



Mindful Attention Awareness among UM Digos University College Students: A Comparative Analysis

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Mindful attention awareness involves intentionally being attentive to the current moment without bias, allowing focus on the current moment and what is most important to you, rather than concentrating on thoughts and feelings. This study explores whether mindful attention awareness has significant differences in sex, year level, and department. This research is quantitative and employs a descriptive-comparative design. The data interpretation is performed by JAMOV1 software, together with Excel. The Shapiro-Wilk test was utilized to assess normality, but it did not confirm a normal distribution for continuous variables, while mean and standard deviation were used to measure variable levels. The findings revealed that respondents had a moderate range in all sub-scales in the area of mindful attention awareness. The results showed that females had a high significance difference in mindfulness attention awareness. The test of difference shows that sex has an unequal variance, while in year level, only first, second, and fourth-year students had a

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significant difference in mindfulness attention awareness, and the department had no significant difference in mindfulness attention awareness. The study recommends future researchers on exploring the longitudinal effects of mindfulness interventions on academic achievement and student well-being, which could provide valuable evidence for integrating mindfulness into educational practices.

Keywords: Mindful attention awareness; college students; comparative study; attention.

1. INTRODUCTION

In the midst of life's unpredictable currents, mindfulness stands as a steadfast beacon, offering clarity and guidance through the turbulent waters of our existence. Defined by the American Psychological Association (APA) as the conscious awareness of both external surroundings and internal states, mindfulness transcends mere observation to encompass a profound journey of self-awareness and personal transformation. Central to this exploration is the concept of mindful attention awareness, introduced by Langer et al. [1]. Characterized by a heightened state of concentration, composure, and stability, mindful attention awareness directs our focus to the present moment with an open, accepting, and judgment-free mindset.

The evolution and dissemination of the concept of "mindfulness" traces a trajectory from its Buddhist origins through Western adoption and eventual reintroduction to Eastern contexts via therapeutic applications and psychological assessments [2,3,4]. This journey underscores the necessity for robust measures that can effectively capture the impacts of mindfulness training both theoretically and empirically Abujaradeh et al. [5], as emphasized by Baer [6], in highlighting the importance of assessing mindfulness for a comprehensive understanding of its associations with health and well-being. When the mind inevitably wanders, mindfulness gently guides it back to the present moment, fostering a deeper connection with our immediate experiences. Research into mindfulness interventions has revealed promising outcomes, demonstrating positive effects on both performance and health. Individuals who engage regularly in mindfulness-based treatments (MBIs) report lower levels of stress, according to apparent studies conducted by Balconi et al. [7].

One commonly employed method for evaluating mindfulness through self-reporting is the Mindfulness Scale, which was generated by Brown and Ryan [8] and has gained widespread recognition. The mindfulness scale measures

the overall inclination to be attentive and aware of events in the current moment during daily living in a variety of settings. It has various benefits over existing mindfulness measures, including its shortness, uni-dimensional structure, applications to both clinical and non-clinical individuals, regardless of previous meditation experience, and availability in several languages [9].

The five-facet approach to mindfulness provides a comprehensive framework in the field of the phenomenon in a multi-dimensional manner. This approach enables researchers to explore how different components of mindfulness intersect with various psychological constructs, together with clinical matters such as anxiety and depression symptoms, as substantiated by Webb et al. [10]. FFMQ appraises the Five Facets of Mindfulness: (1) Observing: one's capacity to pay attention or view internal and external stimuli; (2) Describing: the ability to take in or identify the stimuli with the words mentioned above; (3) Acting with Awareness: the skill to act at a second moment rather than acting impulsively or in an absent mind; and (4) Non-Judging of Inner Experience: the ability to abstain from assessing one's sensations, cognitions, responses, and emotions. and (5) Non-Reactivity to Inner Experience: the tendency to have conceptions and feelings occur and set off without focusing on them [11].

A study by Roca et al. [12] suggests that facets such as acting with awareness and nonreactivity may serve as crucial bridges between mindfulness and maladaptive factors like depression, stress, and anxiety as observed by Medvedev et al. [13]. Mindfulness-based interventions, including mindfulness-based cognitive therapy, are being explored for their efficacy in various settings, including school settings, highlighting potential benefits for adolescent well-being and psychological development [14,15,16]. In light of the findings from the study of Anzulewicz and Wierzchoń [17], propose a nuanced understanding of attention mechanisms, highlighting the importance of

considering contextual factors, expectations, and prior experiences in constructing a comprehensive model of conscious visual perception representation. In the last few years, there has been a notable outpouring of academic dividends surrounding mindfulness and its diverse applications across various domains of human life.

With academic interest surrounding mindfulness, a study of Dong Y. et al. [18], exploring the First-year level students in college mindfulness. The study's objectives are to scrutinize the relationships between multiple surfaces in mindfulness's flexibility, resilience, and college adjustment among first-year college students and to examine the mediating role of resilience in these relationships. The results of the investigation showed a positive correlation between resilience, mindfulness, and college adjustment among first year students. The interrelationships uniting the four aspects of mindfulness—describing, acting with awareness, observing, and non-reactivity—and college adjustment were significantly mediated by resilience.

To support this claim, the study of Terenzini and Wright [19] found that personal development in college years is consistently related to collegiate experiences, with academic integration stronger in the sophomore year. A study by Baluku et al. [20] investigates the role of intellectual resources, particularly psychological capital, in students' preparation for the school-to-work transition (STWT) and career success. This research study found that psychological capital positively impacts perceived employability and readiness for STWT, and having fun while working can indirectly affect job satisfaction through career assignments and external physical activities.

Furthermore, Udzil and Günaydan [21], conducted a descriptive relationship study to examine the impact of coherence on mindfulness and academic achievement. Self-efficacy among nursing students. Their findings were somewhat good. There is a negative correlation between academic self-efficacy, sense of coherence, and mindfulness attention awareness. Nonetheless, further study is needed to clarify these linkages in the context of nursing students. In addition to this study, Hepburn et al. [22], reviewed the goal of the current research, which aimed to examine the connection among awareness, perceived stress, and subjective feelings of fulfillment in

training teachers. According to the findings, lower levels of perceived stress and higher levels of self-reported happiness may be associated with higher levels of mindfulness, while higher levels of subjective well-being may be connected to lower levels of perceived stress.

Next, the increased attention is evidenced by a widening body of research exploring the multifaceted nature of mindfulness and its potential implications for well-being and positive human functioning [23,24,25,26,27]. Studies by Hernandez et al. [28] have predominantly concentrated on female respondents, shedding light on gender discrepancies in stress responses. Further insights into the dynamics of mindfulness emerge from studies exploring the influence of gender and age. While Thirumaran et al. [29] found that mindfulness scores tend to improve with age, with no significant gender differences, other studies by Govindaraju et al. [30] and Ahmad & Hussain [31] revealed that age, nationality, and gender have insignificant influence on mindfulness in specific contexts such as academic and job performance among medical students and employees.

In continuation, the findings underscore the imperative for further investigation into the intersection of mindfulness, self-compassion, and perceived stress reactivity within mixed gender populations. Notably, research adapted the Perceived Stress Reactivity Scale (PSRS) for adolescents, revealing that girls generally exhibit higher overall stress reactivity scores compared to boys, underscoring the significance of considering gender disparities in stress responses when examining the potential moderating effects of mindfulness and self-compassion on stress reactivity [32]. Following this are the recent reviews of mindfulness based interventions that have highlighted the importance of evaluating and reporting the importance of gender differences in outcome variables. It has been suggested that further studies investigating sex variations within mindfulness are necessary to explain the results as well as tailor interventions accordingly, especially for college-aged men and women [33]. However, due to the unequal distribution of males and females in mindfulness studies, the interrogation of sex differences in the present study is considered introductory.

In 2020, Alampay and colleagues [34] conducted a combined randomization study on a culturally

tailored Mindfulness-Based Cognitive Therapy (MBCT) program, which included 186 Filipino public-school students ranging from nine to sixteen years old. Filipino teachers and guidance counselors were designated as mindfulness program facilitators, with authors ensuring that facilitators underwent training and developed their mindfulness self-practice over seven months. Despite the research outcomes contradicting initial goals and acknowledging limitations, Alampay et al.'s [34] study marks a significant milestone in Philippine mindfulness research, offering valuable insights for contextualizing and adapting mindfulness interventions in the Philippine setting. To date, this study represents the sole international study published of research on mindfulness interventions conducted with children and adolescent populations in a school setting on a large scale.

This study explores mindfulness among college students in the Davao Region, aiming to understand mindfulness-based approaches to well-being and inform future research. It promotes self-awareness, stress reduction, and academic success, with the evolving research topic serving as a guide for future interventions. This study also provides a detailed analysis of how mindfulness varies across demographic factors such as gender, academic year level, and department. However, it lacks exploration of the underlying factors influencing these differences, which could inform targeted interventions. Additionally, it only examines individual effects without considering potential interaction effects between demographic variables and mindfulness. There's a gap in research on gender differences in mindfulness, especially among college-aged individuals, and the study overlooks the uneven distribution of respondents across genders.

Furthermore, its focus on specific departments limits generalizability, highlighting the need for research with more diverse samples. Lastly, the study relies solely on quantitative measures, neglecting qualitative methods that could offer richer insights into individuals' experiences of mindfulness. Incorporating qualitative research would enhance the study's comprehensiveness.

1.1 Research Objectives

This study sought to evaluate the significant differences in mindful attention awareness among university students depending on sex,

academic year, and department affiliation. Specifically, it intended to determine the following:

1. To determine the demographic distribution attributed study, in terms of:
 - 1.1 Year Level
 - 1.2 Department
 - 1.3 Sex
2. To determine the level of Mindful Attention Awareness of College Students in terms of:
 - 2.1 Observing
 - 2.2 Describing
 - 2.3 Acting with Awareness
 - 2.4 Non-judging of inner experience
 - 2.5 Non-reactivity to inner experience
3. To determine the significant difference and Group Descriptive in Mindful Attention Awareness of College Students in terms of:
 - 3.1 Year Level
 - 3.2 Department
 - 3.3 Sex

2. METHODOLOGY

This chapter detailed the many methods employed to acquire and evaluate relevant data for the study. The procedures address a variety of subjects, including the study's location, research design, sample size and sampling strategy, data types, data collection methods, and data management.

2.1 Research Respondents

During the academic year 2024, the study included respondents solely from one of the colleges in Davao Region, spanning all academic levels and departments. The researcher selected a sample size of 350 individuals using a simple random sampling technique. The study focused exclusively on students within the university, ensuring a comprehensive representation of the college's demographics which includes the research respondent's year level, department and sex. The research methodology aimed to gather insights from a diverse range of students across various academic levels and departments.

2.2 Research Instrument

The Five Facet Mindfulness Questionnaire (FFMQ) is a self-help instrument that assesses the five components of mindfulness: observing,

describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience. The questionnaire has 39 items that measure the questionnaire, and the results provide an approximation of where we stand in terms of mindful attention and self-awareness. The questionnaire also carefully assesses the influence of any past encounters we have had with mindfulness techniques. The evolution of this questionnaire was vital since it was one of the first to assess the effectiveness of mindfulness in addressing realistic difficulties. Each of the FFMQ's five aspects provides a more detailed glimpse at our inner capabilities. The overall scores of the FFMQ's subscales give an appropriate measure of self-awareness and indicate the advantages mindfulness techniques have demonstrated to us. The framework of a standard 5-point Likert scale item on mindfulness and attention awareness is given: 1 = very rarely, 2 = rarely true, 3 = sometimes, 4 =very often true, and 5 indicates that something is always true. The responses are given on a 5-point Likert scale. scale and the total score are generated by adding the direct and reverse-scored items. The Five-Facet Mindfulness Test features two scoring patterns: direct scoring, which scores items based on their Likert value (for example, one). would add a score of 1, and 4 may add a value of 4. Reverse scoring is when it scores the elements backward. Would imply a score of two, and so on). The sub-scales observing, describing, acting with awareness, non-judgment of inner experience, and non-reactivity to inner experience" were all assigned a value. The FFMQ consistently demonstrated outstanding psychometric qualities (Baer, Walsh & Lykins) [35], including high levels of construct validity (Montgomery, Hatton, Fisk, Ogden and Jansari), [36], as well as reliability, with Cronbach alphas for the sub-scales ranging from 0.73-0.91 [37]. The researchers conducted pilot testing to examine the validity and reliability using Jamovi software. Stated that Cronbach alpha has a value of 0.931 having a high reliability. Also, the researchers utilized Slovin's test to get the sample size of the population.

Using the mean interval by subtracting the overall number of items scale, subtracted by one, and then divided by the value of the overall item scale, which was subtracted by one (5-1/4), the researchers were able to categorize and analyze the respondents' level of mindful attention based on their demographic characteristics and the mean result in each category. Garnering a mean of 4.21 to 5.00 indicates having a very high level

of mindful attention awareness, which is described as always evident. 3.41 -- 4.20 mean score, suggesting a high level of mindful attention awareness described as oftentimes evident. Having a mean score of 2.61–3.40 suggests a moderated level of mindful attention awareness, which is sometimes evident. 1.81 to 2.60 mean score, manifesting a low level of mindful attention awareness described as rarely evident. Lastly, 1.00–1.80 means indicating a very low level of mindful attention awareness described as very rarely evident. Through this table, the researchers were able to differentiate and describe the level of mindfulness and attention awareness of the respondents regarding their demographic profile.

2.3 Design and Procedure

The researchers employed quantitative methods to assess the extent of responses from respondents and measure various variables. Through descriptive-comparative analysis, it aims to examine differences in mindfulness levels among college students based on factors such as academic year, department, and sex.

To collect data, the researchers conducted a number of processes to assess the association between the variables. First of all, they made the surveys accessible to a broader audience by distributing printed copies of the in-person responses. In order to make sure that respondents had permission from the school administration to participate, the researchers first received permission letters from their professor and the dean of the college before they started the survey. This procedure made sure that the right permission was acquired before engaging any parties. Finally, in order to protect participant confidentiality and identity, the researchers gathered data utilizing a data sheet. After that, the data were examined using the statistical program Jamovi to see how the study's variables were correlated.

2.4 Statistical Treatment

Using the Shapiro-Wilk test, the researchers were able to determine the normality of the data and whether to reject or accept the null hypothesis. The statistical method was chosen to address the study's goal. The statistical techniques used the frequency of various values of groupings of variables. A weighted mean will be used to evaluate the respondents' level of mindfulness awareness using descriptive analysis.

Next, after determining the normality as per result $p < 0.05$ (0.01), the results are not normally distributed. Since the study utilizes a descriptive study showing the differences in the level of mindfulness attention awareness, the researchers applied the descriptive method to test the differences between the variables of year levels, departments, and sex in the mindfulness attention awareness of the respondent. A statistical test called the Kruskal-Wallis one-way ANOVA is utilized to find out if three or more groups differ significantly from one another on relevant variables. A multiple comparison test is also used to evaluate whether groups are uniquely distinct from one another. This test will look at the differences between the means of the various groups while controlling for the family-wise error rate.

By using the mean, standard deviation, and minimum and maximum values in descriptives, the researchers determine the level of mindfulness awareness of respondents. By doing so, the researchers can differentiate the level of MAAS in terms of year level, department, and sex. This specified the levels of mindfulness awareness and its differences within the subgroups under year levels first, second, third, and fourth. For departments that have DAS, DTP, DCJE, DBA, DAE, and DTE, lastly is for sex: male and female. In sex, the researchers employed the Dwass-Steel-Critchlow-Fligner pairwise comparisons, following a significant result from the one-way ANOVA Kruskal-Wallis test. This multiple comparison test identifies specific groups that differ from each other. According to Ostertagova et al. [38], the Kruskal-Wallis test is a prominent nonparametric test that uses ranks to assess more than two independent samples. This test is effective as a general nonparametric method and will be used to determine if these samples come from the same distribution.

2.5 Ethical Considerations

2.5.1 Voluntary participation

All research respondents have the freedom to opt for participation voluntarily, without any form of pressure or coercion. In addition, all respondents have the option to withdraw or exit the research at any moment without feeling forced to continue.

2.5.2 Right to revoke

The researchers guaranteed that all respondents might leave at any time, and participation was voluntary.

2.5.3 Privacy and confidentiality

All the personal information provided by the respondents is not disclosed to unauthorized individuals and is kept secure in a plastic envelope and put in a secured cabinet. Additionally, it will not be used outside the study. Moreover, the personal information of the respondents to the study is ensured to be protected, and they have control over how their data is collected, used, and shared during the study.

2.5.4 Informed consent process

The potential respondents were informed by the researchers about the purpose, risk, benefits, and procedure of the study before they decided to join or decline.

2.5.5 Benefits

The researchers ensured that the study was beneficial and helpful to others. In addition, the respondents are informed about the possible benefits of the study, which may lead to personal growth and increased awareness.

2.5.6 Risks

Alongside discussing the benefits, it is crucial to acknowledge the possible risks associated with the study. Respondents in this research are informed about potential harm or injury that a reasonable person would deem significant when deciding to participate. Furthermore, the researchers will take measures to minimize these risks to the best of their ability.

2.5.7 Plagiarism

The research project contains no portrayals that may result in plagiarism. Researchers ensured that the correct way of referencing concepts and findings from the studies of the indicated authors and experts was used.

2.5.8 Fabrication

The researchers ensured that they did not misrepresent someone else work. Furthermore, there was no effort to falsify data or results, manufacture outcomes, or present conflicting findings with the literature previously included in the manuscript.

2.5.9 Falsification

The study relies on various reliable and precise studies. The authors were recognized, and the paper was based on their research.

2.6 Conflict of Interest

The researchers are committed to ensuring the quality of the results and that the study is carried out with integrity.

2.6.1 Deceit

The study guaranteed that respondents provided genuine and non-harmful responses. The researcher utilized no unethical practices to deceive the volunteers. Proper treatment of provisions prevented inappropriate remarks and ethical dilemmas.

2.6.2 Permission from the organization/local

Before distributing questionnaires to students, either the field of study being conducted or the site where data were being gathered, the researcher obtained adviser signatures as well as the professional school dean's positive endorsement on letters of authorization.

3. RESULTS AND DISCUSSION

Illustrated in this chapter are the data, findings, interpretations, discussion, and data analysis

based on the respondents' answers regarding their mindful attention awareness. The tables are organized under the following subheadings: the demographic profile of the respondents, the level of mindful attention awareness, the significant difference between the demographic profile, including sex, year level, and department, and mindful attention awareness and its group descriptive.

3.1 The Demographic Profile of the Respondents

This table displays the characteristics of respondents' demographic information, including sex, year level, and department. Males account for 37.1% of the sample, while females make up 62.9%. This indicates that the majority of respondents in the study are female. The cumulative percentage for females is 62.9%, while for males, it is 100.0%. In terms of year level, this column displays the number of individuals in each year level category. There are 127 individuals classified as 2nd year, 173 individuals classified as 1st year, 36 individuals classified as 3rd year, and 14 individuals classified as 4th year.

Table 1. Mindfulness Attention Awareness Mean Interpretation

Mean Interval	Description	Interpretation
4.21 – 5.00	Very High	MAAS is always evident.
3.41 – 4.20	High	MAAS is oftentimes evident.
2.61 – 3.40	Moderate	MAAS is sometimes evident.
1.81 – 2.60	Low	MAAS is rarely evident.
1.00 – 1.80	Very Low	MAAS is very rarely evident.

Table 2. Characteristics of Respondents (n=350)

Profile	f	%
Sex	220	62.9
Female		
Male	130	37.1
Year Level	173	49.4
1 st		
2 nd	127	36.3
3 rd	36	10.3
4 th	14	4.0
Department		
DAS	71	20.3
DBA	45	12.9
DAE	30	8.6
DTP	51	14.6
DCJE	75	21.4
DTE	78	22.3
Total	350	100.0

Table 3. Level of Mindfulness Attention Awareness

Subscales	\bar{x}	SD	Interpretation
Observing	3.31	0.697	The level of MAAS is Moderate.
Describing	3.05	0.490	The level of MAAS is Moderate.
Acting with Awareness	2.93	0.671	The level of MAAS is Moderate.
Non-Judging of Inner Experience	2.76	0.698	The level of MAAS is Moderate.
Non-Reactivity to Inner Experience	3.09	0.607	The level of MAAS is Moderate.
Mindful Attention Awareness Overall	3.03	0.228	The level of MAAS is Moderate.

Table 4. Group Descriptive between Year Level on Mindful Attention Awareness

	Year Level	\bar{X}	SD	Minimum	Maximum
Mindful Attention Awareness	1 ST Year	3.02	0.199	2.33	3.70
	2 nd Year	3.01	0.234	1.98	3.96
	3 rd Year	3.09	0.265	2.65	3.95
	4 th Year	3.21	0.306	2.88	3.91

Table 5. Group descriptive between department on mindful attention awareness

	Department	\bar{X}	SD	Minimum	Maximum
Mindful Attention Awareness	DAS	3.00	0.296	1.98	3.95
	DTP	3.02	0.210	2.67	3.60
	DCJE	3.06	0.176	2.75	3.70
	DBA	3.07	0.201	2.78	3.96
	DAE	2.98	0.210	2.53	3.36
	DTE	3.03	0.231	2.42	3.91

Table 6. Group descriptive between sex on mindful attention awareness

	Sex	\bar{x}	SD	Minimum	Maximum
Mindful Attention awareness	Female	3.01	0.241	1.98	3.95
	Male	3.06	0.200	2.60	3.96

Table 7. Kruskal-Wallis Analysis between Year Level and Mindful Attention Awareness

	X_2	df	p	ϵ_2
Year levels on Mindful attention awareness	7.25	3	0.064	0.0208

Table 8. Kruskal-Wallis analysis between department and mindful attention awareness

	X_2	df	P	ϵ_2
Department on Mindful attention awareness	5.77	5	0.329	0.0165

Table 9. Kruskal-Wallis Analysis between Sex and Mindful Attention Awareness

	X_2	df	P	ϵ_2
Sex on Mindful attention awareness	4.55	1	0.033	0.0130

Most respondents are in the first-year level, comprising 49.4% of the sample, indicating that the majority of respondents belong to this year's level. There are 36.3% of respondents in the 2nd

year level and 10.3% in the 3rd year level. However, only 4.0% of respondents are at the 4th year level. In terms of department, the majority of respondents, with a percentage of 22.3%, belong to the DTE category, indicating that most respondents are in this category. Additionally, 21.4% of respondents are in the DCJE category, 20.3% are in the DAS category, 14.6% are in the DTP category, 12.9% are in the DBA category, and 8.6% are in the DAE category. The cumulative percentage for the DTP department is 34.9%, indicating that up to that point, 34.9% of the total sample belongs to the DTP department or earlier departments. The uneven distribution of population across different categories in selecting the respondents was due to random sampling and based on the demographic profile of the respondents, which includes sex, year level, and department, to differentiate the difference in the level of mindful attention awareness of the respondents.

This table provides information about different indicators related to mindful attention awareness, along with their respective means (\bar{x}) and standard deviations (SD). "Observing" has a mean score of 3.31 with a standard deviation of 0.697, indicating a relatively moderate level of mindful attention awareness. "Describing" has a mean score of 3.05 with a standard deviation of 0.490, suggesting a moderate level of this aspect. "Acting with Awareness" has a respectable level as well, with a mean score of 2.93 and a standard deviation of 0.671. Once more indicating a moderate level, "Non-Judging of Inner Experience" has a mean score of 2.76 with a standard deviation of 0.698. "Non-Reactivity to Inner Experience" has a mean score of 3.09 with a standard deviation of 0.607, reflecting another moderate level. Overall, these results suggest that respondents exhibit varying degrees of mindful attention awareness across different aspects, with observing, describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience all showing moderate levels. Overall results in Mindful Attention Awareness have a 3.03 mean score and a 0.228 standard deviation, which implies that it has a level of moderate range. Supporting these findings, Hepburn et al. [39] suggest a correlation between higher levels of mindful attention awareness and lower levels of discernible stress, alongside higher levels of subjective well-being. Conversely, lower levels of discernible stress may be associated with greater subjective well-being. The moderate scores on the subscales reflect individuals' ability to stay

present and focused on the current moment without being overly distracted by past or future events. Baer et al. [40] emphasize the importance of mindfulness in relation to the present moment, one's surroundings, and ongoing activities, which aligns with the moderate levels of awareness indicated by the subscale scores. Furthermore, according to Fulwiler et al. [41], people should learn that mindfulness is defined as the practice of accepting and being aware of one's inner and outer experiences in the present moment without passing judgment. This suggests a moderate degree of mindfulness, as opposed to an extreme high or low. Accordingly, the subscale scores' moderate range denotes a suitable degree of mindfulness, according to the guidelines provided by this research.

This table presents the group descriptive of mindful attention awareness in terms of year level. The first year has (\bar{x} = 3.02, SD = 0.199), the second year has (\bar{x} = 3.01, SD = 0.234), the third year has (\bar{x} = 3.09, SD = 0.265), and the fourth year has (\bar{x} = 3.21, SD = 0.306). The result implies the mean of all groups had fallen to a moderate level, where the values of the means were 2.61-3.40. Implying mindfulness attention awareness is sometimes evident at all college levels. Looking at the minimum and maximum value in the descriptive, rank the lowest and highest level of mindfulness attention awareness by year level. The least minimum value was the second-year level, with a value of 1.98; at the same time, it had a maximum value of 3.96. Indicating that the second-year respondents have low and rarely evident mindfulness attention awareness, but at the same time they are likely to have high levels of mindfulness attention awareness that are often evident.

Table 5 shows the group descriptive of mindful attention awareness in terms of departments. Department of Arts and Sciences (DAS) has (\bar{x} =3.00, SD =0.296); Department of Technical Program (DTP) has (\bar{x} =3.02, SD =0.210); Department of Criminal Justice Education (DCJE) has (\bar{x} =3.06, SD =0.176); Department of Business Administration (DBA) has (\bar{x} =3.07, SD =0.201); Department of Accountancy Education (DAE) has (\bar{x} =2.98, SD =0.210); and lastly, Department of Teacher Education (DTE) has (\bar{x} =3.03, SD =0.231). In line with this result, it indicates that the level of mindfulness awareness in different departments is moderate. The minimum and maximum values in the descriptive table were used for ranking the lowest and

highest levels of mindfulness awareness by the department. Having the least minimum value was DAS, with a value of (1.98) suggesting a low amount of mindfulness attention awareness that is rarely evident in this department, and as per the result, DAS is second in the ranking of having the maximum value in MAAS, with a value of (3.95) indicating a high level of MAAS, but DBA was leading. While the maximum value was DBA with a value of 3.96, meaning a high level of MAAS that is often evident in this department.

The table displays the group descriptives of sex in mindful attention awareness. Females have ($\bar{x} = 3.01$, $SD = 0.241$), while males have ($\bar{x} = 3.06$, $SD = 0.200$). Suggesting that both females and males are both at a moderate level in mindfulness attention awareness that is sometimes evident to both sexes. Since both sexes have a value that falls within the moderate level, which has a value of 2.61-3.40, It appears in the table that the maximum and minimum values are used to identify and rank the level of MAAS in sex. Females have the least minimum value (1.98), indicating a low level of MAAS, which is rarely evident, as well as being followed by males with a value of 2.60 in the minimum value ranking. While males are first in ranking the level of mindfulness attention awareness with a value of (3.96) having a high level that MAAS is often evident, followed by females having a (3.95) value also indicating a high level of MAAS. MAAS is more often evident in males, but there is no great difference in females. While females have the least value of MAAS.

In this table, the Kruskal-Wallis test, a non-parametric alternative to one-way ANOVA was used to examine the relationship between the categorical variable "year level" and "mindful attention awareness." The chi-squared ($X^2=7.25$), derived from the Kruskal-Wallis test, serves to assess whether significant differences exist in "mindful attention awareness" across different levels of "year level." The degrees of freedom (df) associated with this test amount to 3. With a corresponding p-value of ($p=0.064$), the results indicate that there is no significant difference in "mindful attention awareness" across year levels, as the p-value transcends the standard significance range of 0.05. The effect size measure, represented by eta-squared (\mathcal{E}^2), further elucidates the proportion of variance in "mindful attention awareness" attributed to differences in year levels, resulting in a value of 0.0208. While this effect size is relatively small, signifying that approximately 2.08% of the

variance in "mindful attention awareness" can be explained by differences in year levels, it implies some meaningful variations across different academic years. Therefore, we accept the null hypothesis and conclude that there is no discernible difference between departmental and mindful attention awareness.

In cases where there is no substantial variation in mindful attention awareness across different grade levels, several studies provide supportive insights. Ramler, Taylor R. et al. [42], emphasize the impact of stress levels on college students' adjustment and well-being, including mindful attention, which could contribute to a consistent level of mindful attention across various academic years. Additionally, Delello et al. [43], discovered that although first-year college freshmen are more likely to multitask than students in higher levels, perceptions of interference or displacement of time spent on other activities do not significantly differ based on college classification, suggesting a potential leveling effect on mindful attention across year levels. Additionally, Gohn et al. [44], identified various factors influencing attrition or persistence among second-year students, including stress adjustment, time management, and grade satisfaction, which could contribute to relatively similar levels of mindful attention awareness across year levels.

In this table, the Kruskal-Wallis test, a non-parametric alternative to one-way ANOVA, was utilized to examine the association of "department" and "mindful attention awareness." The value of chi-squared ($X^2=5.77$). The examination of degrees of freedom ($df=5$) associated with this test suggests no notable difference in "mindful attention awareness" across departments, as evidenced by a p-value of ($p=0.329$), which exceeds the conventional significance level of 0.05. The effect size measure, indicated by eta-squared (\mathcal{E}^2), further reveals that departmental differences account for only a small proportion of variance in "mindful attention awareness," with a value of 0.0165. While this effect size is relatively modest, implying that approximately 1.65% of the variability in "mindful attention awareness" can be attributed to departmental distinctions, it still indicates some meaningful differences among departments. Thus, the null hypothesis is upheld, suggesting no significant difference between departments in terms of mindful attention awareness. This outcome underscores the similarity in mindful attention awareness levels

across various departments. However, researchers identified factors explaining why these departments displayed comparable levels of mindful attention. According to Harris [44], Mace [46], Baer, Smith, & Allen [47], and Kabat-Zinn [48], individuals with high mindfulness tend to observe themselves without judgment, embrace the present moment without dwelling on the past or future, and accept situations beyond their control. Based on these insights, the researchers conclude that the shared high level of awareness and attention to detail among departments account for the lack of significant differences.

This table, Kruskal-Wallis, was used to compare mindful attention awareness to sex to see if there is a significant difference. In the table above, we can see that the chi-square value (X^2) denotes a statistical measure utilized to assess the presence of a significant association between two categorical variables. The table above signifies the outcome of a chi-square test examining the relationship between "sex" and "mindful attention awareness." It has a value of ($X^2= 4.55$). Next, the degrees of freedom (df) represent the count of values in the final statistical calculation that can vary freely. In these results, it is suggested that the degrees of freedom have ($df=1$), typically determined by the variables' categories. The p-value (p) associated with the chi-square test, standing at ($p= 0.033$), indicates a statistically significant association between "SEX" and "MINDFUL ATTENTION AWARENESS" at the common significance level of 0.05. Eta-squared ($\mathcal{E}2$), also viewed in this table as an effect size measure, yields ($\mathcal{E}2=0.013$), implying that roughly 1.3% of the variance in "mindful attention awareness" can be accounted for by "sex." Therefore, we decline the null hypothesis and conclude that there is a significant difference in mindful attention

awareness regarding sex since the p-value is less than 0.05.

Supporting this result is Katz & Toner's [49] meta-study on sex differences in the efficacy of mindfulness-based therapies. The Practices in Mindfulness-Based Cognitive Therapy (MBCT) incorporate a variety of mindfulness exercises and strategies. Some of them include: (1) meditation, which may be led or self-directed and helps people become more aware of their bodies, thoughts, and breathing. (2) mindfulness techniques, which entail increasing awareness of the present moment. While it may be done during meditation, people may also incorporate these techniques into their regular routines. (3) Mindfulness stretching: according to Crane [50], this practice entails stretching with mindfulness to help awaken the body and mind. Furthermore, a person who practices mindfulness is more conscious of her stress reactions, able to keep her composure and equilibrium, and able to respond deliberately rather than automatically going into fight-or-flight mode, which might exacerbate her stress [48]. Additionally, there is a study that explores gender differences in personality traits, confirming prior findings that women tend to score higher on the Big Five of Extraversion, Agreeableness, and Neuroticism than men. However, significant gender differences emerged at the aspect level for each of the Big Five traits, revealing that these differences are more pronounced and varied in the finer aspects of personality. For extraversion, openness, and conscientiousness, the gender differences diverged at the aspect level, resulting in either small or undetectable differences at the broader Big Five level. These findings enhance the understanding of gender differences in personality and emphasize the importance of assessing personality traits at the aspect level [51].

Table 10. Mean Rank of Mindful attention awareness in terms of Sex

	Sex	N	Mean rank
Mindful Attention Awareness	Female	220	110.5
	Male	130	65.5
	Total	350	

Table 11. Dwass-steel-critchlow-fligner pairwise comparison of sex and mindful attention awareness pairwise comparisons- sex and mindful attention awareness

	Sex	W	P
Female	Male	3.02	0.033

This table shows the mean rank of mindful attention awareness in terms of sex. To get the mean rank, first calculate the sum of ranks from 1 to the total number of females. Next, divide the sum of ranks by the total number of females to find the mean rank. These results revealed that the mean rank of females has a value of 110.5, while for males it has a value of 65.5.

Since there are considerable differences based on sex and mindful attention awareness, we employed the Dwass-Steel-Critchlow-Fligner pairwise comparison in this table. Only in cases where there is a substantial difference between the variables do we apply the DSCF pairwise comparison. The following table shows that the p -value ($p=0.033$) and the ($W=3.02$). The "(W)" value represents the test statistic. This statistic is used to assess the magnitude of the difference between groups in pairwise comparisons. The results in the table above suggest that the preferences of males and females differ in mindful attention awareness.

4. CONCLUSION

This study assessed the difference between mindful attention awareness in terms of year level, department, and sex among college students. The study discovered that the majority of responses were from first-year students, with fourth-year students receiving the least. Female students were in the majority, with male students making up the smallest minority. Furthermore, participants were mostly from the Departments of Teacher Education, Criminal Justice Education, and Arts and Sciences, with the least number of respondents coming from the Department of Accounting Education.

Moreover, the level of mindfulness awareness was evaluated using the mean standard deviation. According to the level of mindful attention, the moderate level resulted in: Observing, this signifies the ability to focus attention on perceived internal and external stimuli; Describing, this is the ability to notice or recognize these sensations using language; Acting with Awareness, entails the ability to act or be in the current moment rather than behaving automatically or with an absent mind; Non-Judging of Inner Experience, which signifies the capacity to stop analyzing one's perceptions, connections, and feelings; and Non-Reactivity to Inner Experience, refers to the capacity to let ideas and emotions pass without focusing on them. However, there's a factor to heighten

mindful attention, such as deliberately focusing one's attention on the present moment without judgment, increasing awareness of thoughts, emotions, and surroundings, and developing a strong sense of clarity and concentration, resulting in a more efficient and focused approach to daily tasks. Descriptive analyses were conducted to determine the mindful attention awareness in terms of year level, department, and sex. The findings indicated that respondents demonstrated a moderate level of mindful observation. The normality of the data was assessed using the Shapiro-Wilk test. Differences among variables were examined using one-way ANOVA (Kruskal-Wallis). The analysis revealed a significant difference in mindful attention awareness between sexes but not across departments or year levels. Consequently, the researchers concluded that there is no significant variation in mindful attention awareness across different year levels, indicating that a respondent's year level does not influence their mindfulness as measured by the Mindful Attention Awareness Scale (MAAS). The researchers also recognized that various factors, such as life events, academic pressures, relationship issues, financial difficulties, sleep quality, nutrition, and physical exercise, influence college students' mental health, cognitive functioning, and mindfulness awareness. No significant differences in mindful attention awareness were found across different departments, suggesting that mindfulness levels are not specific to particular academic programs. The study emphasizes the benefits of integrating mindfulness into college programs, which include enhanced academic performance, empathy, a supportive learning environment, reduced stress, improved emotional well-being, fostered critical thinking, and better preparation for future careers. Therefore, the incorporation of mindfulness practices into college curricula is recommended.

5. RECOMMENDATION

The study aimed to evaluate the Mindfulness Attention Awareness of university college students. For educational institutions, this study provides valuable insights that can assist in managing and supporting students, encouraging the implementation of activities and events that highlight the importance of mindfulness for both mental health and overall well-being. Such initiatives should aim to create a safe and supportive environment for students and staff, fostering strong relationships where individuals

feel secure and supported. Teachers can utilize the findings to promote flexible learning approaches that help students navigate mental, emotional, and physical challenges. This can enhance the overall learning experience and support student resilience. For future researchers, the study suggests conducting correlation studies that link mindful attention awareness with psychological well-being, subjective well-being, personality, and motivation. Increasing the sample size to include more gender diversity, including LGBTQ+ individuals, is recommended. Additionally, future research should focus on specific college programs to accurately identify levels of mindful attention awareness within different academic disciplines. This could provide actionable insights and contribute to addressing issues related to mindfulness and overall well-being. The researchers also recommend finding more citations related to department-specific differences in mindful attention awareness, despite the current study finding no significant differences. This could further enrich the understanding of how departmental factors might influence mindfulness among students.

6. LIMITATIONS

Given an average population of 3,868 students within the Davao Region, the study may have a sample size of at least 350. This could have influenced the findings' generalizability to a larger group. In addition, the use of questionnaires as the major data collection method may have presented a problem linked to self-reporting bias, as respondents may have offered responses that they felt were socially acceptable. Furthermore, external influences such as time limits and respondent availability may have influenced the wide range of the data gathered. Recognizing and overcoming these limitations was critical for interpreting the study's results and recognizing the limits to which the findings might be applied.

CONSENT

As per international standards or university standards, respondents' written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

As per international standards or university standards written ethical approval has been collected and preserved by the author(s).

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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