



Study Engagement in relation to Academic Stress and Self-Efficacy

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Abstract

Received: 22 Oct 2018

Revised: 30 Oct 2018

Accepted: 18 Dec 2018

Keywords:

Academic stress, self-efficacy, student engagement, stress, work engagement.

Stress is a common phenomena experienced by individuals. Students' in their early years of life start facing stressful situation especially in their studies. Academic stress which received much attention among researchers and findings were useful to the academic community also. Using a descriptive research design with 200 post-graduate students, the investigators examined the influence of academic stress and self-efficacy on study engagement and results revealed that the study variables were significantly correlated each other. It was also found that study engagement significantly influenced by academic stress and self-efficacy. The study recommends while addressing the students' study engagement teachers or any individuals' who is interested should consider the role of academic stress as well as self efficacy.

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Study Engagement is defined as a positive fulfilling state of mind characterized by vigor, dedication, and absorption. Vigor is characterized by high level of energy, the persistent even when encounter difficulties. Dedication is represented by a sense of significance, enthusiasm, inspiration, pride, and challenge. Third, absorption encompasses being fully concentrated and happily engrossed in individuals' study, in which time passes quickly and individuals have difficulties with detaching themselves from study. A recent growing interest in positive psychology emphasizing human strengths, optimal functioning, and well-being have led to the emergence of the concept of study engagement. Study engagement should be carefully cultivated since that disengagement brings serious problems such as weak commitment, high burnout and low performance. Particularly, engagement can be seen as harnessing individual member' selves to their study roles. In contrast, student' study disengagement that causes the uncoupling of their selves from their study responsibility can generate unnecessary problems. Previous evidence indicates that students are more likely to engage in their studies when they have developed a high level of motivation and belief.

Stress is viewed as a negative emotional, cognitive, behavioral and physiological process that occurs as a person tries to adjust to or deal with stressors. Stressors are defined as circumstances that disrupt, or threaten to disrupt, individuals' daily functioning and cause people to make adjustments.

Academic stress is a mental distress with respect to some apprehended frustration associated with academic failure, apprehension of such failure or even an awareness of the possibility of such failure Academic stress is the product of a combination of academic-related demands that exceed the adaptive resources available to an individual. It is widely acknowledged that a student's academic achievement and academic ability depend on both internal and external factors such as proper study habits, intelligence, educational aspirations of self and parents, medium of instruction and so on. If these situations are not conducive for learning .They may lead to academic stress.

Self-efficacy is defined as a self-evaluation of one's competence to successfully execute a course of action necessary to reach desired outcomes. It is a multidimensional construct that tries according to the domain of demands and therefore it must be evaluated at a level that is specific to the outcome domain. Thus, in academic settings, one should measure academic self-

efficacy rather than generalized self efficacy, where academic self-efficacy refers to students' confidence in their ability to carry out such academic tasks as preparing for exams and writing term papers. A large meta-analysis of studies of self-efficacy in academic environments concluded that the most specific academic self-efficacy indices had the strongest effect on academic outcomes, while the more generalized measures were less closely associated. General self-efficacy measures were not found to be predictive of any college outcomes while academic self-efficacy has been consistently shown to predict grades and persistence in college. An extensive body of research has shown that academic self-efficacy is positively associated with grades in college as well as with persistence posits that self-efficacy beliefs affect college outcomes by increasing students' motivation and persistence to master challenging academic tasks and by fostering the efficient use of acquired knowledge and skills. Found a positive association between academic self-efficacy and the number of hours students spent studying.

Enhancing learning and studies to improve the quality has been the aim of academia, teachers and others working in the related area for years. The present study is also a part of the same mission which particularly focuses on the students, their self efficacy, study engagement and academic stress. These variables have been selected because they have been very much related to academic performance and achievement. It is clear from the studies of Salnova (2011), Schaufeli et al. (2002), and Bandura (1997) etc.

The demands placed on the students, and the pressure created has lead to a lot of emotional problems to students, they are undergoing a phase of academic stress which has been considered in the present study. How self efficacy and study engagement is related to academic stress, whether students has to be enhanced with self awareness skills etc. is considered. The study also tries to evaluate the earlier reviews in the western countries about engagement and self efficacy. The study has direct application to the school settings, academics, curriculum framework and even in the clinical setup.

Exploration of role of self efficacy in study engagement may help the intervention programs for students like stress management life skill training self management strategies etc. It will also help in his future career by improving his or her coping skills with stress. The present study can explore and suggest various significance relations that directly and indirectly influence the curriculum itself. Hence curriculum setters and policy makers can use and interpret the significant relations of the selected variables which explains the scope of the study.

Objectives

1. To find out the relationship of study engagement, academic stress and self-efficacy of students.
2. To study the influence of academic stress and self efficacy on study engagement.
3. To study how sex and religion of students affects study engagement.

Hypotheses

1. There will be significant relationship between academic stress, self efficacy and study engagement.
2. There will be significant main and interaction effect of self efficacy and academic stress on study engagement and its components.
3. There will be significant sex and religious difference in study engagement of students.

Method

Participants

The participants of this study consisted of 200 post graduate students studying at Teaching and Research Departments of University of Calicut. Among the participants 100 (50%) were males and 100 (50%) were females. Religious affiliation of participants' was also collected and found that 119 (59.5%) Hindus, 48 (24.0%) Islam, 25 (12.5%) Christian and 10 (5.0%) were

not reported their religion. Among the participants' 78 (39.0%) were 1st born, 78 (39.0%) were 2nd born and 44 (22.0%) were later born.

Instruments

1. Academic Stress Inventory: Academic Stress Inventory developed by Uma and Manikandan (2013) was used to measure the stress experienced by the students in their studies. This inventory consists of 36 items with five point anchors as Strongly agree, Agree, Neither agree, Nor disagree, Disagree, and Strongly disagree. The sum total of the items yields the magnitude of academic stress experienced by the subject. The higher the score, higher the degree of stress experienced. The reliability coefficient Alpha of the inventory was found to be .89. Authors of this inventory claims adequate face validity.
2. Self Efficacy Scale: Self efficacy of subjects was measured using Self Efficacy Scale developed by Schwarzer and Jerusalem (1995). This is a one-dimensional scale which measure how the individuals are perceives their capacities. The scale consists of 10 items. The reliability of the scale was estimated by calculating Cronbach Alpha and it was found to be .87. Authors of the scales claims face validity.
3. Utrecht Work Engagement Scale-S (UWES): Study engagement of students was measured using the 14 item of UWES-S. This scale has good psychometric properties and consists of three sub scales: Vigor (5 items), Dedication (5 items), and Absorption (4 items) (Schaufeli & Bakker, 2003). The sum of all items can be used as an index of total study engagement. The items are rated on a 7 point scale from 0 (never) to 6 (always). The reliability of this was .92 and the scale was said to be reasonable construct validity (Schaufeli & Bakker, 2003).
4. Personal Data Sheet: Personal information like sex, religion, family type, stream of study, and birth order of the participants were collected through the personal data sheet.

Procedure

The participants were directly contacted by the investigators at their study premise and requested to participate in the study. They were informed about the objectives and purpose of the investigation and requested their consent for participating in this study. After getting their consent the three research instruments along with personal data sheet were administered and clarified their doubts regarding marking the answers. Then the instruments were collected back and verified for completeness. The instruments were scored as per the scoring scheme given in the manual and the data were entered in to a spread sheet for statistical analysis and interpretation.

Results and Discussion

The first objective of the study was to find out the relationship among the variables study engagement, academic stress and self-efficacy of students. For this Person product moment correlation was calculated and the results are presented in table 1.

Table 1

Correlation of Academic Stress, Study Engagement and Self Efficacy

Variables	Academic Stress	Vigor	Dedication	Absorption	Study Engagement	Self Efficacy
Academic Stress	-					
Vigor	-.283**	-				
Dedication	-.403**	.598**	-			
Absorption	-.148*	.365**	.390**	-		
Study Engagement	-.368**	.826**	.879**	.671**	-	
Self Efficacy	-.294**	.348**	.522**	.268**	.495**	-

**p< .01

From table 1, it can be seen that Academic Stress is negatively correlated with the variables Vigor ($r = -.283$, $p < .01$), Dedication ($r = -.403$, $p < .01$), Absorption ($r = -.148$, $p < .05$), Study Engagement ($r = -.368$, $p < .01$), and Self Efficacy ($r = -.294$, $p < .01$). The variable Vigor was positively and significantly correlated with Dedication ($r = .598$, $p < .01$), Absorption ($r = .365$, $p < .01$), Study Engagement ($r = .826$, $p < .01$), and Self Efficacy ($r = .348$, $p < .01$). From the table it can be also found that Dedication is positively correlated with Absorption ($r = .390$, $p < .01$), Study Engagement ($r = .879$, $p < .01$), and Self Efficacy ($r = .522$, $p < .01$). Absorption is positively correlated with Study Engagement ($r = .671$, $p < .01$), and Self Efficacy ($r = .268$, $p < .01$). Study Engagement has a significant positive correlation with Self Efficacy ($r = .495$, $p < .01$). From these results it can be assumed that students' beliefs about their capacity to succeed in academic activities was significantly and positively related to study engagement. This implies that when they feel that they have the capacity or ability to perform the act they will be motivated or have more vigor; will be dedicated to their studies and naturally the studies or subject of study will become their part of life. But at the same if they experience stress on their studies in relation to teachers, peers, institution may create disturbances even they have high self-efficacy.

The second objective of the investigation was to find out the influence of academic stress and self efficacy on study engagement. Self-efficacy beliefs influence college outcomes (Bandura, 1993) in such way that it increases motivation and persistence to master the subjects of study. Academic stress, the mental distress associated with some anticipated academic failure may also interfere motivational level of students.

Academic stress and Self-efficacy may be independently or jointly influencing the participants study engagement and its dimensions. Both academic stress and self-efficacy was measured in an interval scale and for categorizing them in to three groups the mean and standard deviation was calculated and using the principle of Mean \pm $\frac{1}{2}$ Sd, three groups were formed. These three groups of academic stress were termed as Low ($n=59$, 29.5%), Average ($n=75$, 37.5%) and High ($n=66$, 33.0%). Likewise the self-efficacy groups were also named as Low ($n=64$, 32.0%), Average ($n=63$, 31.5%), and High ($n=73$, 36.5%). To know the influence of Academic stress and Self-efficacy on Study engagement two-way ANOVA was carried out and the results (F- values only) are presented in table 2.

Table 2

Summary of F- Values of Vigor, Dedication, Absorption and Study engagement by Academic Stress and Self Efficacy (3 x 3)

Source of variance	Variables			
	Vigor	Dedication	Absorption	Study Engagement
	F value	F value	F value	F value
Self- Efficacy	7.92**	25.16**	2.72	17.95**
Academic Stress	2.65	9.99**	2.22	5.46**
Academic Stress x Self Efficacy	2.96*	2.22	0.50	2.46*

* $p < .05$. ** $p < .01$

From table 2, it can be seen that Academic stress and Self-efficacy of the participants were significantly interacting ($F=2.96$, $p < .05$) each other on their vigor and study engagement. The main effects of self-efficacy and academic stress, self-efficacy revealed a significant influence on vigor ($F=7.92$, $p < .01$), dedication ($F=25.16$, $p < .01$), and study engagement ($F=17.95$, $p < .01$). Academic stress showed a significant influence on dedication ($F=9.99$, $p < .01$), and study engagement ($F=5.46$, $p < .01$) but the variable vigor and absorption was not influenced by academic stress. From the table it can be observed that absorption was independent of self-efficacy and academic stress of individuals.

Researchers in this area reported that there is no sex difference exists between male and female on study/work engagement (Sarath & Manikandan, 2014). To confirm the findings of previous researchers, the investigator compared the mean scores of male and female on study/work engagement and the results are presented in table 3.

Table 3

Mean, Sd, and 't' Value of Study engagement by Sex

Variables	Sex	N	Mean	S.D	't' Value
Vigor	Male	100	16.43	4.977	0.76
	Female	100	15.86	5.628	
Dedication	Male	100	19.28	6.349	0.35
	Female	100	18.94	7.272	
Absorption	Male	100	14.43	4.026	0.51
	Female	100	14.74	4.618	
Study Engagement	Male	100	50.14	12.451	0.32
	Female	100	49.54	14.106	

From table 3, it can be seen that the sex of the individual is not a significant factor in determining the study engagement of students'. This implies that both males and females experience same vigor, dedication and absorption in their studies.

Religion affiliation and related practices is still another variable which affect the psychological functioning of human beings. In this study, investigators were interested in religion of the participants and tested the 3 religious affiliation and practices has any significant role in study engagement of students' because the religious practices brings some sort of discipline, psychological makeup, and some other behaviors. To verify whether the three religious groups have any effect on the study engagement, one-way ANOVA was carried out and the results are presented in table 4.

Table 4
One-way ANOVA of Study Engagement by Religion

Variables	Source of Variance	Sum of Squares	df	Mean Square	F
Vigor	Between Groups	95.061	3	31.687	1.13
	Within Groups	5509.734	196	28.111	
	Total	5604.795	199		
Dedication	Between Groups	113.293	3	37.764	0.81
	Within Groups	9118.287	196	46.522	
	Total	9231.580	199		
Absorption	Between Groups	206.373	3	68.791	3.84*
	Within Groups	3514.182	196	17.930	
	Total	3720.555	199		
Study Engagement	Between Groups	733.074	3	244.358	1.39
	Within Groups	34331.806	196	175.162	
	Total	35064.880	199		

* $p < .05$

One-way analysis of variance revealed that among the dimensions of study engagement, absorption was found to be significantly influenced by their religious affiliation ($F=3.84$, $p < .05$). Absorption encompasses being fully concentrated and happily engrossed in individuals' study, in which time passes quickly and individuals have difficulties with detaching themselves from study. All other dimensions of study engagement found to be independent of religious affiliation.

The main findings of the study was Academic stress of the students have a significant negative correlation with Vigor, Absorption, Dedication, Study Engagement, and Self Efficacy. Study engagement and components viz: vigor, dedication and absorption were significantly and positively correlated with self-efficacy. There was a significant main and interaction effect of Self-efficacy and Academic stress on study engagement of PG students. Study engagement was to be high in females.

Conclusion

Students', now a day's experience severe academic stress due to the demand from teachers, parents and even society. If one student fails to attain a certain level of academic achievement people around the individual create a stressful environment. As an individual he/she may have belief about his/her ability. It can be concluded that academic stress and self efficacy of the participants significantly influencing their study engagement. As previous researchers pointed, this study also found no significant difference between males and females on study/work engagement.

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