Relationship between academic performance, self-efficacy & stress with academic burnout

Karim Sevari [1], Mitra Kandy[2]

[1.2] Payame Noor University, PO Box 19395-3697, Ahwaz, Iran
Sevari1347@yahoo.com

Abstract: In this research reviewed relationship between academic performance, self-efficacy & stress with academic burnout in girl and boy students of high school (grade third), area two in Ahwaz city. The students were in different majors. 168 students were selected randomly (84 boys, 84 girls). To collect data we used some parameters as follow: Grade point average, self-efficacy questionnaire of Schwarzer & Jerusalem (2000), depression, anxiety and stress of lovibond & lovibond (1995), and academic burnout of Salmela-Aro, Kiuru, Leskinen,Esko and Nurmi (2009). Analysis of data performed by inferential and descriptive statistics. The results indicated that there was a negative significant correlation between self-efficacy and academic performance with academic burnout. meanwhile there was positive correlation between stress & mentioned variable. Multi-variable regression showed that academic performance and stress had the greatest role in predicting of students academic burnout.

1. Introduction

The investigation showed that burnout variable has developed to the positions and educational textures so it was named as academic burnout (Salmela-Aro, Kiuru, Leskinen, Esko and Nurmi 2009). It can be say that, educational position took into accounts as learners workplace, however the learners don't work as an employee or don't have a special job but according to psychological their curricular and educational activities can be consider as a job (Salmela-Aro, Kiuru, Leskinen,Esko & Nurmi (2009). On the other hand many factors influence the students academic performance negatively. One of the effective factors was academic burnout. Some of the thinkers claimed that absence from school, lack of motivation to complete homework and academic drop all are related to academic burnout. Cordes & Dougherty (1993) suggested that less undertaking, escape working, less creation, low spiritual and less accurate were the results of academic burnout. Academic burnout in educational positions recognizes with characteristics as: tiredness due to requirements of study, sense growth and pessimistic attitude without sensitivity to curricular also weak personal feeling to curricular and education (Salanova, Martinez, Bresö, Llorens & Grau 2005). What factors were associated with academic burnout on this topic were of interest to researchers and every one point to several factors. The following are some of the ideas. Investigations showed that academic performance, including the variables that were correlated with academic burnout. In this direction, a study has been done by Yang (2004) as effective factors on the academic performance and academic burnout, the results showed that there was a significant negative correlation between student's burnout and academic performance.

Self-efficacy is also another factor which is associated with academic burnout. In this base, Evers, Brouwers & Tomic (2002) titled: burnout and Self-efficacy (depersonalization, emotional exhaustion, lack of personal accomplishment) on the four hundred ninety teachers achieved that there was a negative relationship between Self-efficacy and depersonalization also emotional exhaustion respectively meanwhile there was a positive relationship between Self-efficacy and personal outcome. Surveys showed that persons which took high mark in Self-efficacy were affected to less exhaustion. The studies (Brouwers & Tomic 2000, Salanova, Grau, Cifre, & Llorens 2000) indicated that self-efficacy predictive academic burnout. A study in this regard Grau, Salanova & Peiro (2001) titled : self-efficacy mediated the effects of job stress on one hundred and two workers. The results showed that the workers who worked with low-efficacy were more emotional exhaustion. Friedman (2003) in a study titled: self-efficacy and burnout at education on three hundred and twenty – two Israeelian teachers concluded that there was a negative correlation between self-efficacy and burnout. Investigations of Linnenbrink, & Pintrich (2003), Salanova, Martinez, Bresö, Llorens, & Grau (2005) indicated that persons with high self-efficacy showed the higher educational involvement. Schwarzer & Hallum (2008) in the two separate studies from German & Syria (the first on the 1203 teachers and the second on the 458 teachers) about the job stress and exhaustion concluded that there has been a negative correlation between teacher self-efficacy and job stress, emotional exhaustion,

depersonalization and personal result. The studies have done indicated that stress was one of the effective factors on academic exhaustion. In that field, Maslach, Jackson & Leiter (1996) during studies concluded that stress is one of the main predictive of the exhaustion. Schaufeli, & Buunk (2002) in an investigation showed that self-efficacy and perceived stress were significant predictive of academic exhausted. On the other hand, the survey Duran,Extermera, Fernandez-Brocal & Montalban (2006) showed perceives stress was significant predictive of academic exhaustion also the results showed that students who have less stress experience less exhaustion. With this introduction, in this survey investigated some of the predictive factors of academic burnout between male and female students in grade third high school, area 2, Ahwaz. In this research the following hypothesis have been put to test:1.Academic performance negatively predicts academic burnout.2. Self-efficacy negatively predicts academic burnout.3. Stress positively predicts academic burnout5. Academic performance, self-efficacy & stress have multiple relationships with academic burnout.

2. Material and Methods

High school students in grade third, education area 2 were statistical population. Ten high schools (5 girls, 5 boys) from governmental high school and sixteen people were selected randomly. In this research 168 people (84 boys and 84 girls) participated. It is necessary to say that the students were selected among different academic fields (38 mathematic field, 52 science field, 80 art field) and from different areas of the city. To measuring stress we used scale of lovibond & lovibond (1995). The scale included 21 questions (every scale has 7 questions) also established three factors: depression, anxiety and stress. Samani and Jokar (2007) recognized the retest reliability for depression 0.80, anxiety 0.76 and stress 0.77. (cited Fathi Ashtiani and Dastani, 2009). To determine validity of the retest confirmation factor analysis was used in the method of the main component. Meanwhile, In this research we used only stress scale (cited Fathi Ashtiani and Dastani, 2009). In this study to calculate Cronbach alpha was used and established its amount 0.74. Self-Efficacy was measured by Schwarzer and Jerusalem scale(2000). This scale was made by Schwarzer and Jerusalem (2000) and included ten questions translated by Sevari and Borna (2007) also were executed on students Azad university in Ahwaz city. The method of replaying to options was in the form of: Not at all wasn't correct (1), a few was correct (2), mostly was correct (3), completely was correct (4). In this study, took into account of Cronbach alpha 0.70. In order to identification of its value through

accounting correlation with researches question was made the amount got 0.34. In this study Cronbach alpha of the test estimated 0.64. Academic performance means the average total number of completed units. To measure Academic burnout we were used academic burnout questionnaire of Salmela-Aro, Kiuru, Leskinen , Esko & Nurmi(2009). The researchers acquired the questionnaire through factor analysis and it was formed of nine materials and three factors (the first one exhaustion at schoolwork included four materials, the second one cynicism toward the meaning of school included three materials, the third one sense of inadequacy at school included two materials). Salmela-Aro, Kiuru, Leskinen,Esko and Nurmi (2009) used Cronbach alpha for exhaustion at schoolwork 0.80, sense of inadequacy at school 0.80, cynicism toward the meaning of school 0.67, respectively. The questionnaire translated by Sevari (2009) and performed on students of grade third(high school). Cronbach alpha took into account 0.71, to identifying of Schwarzer and Jerusalem (2000) its correlation validity, he used self-efficacy questionnaire. Amount acquired 0.16. The responses were marked in this Form: completely agree (6), agree (5), fairly agree (4), contrary (3), fairly contrary (2), completely contrary (1). In this study, for accounting total stability the Cronbach alpha was used and amount estimated 0.63.

3. Results

The findings regard hypothesis are followed in the table.

Table 1: Correlation Academic performance, self efficacy & stress with academic exhaustion

variables	1	2	3
1.Academic burnout			
2.Academic performance	- 0.173[*]		
3.Self_efficacy	-0.166[*]	0.184	
4.Stress	0.285[**]	-0.146	-0.152[*]

**P < 0.01 *P< 0.05

The table shows that academic performance (r = - 0.173) and self–efficacy (r = -0.166) Predicts academic performance negatively also predicts stress (r =0.285, p=0.01) positively so referring to this research. We confirmed the hypothesis 1 to 3.

The results of regression analysis showed that there was multi correlation index between predictor variables (academic performance, self_efficacy & stress) and academic burnout (MR =0.377) it is significant. All in all, these three predictor variables identify 0.142 variances of criteria variable namely academic burnout. The results regarding regression index showed that through the three predictor variables, academic performance and stress recognize academic burnout variance significantly and other

variables have no role in specifying. So according to the table 2 confirms hypothesis 4.

Table 2. The results of regression and analysis of predictor variables (academic performance, Self–efficacy & stress) with academic burnout

	RS	MR	fp	Regression indexes		
				1	2	3
Stress	0.42	0.64	13.98 0.0001	β = 0.258 T = 3.74 p=0.0001		
Self-efficacy	0.119	0.345	7.02 0.0001	β =0.213 T = -2.74 p= 0.009	β =- 0.160 T = 1.93 p= 0.055	
Academic performance	0.142	0.377	6.41 0.0001	β = 0.204 T = -2.55 p = 0.011	β = - 0.128 T = - 1.69 p= 0.092	β= -0.152 t= -2.039 p=0.043

4. Discussions

In this research, we discussed some of the predictor variables of academic performance in girl and boy students' grade third, high school area two in Ahwaz city. As we implicated before, academic burnout was the most effective factor in academic drop. The results in this study showed that there was a negative and significant correlation between academic performance (sig=0.029، r= -0.173) and academic burnout. The findings of our research and the finding of Yong (2004) were harmonious. Academic drop (low mean) can provide ground for academic burnout. On the other hand by method of low academic performance we can expect the academic burnout. To prevent those phenomena it was better reinforced academic grounds and motivation of students. One of the main and most important topics regarding to teaching is student's academic performance because education and teaching are under usage of student's academic performance. Acording to these results it was better to recommend teachers providing suitable conditions for growth, academic progress, students were given opportunities to learn more. If students have no interest in curriculum issues or contain low level of motivation, didn't pay attention to the teachers expresses, didn't perform their homework with effort and didn't acquire progress so much. Conversely if students were interested in curriculum issues or had a high level of motivation both listen to the teachers expresses and their home work would be done seriously so the students search to earn both and would collect more information on curriculum issued so they afterwards would be improve (Saif ,2004). The persons who had better success, they had better performance and we could train the persons till they change to the persons who need to become more successful and in this way we can improve academic performance.

The second variable that associated with academic exhaustion is self-efficacy. The finding showed that there was a significant negative correlation between self efficacy (sig=0.036, r= -0.166) and academic burnout of students. So these findings were harmonious with Evers, Brouwers & Tomic (2000) Salanova, Grau, Cifre & Llorens (2000), Schwarzer & Hallum (2008), respectively. Since, self-efficacy is one of the variables of academic burnout. So; we must strength and develop this variable. According to this research we have to identify the students with low self-efficacy and plan the educational meetings to combating that kind and train the students.

The results of the research showed that there was a positive correlation between stress (sig= 0.0001, r = 0.285) and Academic burnout. According to the findings of this research, there was harmonious between this research and Maslach, Jackson, & Leiter (1996), Schaufeli & Buunk (2002). The research evidences can be saying that stress was one of the most effective factors in creating academic burnout. A student must perform homework and several duties, which its fulfillment necessitous was to have adequate facilities and sources. If school homeworks were so much and individual didn't have ability to perform them he/she set against stress and his/her ability reduced to performed homework.

The results of multivariable showed that there was multi correlation between predictive variables (academic performance, self-efficacy & stress) and academic burnout (MR= 0.377) that it was significant in p < 0.0001 and the amount of that was more than easy index correlations also the amount of every variable was more than academic burnout. Results regarding regression indexes in the last line of the table showed that among the three predictor variables, school mean and stress identify academic burnout variance significantly also other variables didn't have the role in specify it. On the other hand, after recognizing individuals the consultant center can introduce them to the specialized centers of psychological consultation to take consultation help and reduce their involvement to academic burnout also to decreasing and preventing of occurring academic burnout students train till they have more active role in the social and more social relationship with others.

Corresponding Author:

Dr. Karim Sevari
Department of Educational psychology, Payam Noor University of Ahwaz, Iran

E- Mail : Sevari1347@yahoo.com

References:

1. Brouwers, A. & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self-efficacy in classroom management. Teacher and Teacher Education, 16, 239-253

2. Cordes, C.L., & Dougherty, T.W. (1993). A review and integration of resource on job burnout. Academy of Management Review 18 (4), 621–656

3. Duran,A . Extermera , L .Fernandez-Brocal & Montalban, M. (2006). Predicting academic burnout and engagement in educational settings: Assessing the incremental validity of perceived emotional intelligence beyond perceived stress and general self-efficacy. Psicothema18, supl.,158-164.

4. Evers, W.J., Brouwers, A., & Tomic, W. (2002). Burnout and self-efficacy: a study on teachers' beliefs when implementing an innovative educational system in the Netherlands. British Journal of Educational Psychology, 71, 227-243.

5. Fathi Ashtiyani,. Ali & Dastani,. Mahboobeh. (2009). Psychological tests,Tehran.Bessat.

6. Friedman ,Isaac A. (2003). Self-Efficacy and Burnout in Teaching: The Importance of Interpersonal-Relations Efficacy. Social Psychology of Education,6,3 , 191-215.

7. Grau,R ,. Salanova,M & Peiro , J. (2001). Moderator effects of self– efficacy on occupational stress . Psychology in Spain,5. 1, 63-74.

8. Lovibond,P,.F,. & Lovibond.,S,H. (1995). The structure of negative emotional states: Comparison of the Depression, Anxiety & Stress Scale (DASS) with the Beck Depression & anxiety. Inventories.Behavior Research & Therapy. 33(3): 335-343.

9. Linnenbrink, E.A. & Pintrich, P.R. (2003). The role of self-efficacy beliefs in student engagement and learning in the classroom. Reading and Writing Quarterly, 19, 119-137.

10. Maslach, C., Jackson, S.E., & Leiter, M.P. (1996). Maslach burnout inventory manual (3rd edition). Palo Alto, CA: Consulting Psychologists.

11. Saif, AliAkbar. (2004). Training psychology.Tehran. Agah publication.

12. Salanova, M., Martinez, I., Bresó, E., Llorens, S., & Grau, R. (2005). Bienestar psicológico en estudiantes universitarios: facilitadores y obstaculizadores del desempeño académico. Anales de Picologيa, 21, 170- 180.

13. Salanova, M., Grau, R.M., Cifre, E., & Llorens, S. (2000). Computer training, frecuency of usage and burnout: the moderating role of computer self-efficacy. Computer in Human Behavior, 16, 575-590.

14. Salmela-Aro, Katariina, Kiuru ,Noona, Leskinen,Esko & Nurmi, Jari-Erik. (2009). School-Burnout Inventory (SBI). European Journal of Psychological Assessment , 25(1):48–57

15. Schaufeli, W.B. & Buunk, B.P. (2002). Burnout: an overview of 25 years of research and theorizing. In M. Schabracq, J.A.K. Winnubst and C.L.

1. 16.Schwarzer, Ralf & Hallum,.Suhair. (2008). Perceived Teacher Self-Efficacy as a Predictor of Job Stress and Burnout: Mediation Analyses. Applied Psychology : An International Review, 57, 152–171.

16. Schwarzer, R., & Jerusalem, M (2000). General perceived self- efficacy scale , retrieved from www.fuberline .gesund/skalen/language – selection / Turkish General perceived self efficacy/hauptteil general perceived self efficacy . htm.

17. Sevari, karim. (2009). Validity of Academic burnout questionnaire. Unpublished research.

18. Sevari, karim & Borna, Mohhamadreza. (2007). Investigation of relationship between percieved self-efficacy, self-esteem and depression with academic average of students in Azad University of Ahwaz.

19. Yang , Hui-Jen (2004). Factors affecting student burnout and academic achievement in multiple enrollment programs in Taiwan's technical–vocational colleges . International Journal of Educational Development 24, 283–301.

9/20/2012