

Facets of Mindfulness and Test Anxiety of Senior High Students: Basis for Strengthening Mindfulness Program

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DOI: 10.29322/IJSRP.10.11.2020.p10703

<http://dx.doi.org/10.29322/IJSRP.10.11.2020.p10703>

Abstract: The study focused on the link between school-based mindfulness program activities using the facets: explaining, observing, reacting with awareness, non-judging, and non-reacting to students' level of test anxiety. Two self-report measures were undertaken through survey questionnaire. The findings showed that through Mindfulness, the students perceived a moderate level of mindfulness in all facets and conversely low level anxiety during examinations period. The hypothesis that mindfulness and level of test anxiety are inversely related was verified in the findings. Therefore, the practice of Mindfulness in school context is perceived to lessen the test anxiety of students and it is recommended on the basis of results by strengthening the program institution through enhancing a formal practice measures that will continue to address anxiety-related factors. Moreover, to provide information on its impact, researchers may uplift the study into experimental type and or a case study design.

Keywords: mindfulness, mindful breathing, correlation, psychology, program

I. Introduction

Test anxiety is an element of draining factor that needs to be dealt with especially for an individual who is under academic pressure; considered to be a widespread concern among schools bringing stressful events interfering students' ability to perform well in exam - even for the most prepared one. This predicament seeks to entail the coping program of the school and one of which is the practice of mindfulness.

The upsurge interest of Mindfulness has reached a far distant as a program from western medicine and clinical settings, workforce, meditation and consequently its immersion to the educational sphere. The word Mindfulness is restricted to practice by enabling the state of self-awareness in a current and non-judgmental manner (Kabat-Zinn, 2003; Chiesa & Malinowski, 2011). Kabat-Zinn, J. (1994) Quoted by Srinivasan (2014), mindful breathing is a way of life, a ritual we indulge in, it's not an abstract state; it's a kind, curious, non-judgmental consciousness we strive to add to every moment we act. Especially attentive breathing makes us more alert and less reactive.

The role of mindfulness applies widely to education (Simbulan, 2016), as Davis and Hayes (2012) described the effects of experience in lowering student anxiety and helping to enhance awareness in the current situation. Moreover, a study by Hoffman et al. (2010) and Kabat-Zinn (2003) measured the effects of mindfulness-based tension control as a mechanism to manage emotion. Results revealed an inverse correlation between awareness and anxiety, as awareness as a relaxation therapy helps mold students to stabilize anxiety, while increasing grades (Hoffman et al., 2010; Baer, et al., 2012; Brown and Ryan, 2003). Furthermore, the use of mindfulness not only helps stressed students during analysis (Kiat Hui, 2018; Srinivasan, 2014), but also demonstrates an increase in memory, less rumination, and more research focus (Davis & Hayes, 2012). In order to endorse the previous results, the researchers initialize the systematic procedure of taking care every day, referring to Srinivasan Guidebook (2014), but prior to the procedure, the researchers performed a survey at the beginning of the first week of school by conveniently sampling fifty students using Nist and

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<http://dx.doi.org/10.29322/IJSRP.10.11.2020.p10703>

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Deihl (1990) measure anxiety assessment and the results are surprisingly saddening having a high level of test anxiety result (overall mean=3.44), which the case engendered to incorporate mindfulness hinging on the facets from Baer (2006) and to evaluate the initiative as basis for strengthening the mindfulness program.

The following queries to be investigated:

1. What is the level of overall mindfulness and test anxiety of senior high school students?
2. Are the scores from facets of mindfulness having a significant difference?
3. Is there a significant relationship between overall mindfulness scores and the level of test anxiety?

II. Framework

The research endeavored to evaluate the relationship between the overall carefulness of the five-facet senior high students (observing, explaining, behaving with understanding, non-judging and non-reacting) and the level of test anxiety of the students. Moreover, the study will be instrumental in contributing knowledge to educators and decision-makers as the basis for wider application in school context.

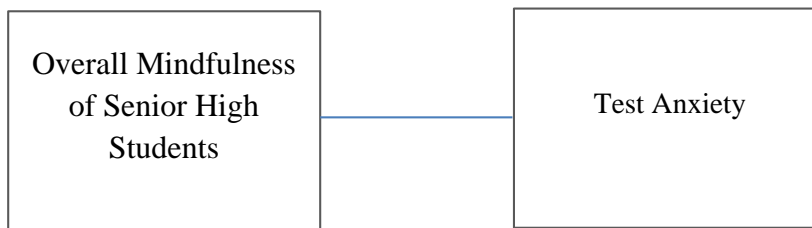


Figure 1. Conceptual Framework

This study postulated the inverse relationship between the practice of mindfulness and level of test anxiety thus, the more conscious students likely to develop less test anxiety.

III. Methodology

The study is a descriptive correlation in nature and employed simple random sampling (n=111 from 152 with 5 percent margin of error) from Humanities and Social Sciences and General Academic strand.

The Five Facet of Awareness Questionnaire (FFMQ) is a psychometric instrument created by Baer et al., (2006) consisting of examining, explaining, behaving with awareness, non-judging and non-reacting to inner experience. The five factors serve as the main elements for assessing the awareness composed of thirty-nine (39) items with five reaction choices: 1 – never or very rarely true to 5 – very often or always true. Build validity was evident in witnessing, identifying, non-judging, and non-reacting aspects (Baer et al., 2006 as quoted by Vonderheyde, E. M. , 2017). Internal consistency also showed reliability (Veehof et al., 2011; Lilja et al., 2011). Moreover, to determine the level of student test anxiety the researchers used questionnaire developed by Nist and Diehl (1990) consisting of ten items, the items have 5 Likert-like format coding: from Never (1) to Always (5). The above tools were validated and accurate by the test-retest methodology in a two-week gap on thirty students to accommodate this analysis.

The school administration obtained a letter for study purposes to conduct the study and collect the necessary data. The study was conducted in July's first semester. Informed consent was obtained from each subject participating in the mindfulness practice and assured anonymity and confidentiality for participants. The FFMQ was conducted two days prior to the preliminary exam with the allotted time between 10-20 minutes together with the inclusion of clarity of instructions. Meanwhile, the test anxiety questionnaire was given the day after the exam. The collection of data covered one week and the responses of the participants of the study were encoded using Microsoft Excel and afterward subjected to statistical analysis using software SPSS version 23.

IV. Results and Discussion

Level of Mindfulness

The result shows that the overall level of mindfulness of students is moderately high (mean = 3.22), which indicates that students are conscious and aware of their feelings and able to control their actions with focus and unveils their ability to accept one's or others emotions without judging.

Table 1. Summary of Mindfulness Facets

Variable	Mean	SD	Verbal Interpretation
1. Observing (O)	3.289	.418	Moderately High
2. Describing (D)	3.240	.463	Moderately High
3. Acting with Awareness (AA)	2.831	.638	Moderately High
4. Non-judging (NJ)	3.386	.792	Moderately High
5. Non-reacting (NR)	3.362	.744	Moderately High
Overall	3.222	.611	Moderately High

Legend: 4.21 - 5.00 Very High/Always true; 3.41 - 4.20 High/Often true; 2.61 - 3.40 Moderately High/Sometimes true; 1.81 - 2.60 Low/Rarely true; 1.00 - 1.80 Very low/Never true

Students' Level of Test Anxiety

As depicted from the table below the overall level of test anxiety of students is 'low' (mean = 2.59), noting that this is contrast to the initial findings prior to the initialization of mindfulness which resulted a 'high' anxiety of students (mean = 3.44). This implies the practice of mindfulness practice helps students to minimize test anxiety.

Table 2. Descriptive Statistics of Test Anxiety

Indicator	Mean	Interpretation
1. I have obvious signs of nervousness just before my test, such as sweaty palms, shaky hands, etc.	2.793	Moderate
2. Before and during exam, I have "butterflies" in my stomach.	2.441	Low
3. Before an exam, I feel nauseated.	2.216	Low
4. I have read the test and feel I do not know the answers.	2.874	Moderate
5. I exhibit panic attack during examination	2.369	Low
6. During an exam, my mind is blank.	2.838	Moderate
7. I recall the details I blanked out after I got out of the exam.	2.523	Low
8. The night before an exam, I have trouble sleeping.	2.892	Moderate
9. I make mistakes with simple questions or placing responses incorrectly.	2.721	Moderate
10. I have difficulties selecting responses.	2.270	Moderate
Overall	2.594	Low

Legend: 4.21 - 5.00 Very High/Always; 3.41 - 4.20 High/Very often; 2.61 - 3.40 Moderate/Sometimes; 1.81 - 2.60 Low/Rarely; 1.00 - 1.80 Very low/Never.

Test of Difference on the Facets of Mindfulness

As shown in the next pages are the facets of mindfulness that are compared using one-way ANOVA. The results vividly show that there is a significant difference among the responses of the respondents from the five facets of mindfulness. In reference to the means of mindfulness in Table 1, students are more mindful in terms of non-judging and non-reacting whilst lower in Acting with awareness.

Table 3. ANOVA Facets of Mindfulness

Source of Variation	SS	df	MS	F	p-value
Between Groups	22.662	4	5.666	14.326**	0.000
Within Groups	217.504	550	0.395		

Note: **p ≤ .01

Correlation between Mindfulness and Test Anxiety

The table below presents test of relationship between five facets of mindfulness and its overall score to the test anxiety of students. For which it can be gleaned that among the facets only Acting with awareness gained low correlation ($r = 0.015$), while the four facets (O, D, NJ, NR) yielded negative correlation whereas also the overall mindfulness resulted in a moderate inverse correlation and significant relationship to the test anxiety. Findings are similar to the study of Brown & Ryan (2003) and Palmer & Rodger (2009) where test anxiety can be minimized through mindfulness. Thus, it can infer that the higher incline for mindfulness the lesser disturbance of test anxiety.

Table 4. Correlation between Mindfulness Scores and Test Anxiety

Mindfulness	<i>r-value</i>	<i>p-value</i>
Observing (O)	-0.204**	0.011
Describing (D)	-0.315**	0.000
Acting with awareness (AA)	0.015	0.853
Non-judging (NJ)	-0.316**	0.000
Non-reacting (NR)	-0.468**	0.000
Overall Mindfulness	-0.511**	0.000

Note: ** $p \leq .01$

V. Conclusions and Recommendations

The findings concluded that students have relatively high knowledge of the non-judging dimension and a significant interaction between the aspects of knowledge except behaving with awareness of the test anxiety. Hence, the more practice of mindfulness leads considerably in decreasing test anxiety for students. In light of the findings, the researchers sought that the practice of mindfulness is a timely program to be included as an anxiety relief for students. The school, through the administrators may continue to hold the practice of mindfulness especially prior to the examination of students. Also, underpinning procedures on the planning enhancement, benchmarking, formulation of guidelines, implementation and regular monitoring of mindfulness program may adhere to the school-wide level. Further, to strengthen the program the expansion of knowledge and skills may be a strong consideration like initiating attending seminars, seeking guidance for practitioners, webinars, symposia, yoga classes for teachers. More research is needed and certainly warranted to support and provide information on the impact of mindfulness as an intervention to anxiety like uplifting the study to experimental and diverse research design and large sample cases.

Acknowledgment

The researchers extend their sincerest gratitude to the administrators of the Tayabas Western Academy for their financial and moral support in the conduct of the study and to Mr. Andrian S. Nollo do for statistically treating the data.

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