

SELF-ASSESSMENT REPORTS FOR ACADEMIC PROGRESS: EVIDENCE FROM BUSINESS ADMINISTRATION FACULTIES OF HEIs IN AN EMERGING ECONOMY

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Abstract

Purpose of the study: Quality Enhancement Cells (QECs) are prudent and play a dynamic role in the advancement of quality in higher education. This study examined the role and significance of QEC's in HEIs in an emerging economy like Pakistan.

Methodology: This study is conducted on the perceived benefits of Self-Assessment Reports (SARs) to have an initial guideline for further investigation on the role of QECs. The research model for this study has been formulated from the outcomes of SARs devised in a previous similar study. The model was evaluated through quantitative analysis using SmartPLS, determining SARs benefits associated with academia and students.

Main Findings: The empirical findings indicated that faculty perception regarding SARs and their benefits are positive and the relationship between the assessed variables is significant.

Applications of this study: The study findings will benefit the policymakers in HEIs to induct SARs as an organizational development tool.

Novelty/Originality of this study: This research is novel in its nature as limited research work regarding SAR and QEC evaluation in Pakistan has hindered the research-related activities and strategic planning in this area.

Keywords: Higher Education Institutes (HEIs), Quality Enhancement Cells (QECs), Self-Assessment Reports (SARs), Emerging Economies, Academia, Education.

INTRODUCTION

Quality and quality management are much broader in the application that must not be confined only to industrial or manufacturing, particularly in today's world, where these concepts are unjustly confined to business studies (Vykydal, Foltá & Nenadal, 2020). This assertion is rational as technological advancement has proven to make these concepts integrated into all the other areas of life particularly to the higher education sector (Habib, Jamal, Khalil, & Khan, 2020; Turi et al. 2019). The goal of the higher education sector is to make students competent enough so that they may reflect these qualities through their performance in professional practices (Sultan et al. 2019). Although in the higher education sector is better to assume quality management as the third-order model which takes input from educational, administrative, and social qualities (Vykydal et al., 2020), the assessment of education thus is also termed a systematic process (Aliyu et al., 2020), which uses qualitative as well as quantitative data to improve quality and capacity of teaching & learning (Islam & Chowdhury, 2015). However, formulation of Quality Enhancement Cells (QEC) in the higher education sector of Pakistan rooted in the formulation of (QAA) Quality Assurance Agency (Habib et al. 2021; Higher Education Commission of Pakistan a. n.d.), these departments are also supposed to work independently and also as the primary agent for attaining quality learning, especially in universities. However, the purpose of the Higher Education Commission (HEC) behind all this is to meet the international needs of higher education (Habib et al. 2021; Batool & Qureshi, 2017). Thus, the department needs to assume several measures for quality optimization which also includes a mechanism for quality assessment of academic programs termed as self-assessment reports (Khan & Ramzan, 2020; Higher Education Commission of Pakistan a. n. d.).

Self-Assessment Reports

Assessments apply to every discipline to education where the systematic process is conducted through qualitative & quantitative data to evaluate the teaching, learning, and academic standards (Forsman et al., 2020; Islam & Chowdhury, 2015). Numerous studies and articles have been published since 1990, which have investigated and focused on the various aspects or issues of quality in higher education, and various diverse opinions have been studied in this area until now (Vykydal et al., 2020). However, there is severe lacking research on quality and quality assurance perspectives concerning Pakistan (Khatoon & Usmani, 2014; Usmani & Khatoon, 2018). However, these studies are based on the performance of quality enhancement cells for degree programs and institutions.

The Asian scenario of the Self-Assessment process indicates that faculty, students, staff, and employers do not stand on the same stance regarding quality in higher education ([Islam & Chowdhury, 2015](#); [Vykydal et al., 2020](#)). Thus, writing quantitative case studies on the performance of QEC departments as contended by [Usmani and Khatoon \(2018\)](#) is much difficult. Nevertheless, the outcome of the self-assessment process is SAR is significant ([Higher Education Commission of Pakistan b, n.d.](#)) & it is mandatory to submit SARs for each program with a status of compliance ([Usmani & Khatoon, 2018](#)). Initially, QEC had to face much resistance from management and faculty that were engaged in the implementation of quality assessment and evaluation practices ([Usmani & Khatoon, 2018](#)). Therefore, it is better to conduct a quantitative study regarding the perceived benefits of SAR reports through faculty in order to device quantitative study which may aid and support previous assertions by [Khatoon and Usmani \(2014\)](#) and [Usmani and Khatoon \(2018\)](#).

Significance and Scope

This study is one of the premiers in highlighting the significance of SARs in detail and also provides evidence to conduct similar studies under different circumstances. The study also links theoretical & conceptual frameworks available regarding the role of QEC to develop an applicable framework concerning business education in Pakistan. Thus, it is legitimate to indicate that the study is also not only a state of artwork but also a real pervasive issue for the education industry.

Research Questions

RQ.1: Do SARs produce a better impact on business education in Pakistan?

RQ.2: Do SARs provide a better understanding regarding the academic areas which need improvement?

RQ.3: Do SARs provide a better understanding of the significance of QEC in higher education institutes?

LITERATURE REVIEW

Quality Assurance Agency (QAA) is the base of quality enhancement in the higher education sector of Pakistan which aims to foster the level of education quality ([Batool & Qureshi, 2017](#)). There are some parameters and initiatives of QAA which are similar all over the globe e.g., techniques for policy building and development of policy documents. Similar parameters apply to Pakistan where HEC uses QAA to formulate certain standards, tools, documents, and evaluation techniques for optimization of university-level teaching. However, the QEC of every entity is primarily responsible for the evaluation of various degree programs through a self-assessment approach ([Khatoon & Usmani, 2014](#)). Additionally, [Rahnuma \(2021\)](#) and [Islam and Chowdhury \(2015\)](#) highlighted the purpose of self-assessment is not only to optimize the quality of teaching-learning but also for the quality enhancement of graduates. The assessments also have their benefits rooted in the governance of the institution and its departments. Moreover, self-assessment is also termed as the potent tool for self-efficacy and self-improvement ([Schunk & Ertmer, 1999](#)) and also aid in the systematic review of progress and monitoring ([Paris & Paris, 2001](#)). Apart from its benefits and advantages, previous literature has extensively pointed out the issues pertaining to self-assessment procedures such as [Boud and Falchikov \(2006\)](#), identified some significant possible variables in the self-assessment literature, and indicated the objectivity, consistency, and accuracy of the methodological approach of self-assessment studies. Similarly, the attributes of the participants are also widely considered including the participants' knowledge about the subject area, their expertise, and understanding of the self-assessment techniques ([Evans, 2013](#); [Boud, & Falchikov, 1989](#)). Relatedly, self-assessment training to faculty and students have been emphasized by researchers to increase the participant's interest in self-assessments and also to enhance their assessment skills ([Sitzmann et al. 2010](#); [Dunning, Heath, & Suls, 2004](#); [Stuart, Goldstein, & Snope, 1980](#)).

Self-assessment practices in organizations have been an attractive practice for a long and have been adopted by organizations, by and large, to ascertain the organizational work quality ([Jose Tarí, 2010](#)). Education institutes correspondingly use the same means to examine their organizational quality standing ([McAdam, & Welsh, 2000](#)). Assessments lead to quality enhancement and provide means to sustain quality standards in organizations ([Pratama, 2019](#)), through the development of standards, inspecting, monitoring as well used to improve the standards in accordance with respondents' perspectives and opinions ([Monteiro & Nicolini, 2015](#); [Hartley & Downe, 2007](#)). Thus, it is evidently asserted that self-assessments help managers in organizations and administrators in HEIs to improve their quality standards ([Budiyanti, Patiro, Djajadi, & Astuty, 2020](#)), and also help in identifying organizational strengths and weak areas where improvement effort is to be implied ([McAdam & Welsh, 2000](#); [Becket, & Brookes, 2008](#)).

The self-assessment benefits are also highlighted by [Andrade and Valtcheva \(2009\)](#) & therefore it is optimal to believe that self-assessment provides tremendous aid not only to primary users like teachers & students but also to the other concerned authorities ([Uddin, 2016](#)). However, in the scenario of Pakistan self-assessment is based on program evaluation ([Raouf, 2006](#)). The purpose of this type of evaluation is to measure the efficiency of the program through evaluating its contribution to vision, mission & objectives. Moreover, program evaluation also provides structured guidelines to developers, runners, and users of the program to plan implement, and deliver the desired level of output. Thus, this study will provide the base to evaluate the extent to which the program is achieving the stated goals and objectives to enhance the standards of quality ([Khatoon & Usmani, 2014](#)).

Theoretical Framework

Studies like [Islam and Chowdhury \(2015\)](#) & [Uddin \(2016\)](#) have analyzed self-assessment programs with the reference to higher education in Bangladesh. The study of [Islam and Chowdhury \(2015\)](#) was conducted in the scenario of business administration while the study of [Uddin \(2016\)](#) was conducted in social sciences scenario. Although both of the studies used datasets from all the stakeholders like faculty, students, this study is majorly associated with [Islam and Chowdhury \(2015\)](#) which also relate to the evaluation of standards with external peer review committee. The purpose of the committee is to evaluate the outcomes of Self-Assessment Reports (SARs) and provide recommendations for the betterment of stakeholders.

Moreover, it has also been indicated that the practice of using self-assessment reports was in its initial stages, especially in Bangladesh, therefore points used to evaluate self-assessment from students and faculty were reviewed by an external committee. In addition to this, SAR was pertaining specifically to business administration department universities. Thus, to review the process of self-assessment thoroughly, the initial data was collected from students, faculty, alumni, graduating students, and employers and the entire range of criterion used in the study is given below:

Table 1: Review Data on SARs

Sr. No.	Benefits/ Criteria	Evaluated by	
		Faculty	Students
01	Governance	Yes	Yes
02	Curriculum design and content review	Yes	Yes
03	Teaching learning	Yes	Yes
04	Learning Evaluation	Yes	Yes
05	Institutional Facilities	Yes	Yes
06	Institutional structure	Yes	Yes
07	Recruitment promotion and development	Yes	No
08	Institutional Support	Yes	No
09	Student Support	Yes	Yes
10	Student counseling	Yes	Yes
11	Development of Skills	Yes	Yes
12	Research and extension	Yes	Yes
13	Process Control	Yes	Yes

Source: Adapted from [Islam and Chowdhury \(2015\)](#)

However, this study also includes parameters that resemble faculty satisfaction and student's satisfaction as indicated by [Raouf \(2006\)](#). Moreover, the parameters of [Raouf \(2006\)](#) are for the optimization of specific programs and these sorts of evaluations are the tool to verify the efficacy of the program ([Khatoon & Usmani, 2014](#)). The standards mentioned in the manual formulated by Raouf (2006), are for writing SAR rather than for gauging the benefits of QEC or SAR. Therefore, the criterion used by [Islam and Chowdhury \(2015\)](#), to evaluate quality standards from students and faculty are selected in this study as the base of the research model (See Table 1). Though Table 1 was used to collect data even from different students e.g., current, passing, and alumni and faculty, which might not be the appropriate respondents to gauge the entire range of criterion individually. This study, therefore, prefers only those advantages which may reflect upon the betterment of academia and students (See Table 2). This has been done in consideration with [Khatoon and Usmani \(2014\)](#), which used only two initial standards of QEC manual for SAR writing and adapting for the betterment of quality. Therefore, the selected variables given in table 3 are chosen to analyze as tools to measure the benefits of SARs.

Table 2: Measures for SAR benefits

Sr. No.	Benefits/ Criteria
01	Curriculum design and content review
02	Teaching-learning
03	Learning Evaluation
04	Student Support
05	Student counseling
06	Development of Skills
07	Research and extension

Source: Adapted from [Khatoon and Usmani \(2014\)](#)

Thus, from the literature validation above, the following research hypotheses are formulated:

H₁: There is a positive impact of SAR writing on curriculum design and content review in business education.

H₂: There is a positive impact of SAR writing on the development of skills in students of business education.

- H₃:** There is a positive impact of SAR writing on learning evaluation in business education.
- H₄:** There is a positive impact of SAR writing on research and extension in business education.
- H₅:** There is a positive impact of SAR writing on student counselling in business education.
- H₆:** There is a positive impact of SAR writing on student support in business education.
- H₇:** There is a positive impact of SAR writing on teaching and learning in business education.
- H₈:** Degree program does moderate the relationship of SAR writing with curriculum design and content review in business education.
- H₉:** Degree program does moderate the relationship of SAR writing with the development of skills in students of business education.
- H₁₀:** Degree program does moderate the relationship of SAR writing with learning evaluation in business education.
- H₁₁:** Degree program does moderate the relationship of SAR writing with research and extension in business education.
- H₁₂:** Degree program does moderate the relationship of SAR writing with student counselling in business education.
- H₁₃:** The degree program does moderate the relationship of SAR writing with student support in business education.
- H₁₄:** Degree program does moderate the relationship of SAR writing on teaching and learning in business education.

METHODOLOGY

Research Design

This study has adopted research design from other previous research studies of [Batool and Qureshi \(2017\)](#); [Islam and Chowdhury \(2015\)](#); [Khatoon and Usmani \(2014\)](#) and [Raouf \(2006\)](#). The philosophical stance of the research epistemological as the study is for knowledge optimization concerning quality enhancement in the higher education sector. The linkage of study with epistemology is appropriate enough as epistemology is associated with knowledge, creation of knowledge, and devising good knowledge ([Bawden, 2007](#)). The technique used in the study is quantitative and the technique of data collection and analysis is based on major research questions and paradigms pertaining to the study. The research strategy is espoused in the survey technique as the research is based on primary data from HEI's faculty. However, the conditions prevailing due to COVID-19 the respondents were allowed to fill questionnaire at their convenience. The data for the study was collected from December 2020 to March 2021.

Sampling Design

According to the pattern indicated by [Islam and Chowdhury \(2015\)](#) and [Roouf \(2006\)](#), faculty is always the best for collecting the data for self-assessment program. However, the program must be evaluated separately i.e., with respect to years of schooling & title of the program ([Roouf, 2006](#); [Usmani & Khatoon, 2018](#)). Thus, this study uses only those faculty members who are experienced in making SAR for Bachelor of Business Administration. Moreover, the criteria for self-assessment are implemented in Pakistan for fourteen years ([Raouf, 2006](#)) therefore this is not a new form of evaluation as it was in Shah Jalal University in Bangladesh ([Islam & Chowdhury, 2015](#)). Hence this study uses experienced faculty members who also hold experience of working as the program teams for self-assessment reports. However, the study is one of the foremost studies on the subject area therefore initially it works only for the Bachelor of Business Administration program as done by [Islam and Chowdhury \(2015\)](#). Therefore, following this criterion makes the study based on a smaller size, and to make it effective enough the study includes the opinion of experienced program team members from higher educational institutes of Karachi, Pakistan. Considering Karachi as the population of the study is that the Karachi has the highest number of HEC recognized campuses for the different public sector and private sector universities ([Higher Education Commission of Pakistan b, n. d.](#)).

Questionnaire: The questionnaire has been developed by considering the elements and points mentioned by [Islam and Chowdhury \(2015\)](#) and [Khatoon and Usmani \(2014\)](#). Questionnaires were also transformed into a Likert scale to gauge attitudes ([Likert, 1932](#)) of faculty regarding the importance and significance of writing SARs. Moreover, the use of the Likert scale helps relate the study to different dimensions ([Revilla, Saris & Krosnick, 2014](#)) to optimize implication through masses ([Johns, 2005](#); [Johns, 2010](#)).

Software and Statistical Testing: There are few studies in the context of Pakistan which are aligned with quality optimization and QEC e.g., [Khatoon and Usmani \(2014\)](#) and [Usmani and Khatoon \(2018\)](#). Although almost none of these indicated the significance and use of SAR reports in the quality optimization of degree programs. Therefore, criteria considered are from a study from Bangladesh i.e., [Islam and Chowdhury \(2015\)](#) to gauge the significance of writing SARs concerning faculty members. Thus, this study must be inclined with the theory-building approach. Thus, it is valid to incorporate SMART-PLS software, due to its ability to deal with relevant conditions and reputation in the field of statistical testing ([Benitez, Henseler, Castillo & Schuberth, 2020](#)). The software is the best solution for

descriptive analysis and inferential modelling (Richter, Sinkovics, Ringle & Schlaegel, 2016). This study measurement model is reflective & therefore must be analyzed as per the indication of Afthanorhan (2014) and Hair et al. (2019).

RESULTS AND ANALYSIS

Table 3 & 4 indicate the outer loadings of the model and according to Afthanorhan (2014), 0.60 is the least acceptable value for any element which is required to be included in the model. However, inclusion becomes more effective with the values getting closer to 1 (Khan, Sarstedt, Shiau, Hair, Ringle & Fritze, 2019). Though according to the table none of the elements used in the questionnaire is producing outer loading lesser than 0.708. Therefore, it is justified to consider the criterion effective for analysis (Hair, Sarstedt, Ringle & Mena, 2011).

Table 3: Outer Loadings

	Curr. Des. & Cont. Rev.	Degree Prog.	Dev. of Skills	Learn. Eval.	Res. & Ext.	Stud. Coun.	Stud. Supp.	Teach. & Learn.	Writing SARs
CD1	0.830								
CD2	0.846								
CD3	0.842								
CD4	0.848								
DP		1.000							
DS1			0.752						
DS2			0.892						
DS3			0.836						
LE1				0.908					
LE2				0.792					
LE3				0.885					
RE1					0.844				
RE2					0.914				
RE3					0.892				
SC1						0.884			
SC2						0.874			
SC3						0.944			
SS1							0.778		

Source: Study Analysis

Table 4: Outer Loadings

	Curr. Des. & Cont. Rev.	Degree Prog.	Dev. of Skills	Learn. Eval.	Mod. Eff. 1	Mod. Eff. 2	Mod. Eff. 3	Mod. Eff. 4	Mod. Eff. 5	Mod. Eff. 6	Mod. Eff. 7	Res. & Ext.	Stud. Coun.	Stud. Supp.	Teach. & Learn.	Writing SARs
SS2														0.877		
SS3														0.868		
TL1															0.878	
TL2															0.944	
TL3															0.886	
WR1																0.904
WR2																0.926
WR3																0.897

WR4					0.849
Wrtg SARs * DP.	1.206				
Wrtg SARs * DP.	1.206				
Wrtg SARs * DP.	1.206				
Wrtg SARs * DP.	1.206				
Wrtg SARs * DP.	1.206				
Wrtg SARs * DP.	1.206				
Wrtg SARs * DP.	1.206				
Wrtg SARs * DP.	1.206				

Source: Study Analysis.

Table 5: R-Square (Predictive Accuracy)

	R Square	R Square Adjusted
Curriculum Des. and Cont. Rev.	0.680	0.674
Development of Skills	0.722	0.716
Learning Evaluation	0.691	0.685
Research & Extension	0.779	0.775
Student Counselling	0.618	0.611
Student Support	0.763	0.758
Teaching-Learning	0.688	0.682

Source: Study Analysis

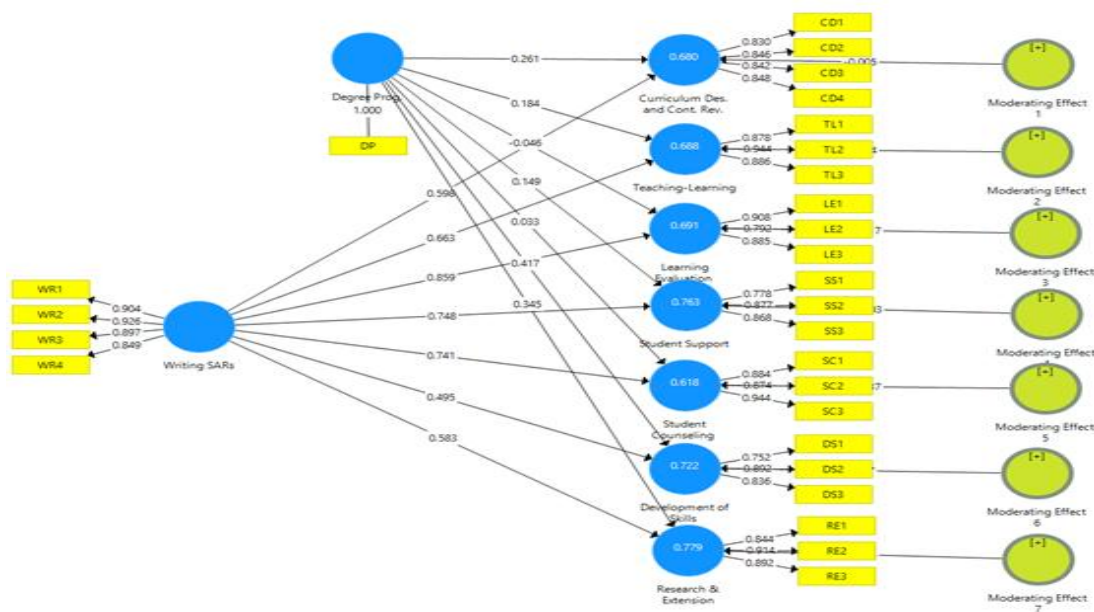


Figure 1: CFA and Outer Loadings

Source: SmartPLS Modelling

Table 5 reflects the predictive accuracy through R-Square. This is the measure used to highlight the variations caused by the independent variable. Interpretation of the relationship is to provide predictive accuracy in sample space (Benitez et al., 2020) & is the same as of multiple regression (Andreev, Heart, Moaz & Pliskin, 2009). Values 0.75 or above are the values for the extensive relationship between IV and DV (Henseler, Ringle & Sinkovics, 2009; Hair Ringle & Sarstedt, 2013). Though according to table 2, the lowest value of R-Square is 0.680, and two values are above 0.75 i.e., research & extension and student support. Therefore, these two are termed as extensive relationships and all the other relations are lesser than 0.75 but above than 0.50 and hence termed as moderate fit or relationship.

Similarly, table 6 infers the construct reliability and convergent validity. The table uses Cronbach's alpha; Goldstein rho & composite reliability to indicate reliability while composite reliability in association with AVE is used to indicate convergent validity (Sijtsma, 2008; Sijtsma, 2009). Although AVE alone is sufficient for highlighting convergent validity although there is a requirement of a minimum 0.5 value for assuring the validity (Ab Hamid, Sami & Sidek, 2017). Thus, values are sufficient for construct reliability and convergent validity as it demonstrates the values of 0.70 or above from Cronbach's Alpha, Goldstein rho, and composite reliability and 0.50 or above for AVE.

Table 6. Construct Reliability & Convergent Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average (AVE)	Variance Extracted
Curriculum Des. and Cont. Rev.	0.863	0.872	0.907	0.708	
Degree Prog.	1.000	1.000	1.000	1.000	
Development of Skills	0.775	0.824	0.868	0.687	
Learning Evaluation	0.829	0.848	0.897	0.745	
Moderating Effect 1	1.000	1.000	1.000	1.000	
Moderating Effect 2	1.000	1.000	1.000	1.000	
Moderating Effect 3	1.000	1.000	1.000	1.000	
Moderating Effect 4	1.000	1.000	1.000	1.000	
Moderating Effect 5	1.000	1.000	1.000	1.000	
Moderating Effect 6	1.000	1.000	1.000	1.000	
Moderating Effect 7	1.000	1.000	1.000	1.000	
Research & Extension	0.860	0.866	0.915	0.781	
Student Counselling	0.884	0.894	0.928	0.812	
Student Support	0.797	0.825	0.879	0.709	
Teaching-Learning	0.886	0.894	0.930	0.815	
Writing SARs	0.916	0.917	0.941	0.800	

Source: Study Analysis

Besides, table 7 below is positing the discriminant validity through the Heterotrait-Monotrait ratio. The purpose of the ratio is to highlight dissimilarity in the variables of the same construct through correlation among variables (Cheung & Lee, 2010). The maximum value by which two variables of the same construct are allowed to correlate is 0.85 (Hair et al., 2019). Thus, as per the values of the HTMT ratio, there are no variables that are correlating with the other as there is no junction that has a value of 0.85 or above.

Table 7: Discriminant Validity (HTMT)

	Curriculum Des. and Cont. Rev.	Degree Prog.	Dev of Skills	Learn. Eval.	Mod. Eff. 1	Mod. Eff. 2	Mod. Eff. 3	Mod. Eff. 4	Mod. Eff. 5	Mod. Eff. 6	Mod. Eff. 7	Res. & Ext.	Stu. Couns.	St. Supp.	Teach. Learn.	Writing SARs
Curriculum Des. and Cont. Rev.																
Degree Prog.	0.792															
Dev of Skills	0.522	0.412														

Learn. Eval.	0.642	0.709	0.311	0.309	0.311	0.309	0.311	0.309	0.311	0.309	0.311	0.309	0.311	0.309	0.311	0.309
Mod Eff 1	0.310	0.21	0.519	0.21	0.519	0.21	0.519	0.21	0.519	0.21	0.519	0.21	0.519	0.21	0.519	0.21
Mod Eff 2	0.549	0.12	0.781	0.12	0.781	0.12	0.781	0.12	0.781	0.12	0.781	0.12	0.781	0.12	0.781	0.12
Mod Eff 3	0.544	0.17	0.510	0.17	0.510	0.17	0.510	0.17	0.510	0.17	0.510	0.17	0.510	0.17	0.510	0.17
Mod Eff 4	0.431	0.81	0.491	0.81	0.491	0.81	0.491	0.81	0.491	0.81	0.491	0.81	0.491	0.81	0.491	0.81
Mod Eff 5	0.589	0.12	0.783	0.12	0.783	0.12	0.783	0.12	0.783	0.12	0.783	0.12	0.783	0.12	0.783	0.12
Mod Eff 6	0.311	0.19	0.805	0.19	0.805	0.19	0.805	0.19	0.805	0.19	0.805	0.19	0.805	0.19	0.805	0.19
Mod Eff 7	0.721	0.91	0.319	0.91	0.319	0.91	0.319	0.91	0.319	0.91	0.319	0.91	0.319	0.91	0.319	0.91
Res & Ext	0.499	0.11	0.602	0.11	0.602	0.11	0.602	0.11	0.602	0.11	0.602	0.11	0.602	0.11	0.602	0.11
Student Counselling	0.712	0.75	0.520	0.75	0.520	0.75	0.520	0.75	0.520	0.75	0.520	0.75	0.520	0.75	0.520	0.75
Stud Supp	0.346	0.23	0.790	0.23	0.790	0.23	0.790	0.23	0.790	0.23	0.790	0.23	0.790	0.23	0.790	0.23
Teach. Learning	0.821	0.65	0.498	0.65	0.498	0.65	0.498	0.65	0.498	0.65	0.498	0.65	0.498	0.65	0.498	0.65
Writing SARs	0.597	0.35	0.421	0.35	0.421	0.35	0.421	0.35	0.421	0.35	0.421	0.35	0.421	0.35	0.421	0.35

Source: Study Analysis

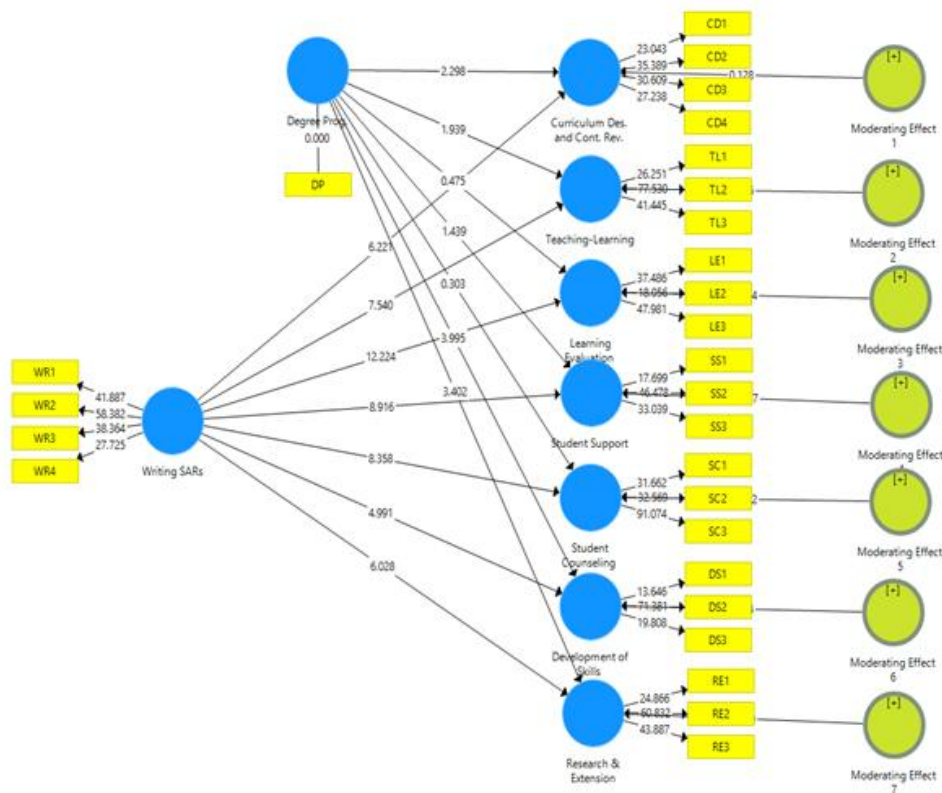


Figure 2: Regression Weights and Path-Coefficients

Source: PLS Path Model

Table 8: Path Coefficients (Total Effect)

	Original Sample (O)	Sample Mean (M)	Std.Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Degree Prog. -> Curriculum Des. and Cont. Rev.	0.261	0.250	0.114	2.298	0.022
Degree Prog. -> Development of Skills	0.417	0.403	0.104	3.995	0.000
Degree Prog. -> Learning Evaluation	-0.046	-0.057	0.096	0.475	0.635
Degree Prog. -> Research & Extension	0.345	0.342	0.101	3.402	0.001
Degree Prog. -> Student Counseling	0.033	0.024	0.110	0.303	0.762
Degree Prog. -> Student Support	0.149	0.137	0.103	1.439	0.151
Degree Prog. -> Teaching-Learning	0.184	0.185	0.095	1.939	0.053
Moderating Effect 1 -> Curriculum Des. and Cont. Rev.	-0.005	-0.009	0.037	0.128	0.898
Moderating Effect 2 -> Teaching-Learning	-0.024	-0.024	0.028	0.826	0.409
Moderating Effect 3 -> Learning Evaluation	-0.017	-0.020	0.033	0.504	0.614
Moderating Effect 4 -> Student Support	-0.003	-0.005	0.033	0.087	0.931
Moderating Effect 5 -> Student Counseling	-0.037	-0.038	0.041	0.902	0.368
Moderating Effect 6 -> Development of Skills	0.037	0.036	0.037	0.994	0.321
Moderating Effect 7 -> Research & Extension	0.004	0.004	0.031	0.130	0.896
Writing SARs -> Curriculum Des. and Cont. Rev.	0.598	0.607	0.096	6.221	0.000
Writing SARs -> Development of Skills	0.495	0.507	0.099	4.991	0.000
Writing SARs -> Learning Evaluation	0.859	0.868	0.070	12.224	0.000
Writing SARs -> Research & Extension	0.583	0.587	0.097	6.028	0.000
Writing SARs -> Student Counseling	0.741	0.748	0.089	8.358	0.000
Writing SARs -> Student Support	0.748	0.759	0.084	8.916	0.000
Writing SARs -> Teaching-Learning	0.663	0.658	0.088	7.540	0.000

Source: Study Analysis

The combination of Figure 2 and Table 8 present the inferential section of SmartPLS indicate the perceived significance and advantages of writing SARs. The results depict that the SARs are perceived as beneficial for all the major determinants i.e., Curriculum Design & Content, Review; Development of Skills, Learning Evaluation, Research & Extension, Student Counseling, Student Support, and Teaching-Learning. Although degree program is creating effect only on Curriculum Design & Content, Review; Development of Skills, Learning Evaluation, Research & Extension. Thus, moderation of degree program with the significance and benefits of SARs writing result in nullifying the effect as moderation has resulted in the acceptance of null hypotheses.

CONCLUSION

The findings of the study are linked and also are found consistent with [Islam and Chowdhury \(2015\)](#) that all the elements found critical in Bangladesh are also termed important in the scenario of Pakistan. Although in Pakistan, SARs are used for the evaluation of programs rather than the entire discipline and hence the moderation of different degree programs indicated that variables are not found consistent. Therefore, it is justifiable to consider the criterion raised by [Raouf \(2006\)](#) that every program has different significance for students and faculty and therefore needs to be evaluated separately.

A similar sort of indication was made initially by [Khatoon and Usmani \(2014\)](#), although the criterion they evaluated is

not concerning the significance of SARs. Therefore, this study proposes a systematic framework to relate SAR writing with the perceived benefits rather than methods to write SARs.

AREA FOR FUTURE RESEARCH

This study has only covered the reference of faculties of those universities which are ranked in the category of business education by HEC in Pakistan. Although other universities and HEIs in the general category are also providing business education, hence, a clearer picture might be created by including all universities and HEIs in the sample. Similarly, if the study may compare the benefits of SAR writing for business education and general sector or private or public sector then a more effective and clear depiction will be produced.

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AUTHOR'S CONTRIBUTION

Sadia Shaikh has contributed to the overall research writeup and assisted in data analyses of this study. She has also corresponded with the journal for the entire publication process.

Mushtaque Ali Jariko provided with his expert guidance on the subject and research framework. He has also majorly contributed to the literature review write-up.

Muhammad Faisal Sultan has contributed to data analysis and research writeup in this research project.

Asif Qureshi conducted the literature review and data analysis.

Tania Memon Mushtaq helped refine the manuscript with APA formatting of the text, citations, and references.

All authors equally contributed to data collection for this research study.

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