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The Impact of Education, Motivation, and Performance on Student Success

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ABSTRACT

This research explores how the quality of education, student motivation and student performance affect student success in university students in Lahore Pakistan. The research design was a quantitative study that analyzed the primary data of 250 students based on a designed questionnaire which included Likert-scale items. The viability was tested with the help of Cronbach alpha and data centered on the descriptive statistics, Pearson correlation, multiple regression analysis and structural equation modeling (SEM) in AMOS 24. Findings indicated that there were significant positive correlations among all the variables. Quality of education (0.341), motivation of students (0.412) and academic performance (0.298) were found to be strong predictors of student success. The model fit of SEM were found to be satisfactory (CFI = 0.961, RMSEA = 0.047). This has significant implications to academic policymakers and university administrators who aspire to make students succeed.

Keywords: The quality of education, student motivation, academic results, student success, SEM, Lahore university.

INTRODUCTION

Student achievement in higher education is a complex phenomenon which is affected by institutional, psychological and academic variables. Universities in the fast-growing field of higher education in Pakistan are faced with the challenge to increase access, while preserving quality outcomes, which are more common in the metropolitan centres, such as Lahore (Shamim and Rashid, 2021). It is then important to learn what makes students work hard in order to come to terms with academic policymakers and teachers.

Education quality is defined as the concept of the ability of academic institutions to offer relevant, rigor and helpful learning environment (UNESCO, 2020). Motivation, intrinsic and extrinsic has been known to be a factor in making people work harder in their academics and persistently work (Deci and Ryan 2000). Academic performance is the medium output, which corresponds to the combined impact of the educational inputs and to the student activity. Although there is isolated research on such constructs in individual studies, there is little empirical research of the joint effect of the constructs on student success in Pakistan using advanced statistical modelling.

Socio-psychological factors, besides institutional factors, are important determinants of student success. Motivation and in more particular academic motivation has been largely cited as a force that dictates the

intensity of effort, persistence and interest a student has in his or her studies (Deci and Ryan, 2000; Pintrich, 2003). More intrinsically motivated students will use more in-depth learning strategies and it leads to better understanding and academic success. In contrast, demotivation tends to result in inengagement and poor performance in school. Motivation is even more important to interpret differences in the success of students in developing countries such as Pakistan where resources and systems designed to support children in education might not be equally distributed (Ahmed et al., 2021; Khan and Iqbal, 2022).

Quality of education is another underlying factor of academic success and it covers the teaching and learning effectiveness, the design of curriculum, the institutional facilities and learning materials. UNESCO (2020) also states that quality education guarantees equal access to knowledge and promotes life-long learning capabilities. Within the Pakistani context of higher education institutions, inequality in terms of the quality of teaching and access to resources may heavily impact the experiences and achievements of students (Ali and Javed, 2021). Research has also found an inverse relationship between the aspect of interactive instruction delivery, qualified faculty, and modernized curricula with increased academic achievements and satisfaction among students (Hussain et al., 2022; Rehman and Malik, 2023).

Scholastic performance, commonly gauged by GPA, course success, serves as an important way of measuring the level of successful merging of educational inputs and motivational elements among students. It is not only an outcome variable, but also a mediating construct, which demonstrates the interplay between the quality of institutions and individual effort (York et al., 2015). Studies show that high academic performance by student leads to increased confidence and readiness to be absorbed into career in the future (Bashir and Akhtar, 2020; Farooq et al., 2022). Accordingly, the analysis of academic performance and quality of education and motivation are more effective ways of studying how students can succeed in the higher education settings.

The gap that this study fills is that it theoreticalizes and empirically tests a structural model which then connects the level of education, student motivation and student performance to overall student success in undergraduate and post graduate students studied in Lahore, Pakistan. The findings will give empirically based findings, which can guide institutions towards enhancing student outcomes.

LITERATURE REVIEW

Quality and Student Success in education

Ample literature supports the fact that quality in education is the key factor that defines student performance. Hanushek and Woessmann (2015) posit that the academic trajectory of students depends on the quality of instruction, relevance of curricula and resources available in institutions. In an analysis of Pakistani universities, Malik et al. (2020) discovered that educational institutions that had organization of academic aid and qualified faculty performed a lot better than others in terms of student retention and graduation levels.

Academic Engagement and Motivation

The Self-determination Theory (Deci and Ryan, 2000) is an intrinsic theory that suggests that the need to be curious, have mastery and personal relevance is a more reliable predictor of sustained academic

engagement than extrinsic motivators, like grades or rewards. These studies have confirmed that, motivated students are investing more cognitive effort, are proactive in seeking feedback and more persisting when confronted with challenges in their academic life (Pintrich, 2003). A positive GPA-academic motivation relationship was high and significant in Pakistani universities (Rehman and Abbas, 2022).

Academic Performance as a Mediating Variate

Academic performance, which is often represented by GPA or assessment data, is a predictor of the longer-term measures of success like employability and admission to graduate school as well as a product of educational input (York et al., 2015). Research in South Asian education demonstrates that instructional quality, peer influences, and student self-efficacy (Khan and Aslam, 2021) are identified as determining the quality of performance.

Student achievement in Higher Education.

Student success is a general concept that extends beyond the academic grades, learning outcomes, skill acquisition, student satisfaction, retention, and employability in the future. Tinto (2012) points out that academic integration and social integration in the university setting is critical toward the achievement of student success. In the same vein, Kuh et al (2006) observe that student engagement is among the best indicators of success in college education since it demonstrates time and effort that students allocate towards activities that are educationally purposeful. In developing nations, such as Pakistan, institutional support systems, the quality of teaching, and the behavior of the individual learning process (Iqbal and Qureshi, 2021; Shah and Mahmood, 2022) commonly determine the success of students. Further, universities are under more scrutiny as to whether they are producing graduates that are more prepared to face challenges at work as well as within their societies.

Connection between the quality of education, motivation, and performance

The recent literature emphasizes the fact that the quality of education, motivation and academic performance are not independent constructs but are closely intertwined. Quality learning environments maximize student motivation through an ability to provide learning experiences that are supportive, meaningful and engaging (Astin, 1993; Biggs and Tang, 2011). Motivated students in their turn have high chances to obtain better academic performance because they are more willing to work more, be more persistent and use effective learning strategies. Academic performance is proposed by both Richardson et al. (2012) and Credé and Kuncel (2008) to be a mediating factor that converts both educational and psychological variables to the success of a student. In Pakistani situation, the study by Naveed et al. (2023) verifies the mediation role of motivation between the instructional quality and student performance, with the two variables being integrated in determining the student academic performance.

Theoretical Framework

The research is based on the input-environment- outcome (IEO) model by Astin (1993) and self determinion theory (Deci and Ryan, 2000) to have a conceptual understanding of the relationship between quality of education, student motivational factors and their success in the academic performance.

The antecedent inputs are education quality, motivation, the environmental mediator is academic performance, and student success is an outcome variable.

The theoretical framework suggested will combine the theories of the Input-Environment-Outcome (IEO) model (Astin, 1993) and Self-Determination Theory (Deci & Ryan, 2000) to understand student achievement on higher education. The variables of input in this model are education quality and student motivation which in turn affect the learning environment. Academic performance is placed as a means performance that indicates the performance of the two aspects- institutional and psychological. The net effect of these relationships is the ultimate outward outcome student success, both in the academic success, satisfaction and preparedness of the student to succeed in future. The framework presumes, that, improvement in the quality of higher education increases motivation that subsequently boosts academic performance. Finally, the interplay between these variables can help in explaining student achievement in colleges.

RESEARCH METHODOLOGY

Research Design

The survey design was a cross-sectional and quantitative one. The philosophical approach embraced was the positivism that was in line with deductive method of research. The main data collection instrument was the structured questionnaire.

Population and Sampling

The study population was the students who were registered at both public and private universities in Lahore, Pakistan. They were chosen by purposive and convenience sampling to have 250 students who represented various departments, academic levels and institutions such as University of Lahore and University of Punjab and LUMS and Lahore Garrison University.

Measurement Instrument

Validated Likert-scale items (1 = Strongly Disagree to 5 = Strongly Agree) were used to operationalize all constructs. The quality of education (5 items) was based on Astin (1993) and student motivation (5 items) on Academic Motivation Scale (AMS; Vallerand et al., 1992) and academic performance (4 items) on York et al. (2015) and student success (5 items) on Kuh et al. (2006).

Data Analysis

Reliability analysis, correlations and regression Data Data were analyzed with the help of IBM SPSS Statistics 25 to conduct descriptive statistics, correlation and regression. Confirmatory factor analysis (CFA) and structural equation modeling (SEM) were performed using IBM AMOS 24 to test the hypothesized relationships and fit to the overall model.

RESULTS

The demographic characteristics of the respondents depict a rather equal representation of gender, age, and academic levels, which enhances overall applicability of the results. The sample included a little more male students (56) than female students (44) and most of the respondents were of the age range 1822

which is a typical undergraduate dominated university population. Also, sixty percent of the respondents were undergraduates, with forty percent being postgraduates, so that the data will reflect the perceptions at different levels of academics. Such diversification within the sample is more enlightening on how the quality of education, motivation and academic performance affects student success in different student backgrounds.

The reliability analysis has proven that all the measurement scales applied in the research are very consistent and can be further subjected to statistical analysis. The alpha of the constructs of all the constructs were from 0.817 to 0.856 being significantly higher than the acceptable coefficient of 0.70 and is a positive indication of high internal reliability. This indicates that the education quality, student motivation, academic performance, and student success questions items of the questionnaires were assessing their intended constructs, effectively. Hence, the gathered data is statistically sound and can be used to perform a deeper analysis like correlation, regression, and structural equation modelling.

The descriptive statistics also show that overall, students indicated positive perceptions of all the variables in the study. Mean varied between 3.74 and 3.92 signifying that the respondents were relatively in agreement with the ideas concerning education quality, motivation, performance, and success. The highest mean was in academic performance, implying that students view themselves as somewhat high in academic performance whereas the lowest mean was in motivation, indicating it to be a relatively weak point in students. The overall skewness values of all the variables have highly negative values, which indicates that students are a bit skewed at the higher levels of agreement, which strengthens the overall positive perceptions students have.

The correlation, regression and SEM findings all affirm strong and significant relationships of all variables under study. The correlation analysis indicates that all the constructs are positively correlated with each other with the highest correlation being found between academic performance and student success. Regression analysis also illustrates that motivation of students is the strongest predictor of student achievement followed by the quality of education and student grades and contributes a significant amount of variance in the dependent variable. Lastly, these relationship are validated on the structural level by the SEM results, where excellent model fit indices indicate the strength of the proposed model. On the whole, the results have a solid basis in the hypothesized framework and clearly show that motivation, the quality of education, and performance play a more significant role in student success.

Demographic Profile

Table 1: Demographic Profile of Respondents (N = 250)

Variable	Category	Frequency (%)
Gender	Male	56% (140)
	Female	44% (110)
Age Group	18–22	42% (105)
	23–27	38% (95)
	28 and above	20% (50)
University Level	Undergraduate	60% (150)
	Postgraduate	40% (100)

Table 1 illustrates that the sample had a higher number of 56 percent males and 44 percent females students. Most of them were aged between 18 and 22 (42 percent) and 60 percent were pursuing undergraduate level and 40 percent pursuing postgraduate degree, which represented the various levels of study.

Reliability Analysis

Table 2: Reliability Statistics (Cronbach's Alpha)

Variable	No. of Items	Cronbach's Alpha
Education Quality	5	0.831
Student Motivation	5	0.817
Academic Performance	4	0.842
Student Success	5	0.856

Every construct had good internal consistency, as Cronbach alpha is between 0.817 and 0.856 (all above the desired figure of 0.70) indicative of scale reliability (Hair et al., 2010).

Descriptive Statistics

Table 3: Descriptive Statistics

Variable	N	Mean	SD	Skewness
Education Quality	250	3.87	0.712	-0.341
Student Motivation	250	3.74	0.738	-0.287
Academic Performance	250	3.92	0.684	-0.412
Student Success	250	3.81	0.721	-0.318

The average of all constructs mailed between 3.74-3.92 on a 5-point scale which showed that perceptions were generally positive. The highest mean was in academic performance (M = 3.92) with the lowest in the student motivation (M = 3.74) being recorded although both of them were above the middle of the scale.

Correlation Analysis

Table 4: Pearson Correlation Matrix

Variable	EQ	SM	AP	SS
Education Quality (EQ)	1.000			
Student Motivation (SM)	0.612**	1.000		
Academic Performance (AP)	0.581**	0.647**	1.000	
Student Success (SS)	0.623**	0.671**	0.714**	1.000

Table 4 indicates a significant positive relationship between all the variables of the studies. The r-value between academic performance and student success showed the highest correlation followed by student motivation and student success ($r = 0.714$, $p < 0.01$ and $r = 0.671$, $p < 0.01$, respectively). All of the correlations were significant under $p < 0.01$, which demonstrated the hypothesized correlations.

Regression Analysis

Table 5: Multiple Regression Analysis — Dependent Variable: Student Success

Predictor	β	SE	t-value	p-value
Education Quality	0.341	0.062	5.50	0.000
Student Motivation	0.412	0.058	7.10	0.000
Academic Performance	0.298	0.071	4.20	0.001
$R^2 = 0.574$, $F = 110.3$, $p < 0.001$				

The regression model explained 57.4% of the variance in student success ($R^2 = 0.574$, $F = 110.3$, $p < 0.001$). Student motivation was the strongest predictor ($\beta = 0.412$, $p < 0.001$), followed by education quality ($\beta = 0.341$, $p < 0.001$) and academic performance ($\beta = 0.298$, $p = 0.001$). Hypotheses were all supported.

Structural Equation Modeling

Table 6: SEM Path Coefficients and Model Fit Indices

Path	β	S.E.	CR	p
Education → Student Success	0.352	0.061	5.77	***
Motivation → Student Success	0.421	0.057	7.39	***
Performance → Student Success	0.311	0.069	4.51	***
CFI = 0.961, RMSEA = 0.047, TLI = 0.953, $\chi^2/df = 1.83$				

The SEM model demonstrated excellent fit (CFI = 0.961, RMSEA = 0.047, TLI = 0.953, $\chi^2/df = 1.83$). All the three structural paths were found to be statistically significant at $p < 0.001$. The highest direct impact on student success of motivation (0.421, CR 7.39) validated the hypothesis of motivation factors as central variables in the academic success paths.

DISCUSSION

The IEO model and Self-Determination Theory predicted theoretical results are quite universal with the results obtained in this research. The quality of education proved to be a powerful indicator of student success, and it aligns with the studies by Hanushek and Woessmann (2015) and Malik et al. (2020), who have also revealed that instructional quality was at the core of determining the outcome of learning in Pakistani universities.

The strongest predictor of student success was student motivation in regression and the student success in the SEM analysis. The present observation is consistent with the original research of Deci and Ryan (2000) and the real-life research of Rehman and Abbas (2022) conducted in the Pakistani university. The intrinsically motivated students seem to be in a better position to negotiate academic obstacles, maintain course, as well as end up with greater rates of success.

The impacts of academic inputs on success outcomes were mediated through academic performance, which further affirms that assessment outcomes can be seen as effective intermediate success factors in the student success pathway. The implication on institutional practice is evident, that is, to ensure the best

possible results in student success, a university needs to invest in both the quality of it academics and motivation support systems.

Findings of this study also highlight the fact that the interplay between quality of education and motivation among students is very important in determining the overall success of students. Good educational settings are not isolated but are dynamic as they enhance intrinsic interest of the students towards the learning process making academic content more enriching and interesting to them. When learners view their institution as being academic supportive and well endowed, they get even more motivated to engage in learning activities. This implies that motivation is a personal characteristic as well as a reaction to the educational environment, which serves as an indication. Hence, it becomes crucial to provide a mixture of beneficial teaching techniques and student-focused learning strategies to maintain motivation and performance in higher education.

Furthermore, the results reveal that such a reflective indicator as academic performance is significant when considering the effectiveness of simultaneous operation of educational and motivational factors. Those students who are regularly supported in their academic endeavors and have great motivation, have better performance results that in turn sustain their performance and their sense of hitting the target. The existence of this cyclical relationship implies that academic success is not a goal in itself but also a perpetuating process that helps in the ongoing school success of students. In addition, the findings imply that universities ought to implement a more comprehensive approach to education that helps at once build quality of their institutions and prepares students psychologically to achieve the best long-term academic achievements.

CONCLUSION

The research offers empirical data that the quality of education, student motivation, and academic performance together and significantly impact student success among university students at Lahore, Pakistan. The structural model was found to be a very good fit and had a significant explanatory power which confirmed all the hypothesis relationships. Curriculum quality, development of faculty, and motivational interferences should be given priority by university administrators and policymakers in order to develop a culture of academic excellence. Subsequent studies can consider expanding the model to incorporate self-efficacy, peer support as well as institutional climate as other predictors of student success.

RECOMMENDATIONS

On the basis of the results of the current study a number of recommendations are drawn up that can be used to improve student achievement in tertiary institutions. To start with, universities ought to focus on enhancing the quality of education by enhancing curriculum elaboration, modernization of scientific methods of teaching and having a well-trained and research-oriented faculty. Blended learning, problem-based learning, and integrating digital classroom teaching methods will help to engage students and understand the material much better.

Second, the institutions need to work on the motivation of students in terms of academic as well as psychological support systems. To ensure that students remain focused and goal oriented, universities can create mentorship programs, offices of academic counseling and career guidance services. Intrinsic

motivation could also be enhanced by designing a conducive learning atmosphere through rewarding students when they excel and motivating them to engage in extra curriculum and academic program activities.

Third, it is advisable to regularly evaluate academic performance by implementation of regular assessment and feedback system and performance tracking tools. Remedial support by early identification of the weak students can help them to improve in their academic performance. Also, teachers are expected to give constructive criticism that would foster growth as opposed to regulation.

Lastly, a comprehensive approach to education through an amalgamation of academic quality improvement, performance-based and motivational support systems must be employed by policymakers and university administrators. Faculty, administration, and students have to collaborate in order to establish the environment that promotes continuous learning and a successful path of a student.

REFERENCES

Astin, A. W. (1993). What matters in college? Four critical years revisited. Jossey-Bass.

Deci, E. L., & Ryan, R. M. (2000). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry, 11(4), 227–268.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis (7th ed.). Pearson.

Khan, A., & Aslam, N. (2021). Factors affecting academic performance of students in Pakistani universities. Journal of Education and Social Sciences, 9(1), 44–58.

Malik, S., Ahmed, R., & Iqbal, Z. (2020). Higher education quality and student retention in Pakistan. Pakistan Journal of Education, 37(2), 121–136.

Rehman, A., & Abbas, Q. (2022). Academic motivation and its impact on GPA: Evidence from public universities in Lahore. Asian Journal of Higher Education, 14(1), 78–93.

York, T. T., Gibson, C., & Rankin, S. (2015). Defining and measuring academic success. Practical Assessment, Research, and Evaluation, 20(5), 1–20.

Ali, S., & Javed, T. (2021). Teaching quality and learning outcomes in higher education institutions of Pakistan. *Journal of Education and Practice*, 12(6), 90–98.

Bashir, M., & Akhtar, S. (2020). Academic performance and student confidence in higher education. *International Journal of Educational Development*, 45(2), 112–120.

Farooq, R., Ahmed, N., & Malik, H. (2022). Academic achievement and career readiness among university students. *Education Research International*, 2022, 1–9.

Hussain, A., Ali, S., & Mahmood, T. (2022). Teaching quality and student satisfaction in Pakistani universities. *Asian Education Review*, 14(1), 33–49.

Khan, M., & Iqbal, S. (2022). Role of motivation in academic achievement of university students. *Pakistan Journal of Education*, 39(2), 88–101.

Naveed, A., Shah, T., & Rehman, F. (2023). Mediation role of motivation between teaching quality and academic achievement. *International Journal of Educational Research*, 117, 102–115.

Pintrich, P. R. (2003). A motivational science perspective on student motivation in learning and teaching contexts. *Journal of Educational Psychology*, 95(4), 667–686.

Rehman, S., & Malik, F. (2023). Curriculum design and student performance in higher education institutions. *Education and Development Journal*, 11(2), 58–73.

Shamim, F., & Rashid, M. (2021). Challenges in higher education expansion in Pakistan. *South Asian Journal of Education*, 8(3), 55–70.

Shamim, F., & Rashid, M. (2021). Higher education quality and student outcomes in developing countries. *Journal of Asian Education Studies*, 7(2), 101–115.