study results is limited by the accuracy of the design of the tools used, their validity and reliability, and the seriousness with which the study participants responded to the study instruments.

Declarations

Author contributions. J, A.; Introduction, literature review, investigation and data collection. S. A; Methodology, validation, resources, formal analysis. A. A; Supervision, review, editing and discussion of results.

All authors have read and approved the published version of the article.

Conflicts of interest. The authors declare no conflict of interest.

Funding. This research received no funding

Data Availability Statement. Data can be provided by second and third authors upon request

References

Abbasi, M., Golmohammadian, M., & Kakabraee, K. (2023). Enhancing psychological hardiness and distress tolerance in mothers of hard of hearing children: the efficacy of mindfulness integrated

with spiritual therapy. *Journal of Clinical Research in Paramedical Sciences*, 12(2), 1-8. <http://dx.doi.org/10.5812/jcrps-138109>.

- Abdollahi, A., Oanahipour, S., Tofti, M., & Allen, K. (2020). Academic hardiness as a mediator of the relationship between school belonging and academic stress. *Psychology in the Schools*, 57(5), 823–832. <http://dx.doi.org/10.1002/pits.22339>
- Aladwan, D., Al Masarwah, U., Barakat, r., & Alfugha, O. (2025). The Predictors of the mindfulness among Jordanian university students. *Dirasat: Human and Social Sciences*, 52(2), 59-106. <https://dog.org/10.35516/hum:v52i2.4725>
- Alomari, H. (2023). Mindfulness and its relationship to academic achievement among university students. *Frontiers in Education*, 8, 1-9. <https://doi.org/10.3389/feduc.2023.1179584>
- Baer, R., Smith, G., Hopkins, J., & Toney, L. (2006). Using self-report assessment methods to explore facet of mindfulness. *Assessment*, 13(1), 27-42.
- Bahrani, S., Jahan, F., Dehraei, H. & Asl, N. (2020). Effectiveness of mindfulness training on anxiety reduction as well as improvement of life quality and perceived academic control of students. *Avicenna Journal of Neuro Psycho Physiology*, 7(2), 69-76. Doi:10.32592/ajnp.2020.7.2100
- Bai, Y., Ma, H., Yu, Y., & Wang, W. (2022). Effect of cognitive-behavioral therapy or mindfulness therapy on pain and quality of life in patients with diabetic neuropathy: a systematic review and meta-analysis. *Pain Management Nursing*, 23(6):861-70. <https://doi.org/10.1016/j.pmn.2022.05.005>
- Barrios, M., & Pitt, L. (2021). Mindfulness and challenges of working from home in times of crisis. *Bus Horiz*, 64, 97- 189. <https://doi.org/10.1016/j.bushor.2020.09.004>
- Belen, H. (2022). Fear of covid-19 and mental health: The role of mindfulness in during time of crises. *International Journal of Mental Health and Addiction*, 20(1), 607-618.
- Bishop, R., Lau, M., Shapiro, S., Carlson, L., Anderson, D., Carmody, J., & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical psychology: Science and practice*, 11(3), 230-241. <https://doi.org/10.1093/clipsy.bph077>.
- Czerwinski, N., Egan, H., Cook, A., & Mantzios, M. (2021). Teachers and mindful colouring to tackle burnout and increase mindfulness, resiliency and well-being. *Contemporary School Psychology*, 25(4), 535-545. <https://doi.org/10.1007/s40688-020-00279-9>.
- Dezhban, R., Samavatian, H., & Arshadi, N. (2020). The relationship between neuroticism and hardiness with employee well-being: mediating role of resiliency and mindfulness and moderating role of working hours and type of shift work. *Journal of Industrial and Organizational Psychology Studies*, 7(2), 259-282. <https://doi.org/10.22055/jiops.2020.34548.1200>
- Feldman, O., Goldstien, E., Rolnik, B., Ganz, A., & Lev-Ari, S. (2021). Inquiry based stress reduction (IBSR) improves overall stuttering experience among adults who stutter: a randomized controlled trial. *Journal of Clinical Medicine*, 10(10), 2187. <https://doi.org/10.3390/jcm10102187>
- Ghasemi, Z., & Kajbaf, B. (2019). The relationship of mindfulness, psychological hardiness and spirituality with depression in mothers. *Social Behavior Research & Health*, 3(1), 287-297. <https://doi.org/10.18502/sbrh.v3i1.1033>.
- Goretzki, M., & Zysk, A. (2017). Using mindfulness techniques to improve student wellbeing and academic performance for university students: A pilot study. *Journal of the Australian and New Zealand Student Services Association*, 25(1), 1-14.

- Hadi, S., Tabar, S., & Zadhasn, Z. (2023). Effectiveness of mindfulness-based cognitive therapy on mental pain, distress tolerance and psychological hardiness in breast cancer patients. *Health Nexus*, 1(1), 56-63.
- Hamid, N. (2020). Study of the relationship of hardiness and hope with life satisfaction in managers. *International Journal of Psychology*, 14(1), 310-339. <https://doi.org/10.24200/IJPB.2020.214143.1143>
- Ivtzan, I., Tarli, Y., Janis, M., Allison, J., Lomas, T., Rona, H., & Orosa, F. (2016). Integrating mindfulness into positive psychology: a randomized controlled trial of an online positive mindfulness program. *Mindfulness*, 7 (6), 1396-1407. <https://link.springer.com/article/10.1007/s12671-016-0581-1>
- Jalali, S., & Amarqan, A. (2015). Study of the relationship between psychological hardiness and creativity with job stress in personnel of emergency social services of Golestan province. *Indian Journal of Fundamental and Applied Life Sciences*, 5(2), 1671-1679.
- Ji, M. (2023). The origin of mindfulness revisited: a conceptual and historical review. *Proceedings of the International Conference on Global Politics and Socio-Humanities*. <https://doi.org/10.54254/2753-7048/25/20230273>
- Kabat-Zinn, J. (2005). *Full catastrophe living: using the wisdom of your body and mind to face stress, pain, and illness*. New York: Bantam Dell.
- Kamtsios, S., & Karagiannopoulou, E. (2020). Undergraduates' affective- learning profiles: Their effects on academic emotions and academic achievement. *Hellenic Journal of Psychology*, 17, 176–204. <https://doi.org/10.26262/HJP>
- Khaledian, M., Babaee, H., & Amani, M. (2016). The relationship of psychological hardiness with irrational beliefs, emotional intelligence and work holism. *World Scientific News*, 28, 57-71. <https://worldscientificnews.com/wp-content/uploads/2024/01/WSN-28-2016-57-71.pdf>
- Kobasa, S. (1979). Stressful life events, personality and health: an inquiry into hardiness. *Journal of Personality and Social Psychology*, 37, 1-11. <https://doi.org/10.1037/0022-3514.37.1.1>
- Kowalski, M., & Schermer, A. (2019). Hardiness, Perseverative cognition, anxiety, and health-related outcomes: A case for and against psychological hardiness. *Psychological Reports*, 122(6), 2096-2118. <https://doi.org/10.1177/0033294118800444>
- Maddi, S. R. (2002). The story of hardiness: Twenty years of theorizing, research, and practice. *Consulting psychology journal: practice and research*, 54(3), 173. <https://doi.org/10.1037/1061-4087.54.3.173>.
- Malboeuf-Hurtubise, C., Léger-Goodes, T., Mageau, G. A., Joussemet, M., Herba, C., & Chadi, N. (2021). Philosophy for children and mindfulness during COVID-19: Results from a randomized cluster trial and impact on mental health in elementary school students. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 107, 110260. <https://doi.org/10.1016/j.pnpbp.2021.110260>
- McBride, E., & Gresson, J. (2023). Mindfulness, cognitive functioning, and academic achievement in college students: the mediating role of stress. *Current Psychology*, 42:10924-10934. <https://doi.org/10.1007/s12144-021-02340>
- Nie, Q., Teng, Z., Bear, G., Guo, C., Liu, Y., & Zhang, D. (2019). Hope as Mediator Between Teacher–Student Relationships and Life Satisfaction Among Chinese Adolescents: A Between-and Within-Person Effects Analysis. *Journal of Happiness Studies*, 20(7), 2367-2383. <https://link.springer.com/article/10.1007/s10902-018-0052-6>.

- Nooripour, R., Hosseinian, S., Farmani, F., Foroshani, N., Ghanbari, N., Farkhojasteh, V., Abdollahi, R., & Ilanloo, H. (2022). Relationship between hardiness and stress of covid-19 through the mediating role of mindfulness in Iranian students. *Journal of Practice in Clinical Psychology*, 10(3), 193-202. http://jpcp.uswr.ac.ir/browse.php?a_code=A-10-288-7
- Oral, M., & Karakurt, N. (2022). The impact of Psychological hardiness on intolerance of uncertainty in university students during the Covid-19 pandemic. *Journal of Community Psychology*, 50(8), 3574-3589. <https://doi.org/10.1002/jcop.22856>.
- Potard C., Madamet A., Huart, I., Hageet, W., & Courtois, R. (2018). Relationships between hardiness, exposure to traumatic events and PTSD symptoms among French police officers. *European Journal of Trauma & Dissociation*. 2(4):165-171. <https://doi.org/10.1016/j.ejtd.2017.10.007>
- Ramadan, F., Menessy, R., & Kamel, N. (2022). The relationship between mindfulness, emotion regulation and mental well-being among academic staff educators at the faculty of nursing. *Egyptian Journal of Health Care*, 6(4), 1-25.
- Sandvik, M., Hansen, L., Hystad, W., Johnsen, B., & Bartone, P. (2015). Psychopathy, anxiety, and resiliency – Psychological hardiness as a mediator of the psychopathy–anxiety relationship in a prison setting. *Personality and Individual Differences*. 72: 30-34. <https://doi.org/10.1016/j.paid.2014.08.009>
- Saxena, S. (2015). Relationship between psychological hardiness and mental health among college students. *Indian Journal of Health and Wellbeing*, 6(8), 823-825. <https://www.proquest.com/openview/ca5ac27da5bb78d0ecd180c93bc927b3/1?cbl=2032134&pq-origsite=gscholar>.
- Seligman, M. (2011). Doing the right thing: Measuring well-being for public policy. *International Journal of Wellbeing*, 1(1), 15-22.
- Seligman, M. (2000) Positive Psychology: An Introduction. *American Psychologist*, 55(1):5-14. <https://doi:10.1037/0003-066X.55.1.5>
- Sepiadou, I., & Metallidou, P. (2022). Academic hardiness as a moderator of the relation between perfectionism and academic procrastination in university students. *European Journal of Psychology Education*. 38, 1053–1071. doi: 10.1007/s10212-022-00648-3
- Shahid, S., Puri, A., & Shukla, A. (2016). The effect of mindfulness and stress among college students. *International Journal of Research & Education*, 5(3), 7-24.
- Shapiro, L., Carlson, E., Astin, A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of clinical psychology*, 62(3), 373-386. <https://doi.org/10.1002/jclp.20237>
- Smith, J., & Brown, A. (2022). The Mediating Role of Mindfulness in the Relationship between Psychological Hardiness and Mental Health among College Students. *Journal of Mental Health and Well-being*, 45(3), 123-135.
- Stoops, T. L. (2005). Understanding mindfulness: Implications for instruction and learning. *Doctoral dissertation*. West Virginia University.
- Telfah, N. (2022). A study of the correlation between psychological exhaustion and psychological hardiness among Al-Nahrain university instructors. *Journal of Positive School Psychology*, 4(5), 2075–2089.
- Treves, I., Li, K., Wang, K., Palchik, O., Olson, H., Olson, & Gabrieli, J. (2023). Mindfulness supports emotional resilience in children during the COVID-19 pandemic. *PLOS ONE*, 18(7), 1-12. <https://doi.org/10.1371/journal.pone.0278501>

- Vaziri, C., Ghanbari Panah, A., & Tajalli, P. (2021). Modeling of Self-regulation based on cognitive flexibility with mediated role of psychological hardiness in students. *Iranian Journal of Educational Sociology*, 4(2), 83-92. <https://iase-idje.ir/article-1-986-en.html>.
- Verma, R. (2022). Mindfulness in Schools for Social Emotional Wellbeing of Students. *International Journal of Psychiatry Research*, 5(5), 1-5.
- Vos, L., Habibovic, M., Nyklicek, I., Smeets, T.,b & Mertens, G.(2021). Optimism, mindfulness, and resilience as potential protective factors for the mental health consequences of fear of the coronavirus. *Psychiatry Research*, 5(1).22-35. <https://doi.10.1016/j.psychres.2021.113927>
- Yavuz, B., & Dilmaç, B. (2020). The relationship between psychological hardiness and mindfulness in university students: the role of spiritual well-being. *Spiritual Psychology and Counseling*, 5, 257–271.
- Wu, S., Emily., Hagan, M., Eschleman, K., & Gard, D. (2024). Hardiness predicts mental health recovery during the Covid-19 pandemic. *Psychology Trauma*, 16(6), 971-979. <https://doi.org/10.1037/tra0001660>.
- Zhang, D., Lee, K., Mak, C., Ho, Y., & Wong, Y. (2021). Mindfulness-based interventions: an overall review. *British Medical Bulletin*, 138(1), 41-57. <https://doi.org/10.1093/bmb/ldab005>

About the Contributor(s)

Ahmad Al Alwan, professor in Educational psychology, Department of Educational Psychology, Faculty of Educational Sciences, the Hashemite University, Zarqa, Jordan.

Email: alwan@hu.edu.jo

ORCID: <https://orcid.org/0000-0002-9347-3557>

Jaber Alhubaidah, Associate professor in the college of basic education, The Public Authority for Applied Education and Training, Kuwait.

Email: jm.alhubaidah@paaet.edu.kw

ORCID: <https://orcid.org/0009-0004-3569-5962>

Saud Alharbi, Associate professor in the college of basic education, The Public Authority for Applied Education and Training, Kuwait.

Email: sn.alharbi@paaet.edu.kw

ORCID: <https://orcid.org/0009-0001-8444-8421>

Publisher's Note: *The opinions, statements, and data presented in all publications are solely those of the individual author(s) and contributors and do not reflect the views of Universitepark, EDUPIJ, and/or the editor(s). Universitepark, the Journal, and/or the editor(s) accept no responsibility for any harm or damage to persons or property arising from the use of ideas, methods, instructions, or products mentioned in the content.*
