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International Journal of Engineering Technology Research & Management

MENTAL TOUGHNESS AND STUDENT ENGAGEMENT IN GRADUATE SCHOOL

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ABSTRACT

The study was conducted to determine which domain of mental toughness best predict student engagement in the graduate school. Moreover, it identifies the level of mental toughness and student engagement, as well as the significant relationship between the two variables. Descriptive correlation method was used in the study and was conducted to 101 students in the graduate school as respondents. Mean, Pearson-r, linear regression were the statistical tools used in the study. Based on the findings, the researchers concluded that the level of mental toughness and student engagement in the graduate school is high. Conversely, there is significant relationship between Mental Toughness and Student Engagement in the Graduate School. Moreover, perseverance as indicator of mental toughness can singly predict student engagement. Finally, mental toughness has significant influence on student engagement in the graduate school.

INTRODUCTION

Mental Toughness is an important individual difference factor that allows individuals to deal effectively with challenges and to persist under pressure. (Clough et al., 2002; Crust and Clough, 2011; Gucciardi et al., 2015).In an academic domain, a tough whole being which comprises physical, emotional, psychological, and mental features are necessary to surface all the tasks and activities being demanded by post-graduate studies. Consequently, graduate school is a setting where mental toughness could play a substantial part. Mental toughness of a graduate student will give one a direction, his natural and developed psychological edge that enables one to cope with the academic pressure and loads affecting his performance in school.

As studied by St Clair-Thompson, etal. (2014), it has been found that there are significant relationships between mental toughness and academic attainment, school attendance, classroom behavior and peer relationships. This proposes that mental toughness, as a construct, endures within education. [1]On the other hand, student engagement at school is a substantial factor of academic performance. As indicated by Lee (2014), student engagement represented academic performance. The affective and behavioral components of student engagement have directly influenced the academic performance of students.[2]

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Mental toughness and student engagement, then, could be related to various aspects of education.However, further research are essential to broaden and develop better comprehension of mental toughness and student engagement in education sector and improve its existing appropriate and useful intervention.

OBJECTIVES

The study aimed to determine which domain of mental toughness best predict student engagement in the graduate school. Moreover, it identifies the level of mental toughness and student engagement, as well as the significant relationship between the two variables.

METHODOLOGY

This study used descriptive correlation method which is appropriate in determining the relationship between mental toughness and student engagement of graduate school students. The study was conducted among 101 students from various universities in Davao City. Adopted questionnaires for mental toughness and student engagement were used in the data collection among the graduate school students. The data collected were gathered and tallied for statistical analysis where Mean, Pearson-r and linear regression were used. In accepting and rejecting the null hypothesis, alpha is set at .05 level of significance.

RESULTS AND DISCUSSION

Level of Mental Toughness of Graduate School Students

Presented in Table 1 is the level of mental toughness of graduate school students and they revealed a high rating of 4.03. This means that the respondents often feel satisfied on the things that they have achieved especially when those are important to them. The respondents often persists until the job is done, excels because of their mental strength, have an optimistic outlook on every situation, believes on one's self no matter of the criticisms and pressure around, and they minimize the effects of stress towards them. Further, students occasionally motivate themselves mentally whatever is appropriate in the situation and not easily distracted when they are handling different tasks.

Table 1. Level of Mental Toughness of Graduate School Students

Indicator	SD	Mean	Descriptive Level
1. Mental Self-Concept	.63	3.88	High
2. Stress Minimization	.61	3.85	High
3. Personal Bests	.55	4.40	High
4. Task Focus	.63	3.62	High
5. Potential	.67	4.01	High
6. Perseverance	.62	4.10	High
7. Value	.65	4.11	High
8. Goal Commitment	.59	4.22	High
9. Positivity	.66	4.10	High
10. Self-Efficacy	.66	4.03	High
Overall	**.44**	**4.03**	**High**

Level of Student Engagement of Graduate School Students

Presented in the Table 2 is the level of Student Engagement of Graduate School Students with a mean rating of 4.16 equivalent to high level. This means that the students often think that learning in school is interesting, participate on extracurricular activities and show a satisfactory behavior at school, try to relate the similarities and differences of the things they learned from school and the things they already know. The results also show that the respondents are eager to learn by making up their own examples to help them understand the important concepts learned from school.

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As termed by Fredricks, Blumenfeld and Paris (2004), manifestations perceived under cognitive engagement include participating in active and collaborative learning through small discussions with classmates, seeking further academic materials, clarifying and asking question to the teachers. Henceforth, there is significant positive relationship between student engagement and greater academic performance. [3]This is supported by the study conducted by Handelsman et al, stating that affective engagement remains to be significant as it gives influence on the students' disposition towards learning. Students with optimistic affective engagement creates an outlook that learning is important which then leads to higher participation on school-related activities and on learning processes. [4]In addition, Hatie and Anderman (2013) stated that students' behavioral engagement precedes greater academic performance and school retention especially to those students who follow the rules and progressively interact with teachers and classmates in school.[5]

Table 2. Level of Student Engagement of Graduate School Students

Indicator	SD	Mean	Descriptive Level
1. Cognitive Management	.55	4.27	High
2. Affective Management	.57	4.11	High
3. Behavioral Management	.55	4.09	High
Overall	**.47**	**4.16**	**High**

Relationships between Mental Toughness and Student Engagement
Presented in Table 3 is the significant relationship between mental toughness and student engagement with the overall R-value of 0.612, with the T-value of 0.000 which is less than 0.05 level of significance. The result is significant and rejection of the null hypothesis. This implies that student engagement in the graduate school is dependent on their mental toughness. This implies further that mental toughness of the graduate school students has to do with their engagement.

Table 3. Relationships between Mental Toughness and Student Engagement

MENTAL TOUGHNESS	STUDENT ENGAGEMENT			OVERALL
	Cognitive Management	Affective Management	Behavioral Engagement	
1. Mental Self- Concept	0.269** (0.007)	0.355** (0.000)	0.201** (0.044)	0.332** (0.001)
2. Stress Minimization	0.183 (0.067)	0.424** (0.000)	0.336** (0.001)	0.379** (0.000)
3. Personal Bests	0.275** (0.005)	0.497** (0.000)	0.406** (0.000)	0.472** (0.000)
4. Task Focus	0.260** (0.009)	0.338** (0.001)	0.328** (0.001)	0.370** (0.000)
5. Potential	0.237* (0.017)	0.465** (0.000)	0.330** (0.001)	0.414** (0.000)
6. Perseverance	0.452** (0.000)	0.583** (0.000)	0.404** (0.000)	0.577** (0.000)
7. Value	0.353** (0.000)	0.537** (0.000)	0.445** (0.000)	0.533** (0.000)
8. Goal Commitment	0.305** (0.002)	0.492** (0.000)	0.407** (0.000)	0.481** (0.000)
9. Positivity	0.335** (0.001)	0.334** (0.001)	0.283** (0.004)	0.380** (0.000)
10. Self-Efficacy	0.272** (0.006)	0.381** (0.000)	0.353** (0.000)	0.403** (0.000)

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OVERALL	**0.417**** (0.000)	**0.620**** (0.000)	**0.492**** (0.000)	**0.612**** (0.000)

Domain of Mental Toughness Best Predicts Student Engagement

Presented in Table 4 is the domain of mental toughness best predicts student engagement in the graduate school. Perseverance is the only domain that can singly predict student engagement as revealed in the T-value of 4.202, with the P-value of 0.000 which is less than 0.05 level of significance. Other domains of mental toughness cannot predict student engagement. The Rsquare value is 0.488, implies that mental toughness can influence student engagement by 48.8%. The variance of 51.2% is attributed to other factors not covered in the study. Finally, mental toughness of students has significant influence to their engagement as reflected in the F-value of 8.59, with the P-value of 0.000 which is lesser than 0.05 level of significance. The Regression Equation predicting student engagement is presented after the table.

According to Mangan (2012), although Perseverance is a non-cognitive trait, it is still necessary to be successful in achieving goals. It is defined as being passionate about your work and resilient in the face of setbacks.[6]Also, Duckworth, et. al (2007) and Duckworth & Quinn (2009) said that it is often associated with "grit" or being defined as perseverance and persistence toward reaching goals.[7][8]A gritty individual's advantage is his stamina for he sees achievement as a marathon.

Table 4. Domain of Mental Toughness Best Predicts Student Engagement

Mental Toughness	Student Engagement		
	Beta	T	P-value
1. Mental Self-Concept	-.075	-.749	.456
2. Stress Minimization	.098	1.003	.318
3. Personal Bests	.240	2.519	.014
4. Task Focus	.092	.942	.349
5. Potential	.062	.631	.530
6. Perseverance	.411	4.202	.000
7. Value	.250	2.304	.024
8. Goal Commitment	-.082	-.658	.512
9. Positivity	.063	.632	.529
10. Self-Efficacy	-.128	-1.122	.265
R- value = 0.699 R^2= 0.488 F-value= 8.590 P-value= .000			

Regression Equation,

$Y = 1.191 - 0.057X_1 + 0.076X_2 + 0.205X_3 + 0.070X_4 + 0.044X_5 + 0.313X_6 + 0.183X_7 - 0.066X_8 + 0.045X_9 - 0.093X_{10}$

CONCLUSION

Based on the findings, the researchers concluded that the level of mental toughness and student engagement in the graduate school is high. Conversely, there is significant relationship between Mental Toughness and Student Engagement in the Graduate School. Moreover, perseverance as indicator of mental toughness can singly predict student engagement. Finally, mental toughness has significant influence on student engagement in the graduate school.

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