

INVESTIGATING THE DETERMINANTS OF STUDENT ACADEMIC PERFORMANCE: A STUDY ON COMILLA UNIVERSITY

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Abstract:

This study seeks to investigate firstly to recognize the institutional and significant competences (influencing factors) that have allowed students to achieve better academic performance, and secondly, the interrelationship between student academic performance and the influencing factors. This study identified social support, student psychology, and self-esteem as determinants of academic performance of students. If it is true, students should concern about self-reliance, and sound mental health. Educational institutions should ensure proper educational support and environment. Families as well as society should concern about family and social relationship and environment. Theoretical framework and hypotheses have been developed by considering the positive relationship of determinants and outcome of academic performance of students with the support of relevant theories and existing literatures. Data were collected from one public university namely, Comilla University through questionnaire survey. Principal component analysis (PCA) and structural equation modeling (SEM) including confirmatory factor analysis (CFA), and path analysis were applied to assess the reliability and validity of models and test the proposed hypotheses of the study. The empirical results provided supportive evidence in favor of the hypotheses and theoretical arguments. The study found positive relationships among social support, student psychology, self-esteem, and academic performance of undergraduate level students.

Keywords: Social support, student psychology, self-esteem, and academic performance

Introduction

When students enroll in undergraduate or post-secondary level of education, they experience extensive pressure and there is a chance to decline their academic performance. Some factors like social support, student psychology, and self-esteem have a significant influence on their academic achievement. Social support and psychology (mental health components) is considered predicting components of academic achievement

(Karimi et al., 2012; Mackinnon, 2012).

Generally, it is assumed that social support and students' psychological condition have a direct influence on academic performance. On the other hand, self-esteem, which is defined as own evaluation about oneself has a mediating role between social support, psychology, and academic performance (Kinnunen, et al., 2008). Different factors like motivation, learning style, economic and social conditions, parenting style have been taken under

consideration for student performance in several studies (Lounsbury, et al., 2004; Mackinnon, 2012; Zakeria and Karimpour, 2011). But, one of the important elements is self-esteem that is supported by perceived social support and psychology has influence on students' academic performance.

Social support is positively associated with student academic performance. Social support is categorized as perceived and received. Social support may economical, informational, instrumental, or emotional (Ikiz and Cakar, 2010). Whatever the category of support, it is crucial for a higher level of self-confidence and higher level of academic achievement. Higher level of self-confidence i.e., self-esteem provide courage to cope with a challenging event. Consequently, people can achieve their desired goals. To build a strong mindset it is necessary to have a sound mental health and high morale (Kinnunen, et al., 2008). Academic performance is not only the result of environmental and economical or instrumental supports, but also the consequent of psychological aspects of individuals (Karimi et al., 2012). Sound mental health is supportive for self-esteem as well as has an impact on students' academic performance.

There is a growing literature suggesting that psychosocial variables such as self-esteem are actually outcomes, rather than antecedents of academic achievement (Baumeister et al., 2003). But, in this study, psychology and self-esteem have been taken as the predictors of academic performance of students. Because if the mental health and confident level are not in expected level people can't do or achieve what they expect. In this study, attention is devoted to developing a relationship among social support, student psychology, self-esteem, and

student academic performance. The interrelationship of social support, student psychology, self-esteem, and student academic performance are introduced as a new approach for research in performance evaluation of students. The influences of social support and student psychology on student academic performance are also a matter of consideration. Two main questions in this study are:

(1) What are the influencing factors of student academic performance?

(2) What is the interrelationship between student academic performance and the influencing factors?

Theoretical arguments and hypotheses development

Social support can be defined as the supports that are accessible or obtainable to an individual (Hupcey, 1998) or a student. It is changeable, and over time it's changed rather it is stable (Bergeman, et al., 2001). It can be economical, informational, mechanical, or affecting (Ikiz and Cakar, 2010). Self-esteem is defined as the self evaluation of oneself (Kinnunen, et al., 2008). Self-esteem shows our level of confidence towards our thinking, coping with challenges, success, happiness, deserves, and enjoying the available benefits. Supportive social relationship ensures the benefits like morale, health, and coping. Consequently, high social support is related to high self-esteem (Kinnunen, et al., 2008). High self-esteem facilitates to build a social relationship. On the other hand, interaction between parent and children i.e., parenting style is associated with children self-esteem (Zakeria and Karimpour, 2011). When financial, instrumental, and other facilities are available students get confidence on

their own mind. These facilities also improve the academic performance of students. Any negative or challenging event can be managed through sufficient social support (Mackinnon, 2012). Strong internal commitment, performance-oriented culture, and leadership are more significant for individual's performance (Mansor, et al., 2012). Friendly relationship among students also fosters to achieve their expected academic goals. Thus, I posit:

H1: There is a positive relationship between social support and student self-esteem.

H2: There is a positive relationship between social support and student academic performance.

Psychology is expressed through human thinking and behavior. It is the combination of human thoughts, emotion, and behavior. It encompasses an inclusive perceptive of affecting issues at the deep core level which carries about physical condition, pleasure and functionality in the human. Self-esteem, anxiety and motivation are affected by psychological factors (Juuso, 2011). The dimensions of psychology such as consciousness, extroverted, agree-ability, and emotional stability have influence on the extent of self-esteem. Morosanu (2012) and Kinnunen, et al. (2008) found psychometric symptoms predict the extent of self-esteem of an individual. On the other hand, psychological aspects such as personality flecks and learning styles have a crucial effect on student academic achievement (Karimi et al., 2012). And the function of personality is greater than the intelligence in the

domain of academic performance. Psychologically sound i.e. more conscious, extrovert, and emotionally stable people can perform better than those who are psychologically weak (Morosanu, 2012). They get motivation to engage in learning, and consequently improve in academic performance. Even, there is a positive impact of school psychological services on student academic performance. Therefore, I Propose:

H3: There is a positive relationship between student psychology and student self-esteem.

H4: There is a positive relationship between student psychology and student academic performance.

Self-esteem is internal conviction organism that values oneself. It shows how much an individual values, approves, prizes, or likes him or herself (Blascovich and Tomaka, 1991). This self-evaluating factor has an influence on emotions, expectation, thinking process and performance attainment (Rahmani, 2011). High self-esteem increases individual's, initiatives and creates happiness. High self-esteemed people are more attentive in their assigned job and become reliable than the people having low-esteem (Baumeister, et al, 2003). Self-esteem is a critical issue sometimes it is a predictor of better performance, sometimes better performance ensure high self-esteem. Positive outcomes and benefits are the consequent of self-esteem (Baumeister, et al, 2003; Kinnunen, et al., 2008). So, I predict:

H5: There is a positive relationship between student self-esteem and student academic performance.

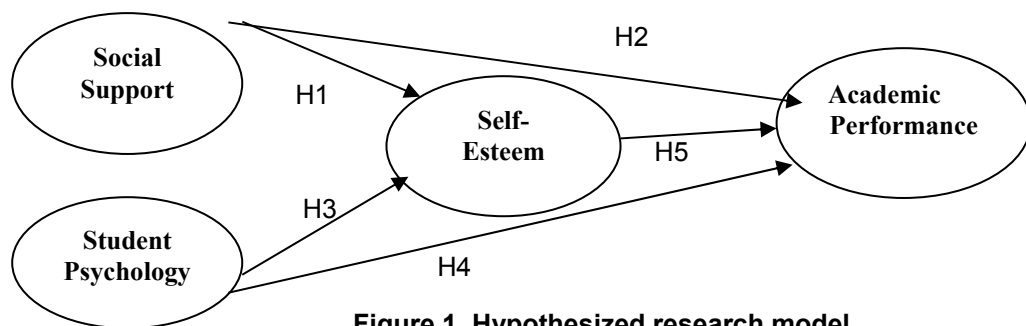


Figure 1. Hypothesized research model

Research design and methodology

Survey instrument

To test hypotheses a questionnaire survey method was used to collect data. Two rounds survey was conducted under this research endeavor most of the measurement items were from existing literatures. Some items were directly adopted from previous survey instrument to operationalize the constructs in this study. Many new items also included in different constructs to get a good response from data collection through survey. I have taken ideas from different scholars' studies and develop items for constructs in some cases. In the survey, a mapping rule has been defined i.e. a scheme for assessing numbers to represent aspects of the event for being measured (Cooper et al., 2012). All constructs were measured using multiple items by a seven point Likert-type scale (1= strongly disagree, 2= disagree, 3= moderately disagree, 4= neutral, 5= moderately agree, 6= agree, and 7= strongly agree).

Data and sample

First round test was conducted with 74 responses from undergraduate level students of Department of Accounting & Information Systems in Comilla University, Bangladesh, out of which 63 percent was male and 37 percent was female students. They were asked to fill the questionnaire and to provide comments of the wording of the measurement items. Principal component analysis (PCA) with a Varimax rotation was conducted on the preliminary sample. Table-2 presents the factor analysis result of first round survey. Cut-off point as 0.40 (suppress absolute value less than 0.40) was imposed in factor analysis. Based on the result principal component analysis (PCA) and suggestions from the preliminary survey one item (V14 was deleted) that belongs to 'self-esteem' construct was removed from the final questionnaire and one item belongs to 'academic performance' was modified. Then final questionnaire was prepared for second round survey containing total 17 items. Table-1 presents the summary of descriptive statistics of first round survey.

Table 1

Summary statistics of preliminary survey

Constructs	No. of items	Mean	SD	α
Social support	4	4.976	1.212	0.838
Student psychology	6	6.020	0.785	0.831
Self-esteem	5	5.970	0.708	0.678
Academic performance	3	3.995	0.974	0.565

SD = standard deviation; α = cronbach alpha; overall α = 0.777

Table 2

Result of factor analysis (preliminary survey)

	Social support	Student psychology	Self-esteem	Academic performance
V1	0.788			
V2	0.831			
V3	0.854			
V4	0.789			
V5		0.596		
V6		0.612		
V7		0.909		
V8		0.678		
V9		0.651		
V10		0.838		
V11			0.929	
V12			0.545	
V13			0.761	
V14				
V15			0.914	
V16				0.418
V17				0.858
V18				0.822
Eigenvalue	4.411	2.724	2.180	1.706
Variance explained (%)	24.50	39.64	51.75	61.22

Notes: Principal component analysis (PCA) is performed on preliminary sample; factor loadings less than 0.40 are not shown

In the second round, the formal survey was conducted on undergraduate level students of 14 departments of Comilla University. Total 520 questionnaires were distributed among the students (1st to 10th top CGPA holders of each department as well as each batch) of Comilla University. 492 complete and usable responses were received

(response rate is 95 percent). Fifty-two percent (52 percent) respondents were men and forty-eight (48 percent) percent were female students. 26 percent respondents were up to twenty years, and 74 percent were above twenty years old.

Analyses and results

Structural equation modeling software (AMOS 17.0) was used to analyze data by applying structural equation modeling that includes measurement model or CFA model and structural model. The measurement model provides reliability and validity of constructs that comprises convergent validity, discriminant validity, and nomological validity. The confirmatory factor analysis (CFA) was conducted to do validity analysis, and then structural model based on path analysis method was conducted to test hypotheses of this study. Before that, an iterated factor analysis with principal component analysis (PCA) with a Varimax rotation

was conducted on formal three groups of sample. As a conservative heuristic, cut-off point as 0.50 (suppress absolute value less than 0.50) was imposed in factor analysis. This process results in a four factors model. Items with a factor loading less than 0.50 (if any) were deleted. It is notable that all calculated alpha values are above the widely recognized rule of thumb of 0.70 (Nunnally, 1978), that expresses a robust internal consistency among items within each construct applicable for the each group of sample responses also. Table-3 shows the rotated factor loadings and their respective eigenvalues and cronbach alpha values.

Table 3

Result of factor analysis

	Social support	Student psychology	Self-esteem	Academic performance
V1	0.763			
V2	0.732			
V3	0.843			
V4	0.836			
V5		0.860		
V6		0.862		
V7		0.820		
V8		0.802		
V9		0.808		
V10		0.749		
V11			0.861	
V12			0.849	
V13			0.884	
V14			0.816	
V15				0.841
V16				0.879
V17				0.851
Eigenvalue	6.941	2.853	1.965	1.246
Variance explained (%)	40.83	57.62	69.18	76.51
Cronbach alpha	0.843	0.920	0.932	0.893

Measurement model

To have a more rigorous interpretation of determinants of student academic performance as a whole than is provided by the principal component analysis (PCA), confirmatory factor analysis (CFA) was conducted on data. According to Olorunniwo et al. (2006) "One additional advantage of using one sample for the exploratory factor analysis and a different sample for the confirmatory factor analysis is to reduce the likelihood of capitalizing the factors on chance characteristics of the same sample, which may lead to a final model that will not necessarily generalize to other samples". To have these advantages and guided by the above analysis, a confirmatory factor (CFA) analysis was performed on the broader sample. CFA was performed for the full model that consists of all the constructs of the study. By using AMOS 17.0 software, the proposed measurement model was estimated. The ability of the hypothesized factor model to reproduce the sampled data is statistically tested by confirmatory factor analysis (Nusair and Hua, 2010). Since a model is a theoretical representation, the proposed measurement model was specified before data collection expecting the model should be confirmed with sampled data. Based on the existing literature and empirical support the measurement model was specified that involves, identifies and determines the relationships of variables with the models. In this case, all parameters were and estimated from observed data

and were to be non-zero. Before specifying the structural models parameters of the measurement models were estimated through confirmatory factor analysis (CFA).

To what extent theoretical model is supported by the collected data is examined to evaluate the overall model fit. To evaluate the goodness-of-fit of the measurement model several measures of indices are used as suggested by Iacobucci (2010), Schumacker (1992): Chi-square/degrees of freedom (χ^2/df) ratio, root mean-square error of approximation (RMSEA), goodness of fit index (GFI), normed fit index (NFI), comparative fit index (CFI), incremental fit index (IFI). χ^2/df ratio, root mean-square error of approximation (RMSEA), and goodness of fit index (GFI) are included in absolute fit measures. On the other hand, normed fit index (NFI), comparative fit index (CFI), and incremental fit index (IFI) are considered as incremental fit measures. To analyze the measurement model maximum likelihood estimation was used. To evaluate the overall model fit, the goodness-of-fit measures were used. As Table-4 shows in case of respondents of Comilla University: $\chi^2/df = 2.530$, RMSEA = 0.056, GFI = 0.967, NFI = 0.979, CFI = 0.987, and IFI = 0.987. Therefore, CFA model can be said proper fit models. After achieving proper fit indices, the measurement model was further assessed for reliability and validity (convergent, discriminant, and nomological validity).

Table 4

Goodness of fit statistics for measurement model

	CFA model values	Suggested values
Absolute measures		
χ^2/df	2.530	<3
RMSEA	0.056	<0.06

GFI	0.967	>0.90
Incremental fit measures		
NFI	0.979	>0.90
CFI	0.987	>0.90
IFI	0.987	>0.90

Item reliability and construct reliability are the two levels of reliability analysis (Nusair and Hua, 2010). The amount of variance in an item because of underlying construct is indicated by item reliability. Standardized loading greater than 0.70 demonstrate item reliability, but standardized loadings ≥ 0.50 are also acceptable (Chin, 1998; Hair et al., 1998). For construct reliability, value ≥ 0.70 is required that intends to the degree to which an observed variable reveals an underlying factor. Table-5 presents the item reliability and construct reliability results. Construct reliability is similar to

cronbach alpha which provides the internal consistency of items measuring each CFA construct. In table-5, standardized loadings ranged from 0.583 to 0.935 are indicating good item reliability of the measurement model. The construct reliability was 0.79 for social support, 0.90 for student psychology, 0.93 for self-esteem, and 0.90 for academic performance constructs respectively. All values of construct reliability were above the threshold value (i.e. 0.70) indicating a high level of reliability for all the constructs of the measurement model.

Table 5

Measurement model results

Constructs and variables	Standardized loadings	t-statistics	Construct reliability (CR)	Average variance extracted (AVE)
Social support				
V1	0.694	12.142**	0.79	0.51
V2	0.781	11.515**		
V3	0.765	12.562**		
V4	0.583	9.696**		
Student psychology				
V5	0.824	18.744**	0.90	0.61
V6	0.789	17.947**		
V7	0.685	14.673**		
V8	0.798	17.523**		
V9	0.818	18.060**		
V10	0.753	16.088**		
Self-esteem				
V11	0.864	21.992**	0.93	0.77
V12	0.883	22.469**		
V13	0.897	22.983**		
V14	0.862	21.675**		
Academic				

performance	0.824	22.419**		
V15	0.935	26.377**	0.90	0.74
V16	0.823	22.011**		
V17				

**Indicates significance at $p < 0.01$ level.

$CR = \frac{\sum \text{Standardized loadings}}{\sqrt{[\sum \text{Standardized loadings}]^2 + \sum (\text{measurement indicator error})}}$

$AVE = \frac{\sum (\text{Standardized loadings})^2}{[\sum (\text{Standardized loadings})^2 + \sum (\text{measurement indicator error})]}$

After being assured that a scale instrument provides necessary levels of reliability, this study stepped to scale validity. Representation of concept of interest accurately is measured by scale validity (Fornell and Larcker, 1981; Hair et al., 2010). Content validity and construct validity are the two prominent types of validity analysis. Except four items (four items were developed by taking the concepts from existing literatures) thirteen items of measurement items of the questionnaire were from existing literatures; therefore they have good content validity (Su et al., 2008). Under construct validity convergent validity, discriminant validity, and nomological validity was tested in this study. The degree to which dimensional measures of the same concept are correlated is assessed by convergent validity. According to Nusair and Hua (2010) "High correlations indicate that the scale instrument is measuring its intended construct. Thus, items of the scale instrument should load strongly

on their common construct". To assess convergent validity average variance extracted (AVE) is used (Fornell and Larcker, 1981; Hair et al., 1998). Representation of latent constructs by items is truly denoted as higher as the average variance extracted is higher. For latent construct the average variance extracted (AVE) should be more than 0.50 (Hair et al., 1998). Table-5 shows the average variance extracted (AVE) values for constructs of the measurement model ranged from 0.51 to 0.77. All average variance extracted (AVE) values of the model exceeded the threshold value 0.50, supportive evidence for convergent validity. Moreover, in a CFA setting, t-statistics related to factor loadings is assessed to measure convergent validity (Rao and Troshani, 2007). All items of the measurement model offers good measures to their respective latent construct because of all t-statistics values are statistically significant at 0.01 level and confirmed convergent validity of the constructs.

Table 6

Squared correlations between constructs

	Social support	Student psychology	Self-esteem	Academic performance
Social support	0.51**			
Student psychology	0.17	0.61		
Self-esteem	0.14	0.17	0.77	
Academic performance	0.13	0.06	0.29	0.74

**Diagonal elements are average variance extracted (AVE)

Discriminant validity measures degree to which indicators of constructs are discrete. In the three CFA models, different constructs are used. If different constructs provide low correlation coefficient with each other, represent measures of discriminant validity theoretically. Thus, discriminant validity is indicated by a low inter-construct correlation (Nusair and Hua, 2010). Average variance extracted (AVE) is used to assess discriminant validity (Fornell and Larcker, 1981). The role of thumb is that the average variance extracted (AVE) values should be greater than corresponding squared inter-construct correlation estimates (SIC) in the model. Table-6 shows the average variance extracted (AVE) estimates in the diagonal values and corresponding squared inter-construct correlation estimates (SIC) values of the measurement model, supportive evidence for discriminant validity. For example, average variance extracted (AVE) estimate for social support was 0.51 and corresponding squared inter-construct correlation estimates (SIC)

values were 0.17, 0.14, and 0.13 for student psychology, self-esteem, and academic performance respectively, an indication of discriminant validity. Whereas, self-esteem shown high discriminant validity from all other constructs as the highest average variance extracted estimate (i.e. 0.77).

Nomological validity estimates sense of correlations of inter-constructs. In the measurement model if the correlation coefficients provide justified estimates for all constructs of the model, indicate nomological validity. To assess nomological validity correlation coefficients among the constructs are used. The constructs must be positively related based on theoretical arguments of student academic performance, which demonstrated nomological validity of the measurement model. Table-7 shows four constructs of student academic performance with positive correlations those are significant at $p < 0.01$ level, supportive evidence for nomological validity.

Table 7

Correlation matrix for all exogenous and endogenous variables**

	Social support	Student psychology	Self-esteem	Academic performance
Social support	1.00			
Student psychology	0.42	1.00		
Self-esteem	0.37	0.41	1.00	
Academic performance	0.37	0.25	0.54	1.00

**All correlation coefficients are significant at $p < 0.01$ level

Structural model

To analyze multivariate data, structural equation modeling (SEM) is used widely in academic research with a confirmatory factor analysis approach (Hair et al. 1998). SEM provides

interrelationships of latent variables by estimation results. The theoretical arguments can be expressed visually through path analysis. Figure-2 shows the diagram corresponding to the theoretical framework of this study. The

measured indicator and the corresponding paths are in the figures. In this figure, two exogenous constructs (i.e. social support, and student psychology) and two endogenous constructs (i.e. self-esteem, and academic performance). Endogenous constructs are influenced by exogenous constructs and considered the outcome based on the hypotheses of this study and also determined by constructs included in the models. For example,

social support and student psychology influence on self-esteem as well as on academic performance of student ([H1, H3], and [H2, H4]). Simultaneously, self-esteem itself influences academic performance (H5). This is the important advantage of SEM that tests multiple hypotheses (including predictor and outcome) simultaneously. This is not possible in a single regression model, where model is bounded by one dependent variable.

Table 8

Goodness of fit statistics for structural model

	Structural model values	Suggested values
Absolute measures		
χ^2/df	2.056	<3
RMSEA	0.046	<0.06
GFI	0.976	>0.90
Incremental fit measures		
NFI	0.985	>0.90
CFI	0.992	>0.90
IFI	0.992	>0.90

The overall model fit of the structural model of this study was assessed using multiple fit indices as suggested by Hair et al. (1998), Iacobucci (2010), and Schumacker (1992). Chi-square/degrees of freedom (χ^2/df) ratio, root mean-square error of approximation (RMSEA), goodness of fit index (GFI), normed fit index (NFI), comparative fit index (CFI), and incremental fit index (IFI) were used to assess the goodness-of-fit of the structural model. Table-8 shows $\chi^2/df = 2.056$, RMSEA = 0.046, GFI = 0.976, NFI = 0.985, CFI = 0.992, and IFI = 0.992. Goodness-of-fit statistics

indicated that the structural model also behaved as like measurement model. Hence, the structural model's estimates are above the all suggested values. Therefore, the structural model can be regarded as perfect fit model.

Hypotheses testing

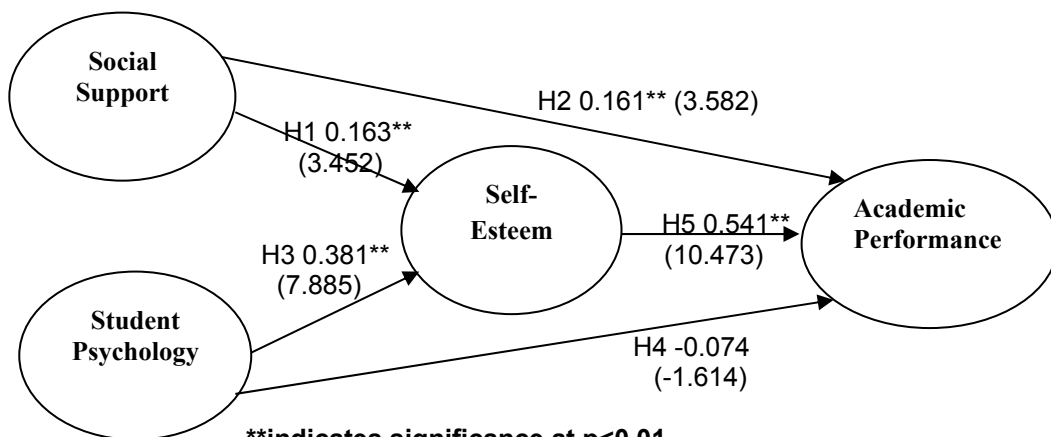
The hypotheses of this study were stated in section 2 based on existing literatures. Those hypotheses were drawn based on the theoretical framework and theoretical arguments of determinants of student academic achievement. Using path analysis statistical significance of hypotheses was tested.

Table 9

Empirical results of the proposed structural model

Casual path	Hypotheses	Path coefficient	t-statistics	Results
Social support → Self-esteem	H1	0.163**	3.452	Supported
Social support → Academic performance	H2	0.161**	3.582	Supported
Student psychology → Self-esteem	H3	0.381**	7.885	Supported
Student psychology → Academic performance	H4	-0.074	-1.614	Not supported
Self-esteem → Academic performance	H5	0.541**	10.473	Supported

**indicates significance at $p < 0.01$ level



**indicates significance at $p < 0.01$

Displayed standardized coefficients values and their t-values in brackets

Figure 2. Outcome of hypothesized structural model

Table-9 depicted the empirical results of proposed hypothesized structural model. The significant path coefficients along with hypotheses and t-values of the latent constructs are visualized in Figure-2, where hypotheses were drawn in the solid lines. In the structural model, social support positively influenced self-esteem, and academic performance of students (support for hypotheses H1, and H2, where $p < 0.01$ level). The standardized path coefficient of social support to self-esteem was 0.163, and

social support to academic performance was 0.161. Similarly, student psychology had positive influence on self-esteem, but there was no significant influence (positive or negative) on academic performance of students (supported hypothesis H3, where $p < 0.01$ level, and not supported hypothesis H4). The corresponding standardized path coefficients were student psychology to self-esteem 0.381, and student psychology to academic performance of students - 0.074. Finally, self-esteem successfully

lead to academic performance of students (supported hypothesis H5, where $p < 0.01$ level). The standardized path coefficient between self-esteem and academic performance was 0.541.

Conclusion

Competition and social uncertainty in higher educational institutions are creating dilemmas situation for studious and meritorious students. Therefore, students who desire to achieve a higher level of academic results are directly affected by their surroundings and psychology (mental health). Students themselves and society (including educational institutions and government) should have coordinated attempt to achieve better performance. Society and institutions have a direct influence on performance management systems as well as on the performance of students (Mansor et al., 2012). This study focused on some fundamental issues regarding academic performance of students. What capabilities can substantially motivate students to involve in better study and a strong mind set up, what inner attribute fetch students' mind to better performance, and possible effects of these motivating factors were identified and discussed in this study.

The literature review and theoretical framework were taken under consideration to propose a theoretical model (including hypotheses) regarding academic performance of students. The model argued about the positive relationship and influence of antecedents of academic performance of undergraduate level students and effects of those antecedents. By questionnaire survey method data were collected, and to test those hypotheses and to get support in favor of the theoretical arguments of this study. Data were analyzed through

structural equation modeling. The empirical results of the study found positive direct relationships between social support and academic performance; student psychology and academic performance; and self-esteem and academic performance. The results also demonstrated the indirect relationships of social support and student psychology with academic performance the mediating role of self-esteem.

The statistically significant values of goodness of fit statistics, reliability, and validity analysis of the measurement model empirically identified and determined relationships of variables and supported the proposed theoretical model. The hypotheses of the study were tested by using path analysis under structural equation modeling. Since the path coefficients were significant at $p < 0.01$ and $p < 0.05$ level, the standardized path coefficients of hypotheses provided support in favor of theoretical model. Thus, the theoretical arguments as well as theoretical model were supported by empirical results of this study.

This study identifies some problems that need to be addressed in future research. By incorporating larger sample future studies can extend this study. This research provides some useful conclusions and theoretical and practical implications for both researchers and practitioners based on a questionnaire survey conducted in undergraduate level students in the university. It is necessary to find the conclusions by questionnaire survey in school and college level students. The results of school and college, and university level survey can be compared by further study. This study combined financial, family, institutional, social issues together as social support. Further study can include those broader aspects separately to assess the

antecedents of performance of students and their effects.

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