

OPEN ACCESS JOURNAL

# **Treating Students as Customers in Higher Education Institutions and its Impact on their Academic Performance**

## Bilal Safdar, Aqib Habib, Ahsan Amjad, Jawad Abbas

Department of Business Administration, Igra University Islamabad, Pakistan Email: bilalsafdar999@gmail.com, aqibhabib08@gmail.com

To Link this Article: http://dx.doi.org/10.6007/IJARPED/v9-i4/8458 DOI:10.6007/IJARPED/v9-i4/8458

Published Online: 29 December 2020

#### **Abstract**

Students are considered as the main source of income for almost all higher education institutions (HEIs). For this reason, HEIs have started treating them as their customer and trying to ensure their satisfaction at all levels. The current research aims to investigate what is the impact of treating students like customers in HEIs on their academic performance. The challenges are examined in this research by taking quantitative responses from 153 undergraduate students studying at different universities located in Islamabad, Pakistan using five points Likert scale. The questionnaire was focused on customer orientation which is also taken as mediating variable in the current study, behaviour related to grade goal, learner identity, and academic performance. The empirical analyses show that students as customer approach negatively impact on their academic performance. Moreover, customer orientation partially mediates the relationship between learner identity, grade goal, and students' academic performance. This research also provides guidelines for the management of HEIs to counter this issue and proposes strategies for improvements in students' academic performance.

Keywords: Academic Performance, Customer Orientation, Student as a Consumer, Grade Goal, Learner Identity

#### Introduction

The purpose of this research is to examine the impact of treating students as a customer in higher education institutes in Pakistan. Student as a customer is a notation that was used from past ten to fifteen years, mostly after when some people went to the civil court back in 2006. The problem started when educational institutes realize that the people are not aware of the educational setup and procedure as well as their rights. Firstly, we need to define what is the student as a consumer means? Student as a consumer is a metaphor, which can be used in many meanings, but when we talk about the educational sector, it's all about earning money rather than distributing a knowledge towards the students (Abbas & Sagsan, 2019). Pakistan is in a phase where students have realized their rights to some extent, but there remains a scarcity of research on it. To address the shortfall of a student as a consumer and its impact on academic performance, the authors focused on learner identity and grade goal

Vol. 9, No. 4, 2020, E-ISSN: 2226-6348 © 2020

which are directly related with consumer orientation while fee responsibility and subject, indirectly related to academic performance.

The issue of treating the student as a consumer is not only in Pakistan it also affects students who study in a developed country like the UK (Saundars, 2014). This issue arose when the UK government introduced tuition fees in higher education institutions and defined "students as a customer's" (Abbas, 2020c). Bunce, Baird, and Jones (2017) said that student as customer approach causes a negative impact on students since they seek to have a degree rather than to learn new thing. Most students enrol in Science, Technology, Engineering, and Mathematics (STEM) subjects. Ball (2015) said these subjects demand more financial budget. As a result, the university increases tuition fees. When universities act or deal students as customer orientation, it not only negatively impact on their learning (Bunce et al., 2017), but students also believe that power has been shifted from education provider to students (Tomlinson, 2014). The second research area is learner identity i.e. how students take a lecturer and make their concept about a particular concept. Learner identity directly associated with positive academic outcomes (Abbas et al., 2015; Bunce et al., 2017).

The review of the literature indicates that although there are a few studies that have focused on this concept from American and European context; however, the authors were not able to find any study that has examined this phenomenon from an Asian context, particularly in Pakistan, one of the emerging economies in Asia. The authors followed non-probability convenience-sampling techniques to collect the data because in this technique participants are selected based on ease in availability and willingness to take part. The data was collected through five points Likert scale, Primarily, the authors focused on the following research questions;

- 1. What is the impact of customer orientation on students' academic performance?
- 2. What is the impact of learner identity and grade goals on students' academic performance?
- 3. What are the support services provided by HEC, when they considered a student as a customer?

#### **Literature Review**

Student as a customer is fairly a novel phenomenon and inadequate researches have been done on this aspect. Most previous researches have been conducted into the various facets of overpricing (Mahmood et al., 2014, 2020). The issue of overpricing at higher education is not only in Pakistan but it also affects students who study in developed countries, such as the United States (US), the United Kingdom (UK). This issue rose, when the UK government introduced tuition fees in higher education institutions and defined "students as customers". This approach causes a negative impact on the student. Students started seeking a degree rather than to learn any new thing (Molesworth et al., 2009). When universities act or deal with its students as consumer orientation their academic performance becomes poorer (Bunce et al., 2017). It also created some advantage to students like the power has been shifted from provider to consumer (Abbas et al., 2014; Tomlinson, 2014).

Past studies indicate that students represent mix views on this approach. Some students identify themselves as a customer of HEIs while some reject this idea. The quality of services is related to the power of the consumer. When the power of the consumer is increasing, the services tend to get better (Abbas, 2020b). This idea should be improved by giving or providing more options for customers (students). This ideology is promoting through competition and competitive environment brings new changes, facilities for students, or more standard in the

Vol. 9, No. 4, 2020, E-ISSN: 2226-6348 © 2020

education sector (Imran & Abbas, 2020). Some universities create their brand name and charge high fees to students with the arguments that they charge more because of best services in the form of sports, medical facilities, transport facilities, state of the art infrastructure, qualified staff, student accommodation services etc.

According to Collins (2003), "customer" is "a person who buys goods or services". In the context of the education sector, student purchases universities services for giving them money in terms of tuition fees (Abbas, 2020c). Redding (2005) also describes the term customer and the consumer for students. He said customers are those who buy or purchase services/ goods for exchange of money. On the other hand, a consumer is one who uses services freely. So HEIs sell their services and charged fees and use term students as a customer for them. The idea of this term was introduced when universities started a competition with each other and introduced more fields in education. (Crawford, 1991). Hill (1995) defined students in the UK as the main customers of higher education services. In this scenario, Rowley (1997) established a question that what is the product or output of university? Process theory helped to get the answer to this question that student is the input for the education system; teachers and services that students use is the transformation process, and getting a degree (graduate) is output. In this context, an alumnus is not anymore a scholar but has been the beneficiary of the past three to four-year academic schedule and its unit.

During the last fifteen years, the market model and operational processes of all businesses have shifted (Abbas et al., 2014) in prominence of higher education almost all over the world (Ahsan et al., 2020). This alternation has been from educator-centred erudition to student-centred erudition. Currently, the education sector is using the term that the commercial sector used, like customers, competitors, and markets (Douglas & Douglas, 2006). In Pakistan, many universities have closed their department or their campus because they are not profitable for them. (Singh, 2002). Similar to the rest of the world, students are also considered as clients for universities. A client is one who uses the services of lawyer, architect, social worker, or other skilful individuals (Oxford University, 1999). Hirvonen and Helander (2001) explained the professional services "services are based on the skilful individual knowledge and expertise". The university management hires those people who are highly qualified and experts in their field, their qualifications or skills are services for universities that they provide to students and in return to charged money.

Boone (2006) said that when students sign the contract for course registration as being aimed at "new breed of fee-paying student consumer". Bejou (2005) opine that students purchase university courses, register for a course, and take a degree from here, then make a donation or representative of the university as alumni. This practice makes sense of customer marketing relationship and it helps universities to manage their long term relationships. Yorke (1999) argue that students are both partners and customers for university. Customers when the university allows them to use their services, and partners when they learn new things at university. Institutions in the US, Australia and the UK are facing a similar situation. However, according to Moles worth et al. (2009), students as customer damages the quality and academic standards and degrades student learning.

Robinson and Long (1987) discussed the importance of internal marketing in the universities and said that universities' management mainly divides their stakeholders/human into three categories: primary, secondary and tertiary. Primary customers are the students, secondary stakeholders include officials staff and faculty, and thirdly stakeholders are the formalize bodies, ex-students, families, and employers, etc. Sirvanic (1996) said that students have a

Vol. 9, No. 4, 2020, E-ISSN: 2226-6348 © 2020

double role during their study: one as a customer and second as a worker. Customer in the sense when he/she learn a new thing or getting knowledge by the professor; worker when he/she spend their time on the learning process and giving their exams or test to a professor. Slack (1995) propose that in the manufacturing system the procedure is directly linked with the inputs to be changed. In higher education this manufacturing process is nearly close to the teaching and learning process, the crucial activity is the manufacturing of customer or else scholar.

Schneider et al.(1994) argued that higher education is a process that produces not a touchable product, giving the environment for simultaneous consumption of knowledge, and teaching attracts the consumer in the investment process to earn the most valuable thing.

Bailey and Bennet (1996) opposed the concept of students as a customer in higher education and said that graduate is a product and employer is the primary customer. They deduce it on two ideas; foremost, they describe to solve the hesitation if the student is the customer so answer the following question: "What do students want from higher education institutions?" "They deduce that students know that their education courses are their future investment and also they know they don't receive any benefit when they are enrolled at this time at a particular subject or during course time but, after its conclusion.

In his survey, Boyer (1987) said that 80% parents send their children to college "to have a more satisfying career" or "to prepare them to get a better job". When HEIs don't ponder to a student as a customer they consider them the beneficiary of the scholastic procedure and that's why they are a product of university (Bailey & Bennet, 1996). Saxton (2000) Spotlight the vast advantage connected with rising education. For example, according to economic theory greater investment in human capital will help an individual to increase their future earnings and also learn or improve the experience in labour workplaces. Based on the above discussion, the following hypotheses are proposed;

- H1: Learner identity has a significant positive impact on students' academic performance.
- H2: Grade goal has a significant positive impact on students' academic performance.
- H3: Leaner identity negatively impacts on students' customer orientation.
- H4: Grade goal negatively impacts on students' customer orientation.
- H5: Student as customer orientation has a significant negative impact on students' academic performance
- H6: Student as customer orientation mediates the relationship between learner identity and students' academic performance.
- H7: Student as customer orientation mediates the relationship between grade goal and students' academic performance.

### **Research Methodology**

#### **Participants**

In this research, the authors collected a total of 153 useable responses using five points Likert scale. The data was collected between February and March 2019. The researchers approached students of public and private HEIs studying in Rawalpindi and Islamabad. Mainly, the students from undergraduate and master level from management sciences, computer sciences, and engineering were approached to collect the data. Most of the participants fall in the age bracket of 20 to 25 (88, 56.9%), and the majority were male 100 (66%) while remaining were female 53 (34%). A range of students who are engaged with our questionnaire is from all semesters who have submitted their responses to an online invitation on Google form.

#### Survey

To collect the data for the current study, the authors used Saundars' (2014) instrument. Example statements were: 'I only want to learn things in my course that will help me in my future career'. I always try my best in assessments and I want to expand my intellectual ability'. See Appendix 1 for a full list of questionnaire statements. Participants respond on these statements based on how much they agreed or disagreed with it on a 5-point scale, where 0 represented strongly disagree,1 for disagree, 2 for neither agree nor disagree, 3 for agree, 4 for disagree, and 5 for strongly agree. These statements went under a primary test and as a result, some statements were removed. The final questionnaire includes 20 statements 4 on each variable, namely Learner identity, Grade goal, customer orientation, and student academic performance. See Figure-1.

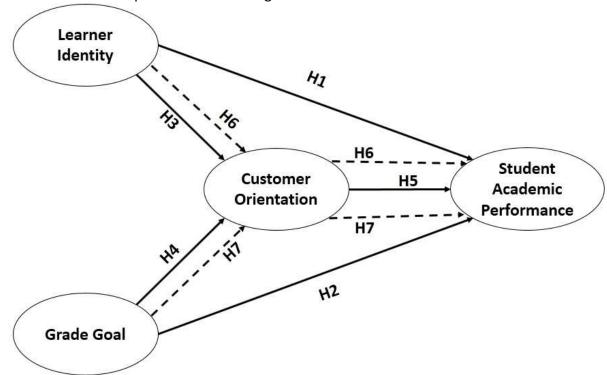


Figure-1. Conceptual Framework

#### **Procedure**

To conduct this research, the authors requested undergraduate and master students to fill the questionnaire based on their thinking or attitude towards their degrees and the structure of Higher education. The questionnaire was placed on different online forums like WhatsApp groups, Facebook pages that were linked on our google document file. The instrument was divided into five sections. In the first section, the demographic information of the respondents was taken, followed by learner identity, grade goal, customer orientation, and students' academic performance.

Vol. 9, No. 4, 2020, E-ISSN: 2226-6348 © 2020

### **Data Analysis**

Table-1:

**Overall Respondent Analysis** 

Items	Mean	Standard Deviation	Male's Mean	Female's Mean	<u> </u>
1. I only want to learn things in my course that will help me in my future career	4.23	1.062	4.16	4.34	_
2. I am not at <i>university</i> to expand my knowledge	2.35	1.462	2.10	2.92	
3. I want to expand my intellectual ability	4.20	0.989	4.26	4.04	
4. I make good use of my study time	4.09	0.982	4.04	4.14	
5. The main purpose of my university education is to maximize my ability to earn money	3.50	1.272	3.46	3.56	
6. If I cannot earn a lot of money after I graduate, I will have wasted my time at university.	2.53	1.277	2.59	2.42	
7. I do the bare minimum to pass assessments	3.34	1.210	3.27	3.42	
8. I take notes during class	3.96	0.938	3.93	4.02	
9. I think of myself primarily as a paying customer of the university.	3.68	1.149	3.68	3.64	
10. I do not enjoy learning at university.	2.43	1.296	2.33	2.62	
11. I read relevant sources to learn more about my subject at university	3.83	1.054	3.75	4.02	
12. I regularly think about the financial cost of my degree.	3.79	1.067	3.81	3.72	
13. If I cannot get a good job after I graduate, I should have some of my tuition fees refunded	2.95	1.231	2.94	3.02	
14. I think of my university degree as a product I am purchasing.	3.49	1.277	3.37	3.7	
15. The financial cost of my degree is not something that is frequently on my mind.	3.37	1.174		3.19	3.
16. What I learned in my course is not useful for my future.	2.63	1.321		2.55	2.
17. I regularly take part in class discussions.	3.75	0.995		3.71	3.
18. I am not at university to learn new things.	2.17	1.328		1.90	2.
19. I always try my best in assessments.	3.92	0.946		3.87	4.
20. I discuss my subject with my lecturer	3.84	0.967		3.85	3.

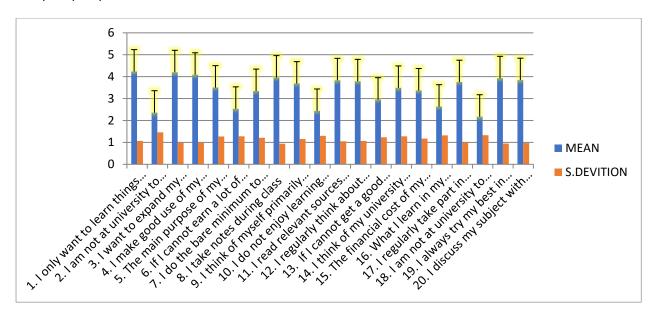


Table-2: Demographic of Respondent

Demograpine of Nespe	Particulars	Quantity	Percentage	
	Less than 20	44	28.1%	
	20-25	86	56.9%	
Age	26-30	20	13.1%	
	More than 30	3	2%	
Canadan	Male	100	66%	
Gender	Female	53	34%	
Department	Management Sciences	71	46%	
	Computer Sciences	47	30.7%	
Department	Engineering	21	13.07%	
	Others	15	9.8%	
	1-2	26	16.9%	
	3-4	40	26.1%	
Semester	5-6	51	33.33%	
	6-7	20	13.07%	
	7-8	16	10.45%	

#### **Analysis of Data**

The researcher followed the structural equation modelling (SEM) technique to examine the relationship between Learner Identity, Grade Goal, Customer Orientation, and students' academic performance. For this purpose, the researcher used SPSS v.23 and AMOS v.23. According to Abbas (2020b), the SEM technique has the strength to remove the biases effect, which is caused by measurement errors, and build latent constructs' hierarchy. The researcher examined the adequacy of the sample through the Kaiser-Meyer-Olkin (KMO) test, which showed a value of 0.828. This value fully meets Kaiser and Rice (1974) minimum requirement of 0.6. The multi-collinearity factor was analyzed through the variance inflation

Vol. 9, No. 4, 2020, E-ISSN: 2226-6348 © 2020

factor (VIF), which showed a value of 3.521. This value filly complied with Hair et al. (2010) requirement of less than 4, indicating the non-existence of multi-collinearity. According to Schwarz et al. (2017), common method bias (CMB) is a critical concern in quantitative studies. The researcher analyzed CMB through Harman's test of a single factor. The result for the single factor contribution was 33.34%. According to Podsakoff, MacKenzie, and Podsakoff (2012), if a single factor contributes less than 50% of the whole variance, CMB does not influence the results; therefore, it can be said that there is no any problem of CMB in the data.

#### Assessment of the Measurement and Structural Model

The measurement model analyses the relationship between latent variables and their determinants and is tested through confirmatory factor analysis (CFA). CFA also ensures the unidimensionality and validity of the measurement model (Hinkin, 1998). The Cronbach's alpha value of the measurement model is 0.903, which fully complies with Peterson (1994) minimum requirement of 0.8. Therefore, it can confidently be said that the measurement possesses adequate reliability. Furthermore, the researcher analyzed the convergent and discriminant validity. According to Awang (2012), convergent validity can be analyzed through factor loading, and, for already established items, the ideal loading is above 0.6. Moreover, Abbas (2019) recommended that the minimum value of the average variance extracted (AVE) for all constructs should be higher than 0.5. The below table provides details about the number of items along with their loading, composite reliability, and AVE values.

Table-3: Instrument Reliability and Validity

Variable	Number of Items	Factor Loading	Composite	AVE
			Reliability	
Learner Identity	5	0.842-0.932	0.857	0.674
Grade Goal	5	0.752-0.859	0.783	0.751
<b>Consumer Orientation</b>	5	0.777-0.882	0.862	0.711
Academic Performance	5	0.734-0.874	0.858	0.766

To ensure that all constructs are empirically different from each other, the discriminant validity test was performed. For discriminant validity, Fornell and Larcker (1981) proposed that the variance of the constructs with its indicators should be higher than other constructs. Another indicator of discriminant validity is that the square root values of AVE have a higher correlation between the pair indicators (Abbas & Sağsan, 2019). In the view of Hair et al. (2010), the correlation between the predictor variable's pair should not be higher than 0.9. The results are given in the following table that indicates that all the requirements of discriminant validity recommended by Hair et al. (2010) and Fornell and Larcker (1981) have been met, and the constructs have adequate discriminant validity.

Table-4:
Discriminant Validity Analysis

Variable	Learner	Grade	Consumer	Academic
	Identity	Goal	Orientation	Performance
Learner Identity	0.821			
Grade Goal	0.522	0.867		
<b>Consumer Orientation</b>	0.592	0.599	0.843	
Academic	0.563	0.620	0.558	0.875
Performance				

According to Habib, Abbas, and Noman (2019), seven indicators determine the goodness of fit of the measurement model, namely chi-square to the degree of freedom (X²/DF), the goodness of fit index (GFI), adjusted goodness of fit index (AGFI), normative fit index (NFI), comparative fit index (CFI), root mean square error of approximation (RMSEA) and standardized root mean squared residual (SRMR). The researcher also included the Tucker-Lewis index (TLI) so that the measurement and structural model's fitness could further be ensured. The findings of the measurement model indicate that the X²/DF value is 1.169, which is significantly below 2 as recommended by Byrne (1989) and also fulfils Bagozzi and Yi (1988) requirement of less than 3. The analysis of other fit indices, such as NFI, CFI, GFI, AGFI, and TLI, also indicates that their values are well above the ideal value of 0.9 recommended by McDonald and Marsh (1990), Bagozzi and Yi (1988), Bentler and Bonett (1980) and Byrne (1989). The RMSEA value is 0.040, which is well below the maximum value of 0.08 determined by Browne and Cudeck (1992). Finally, the SRMR value is 0.0417, which also complies with the 0.1 cut-off limit by Hu and Bentler (1998).

After the assessment of the measurement model, the structural model was analyzed and the results indicated a X²/DF value of 1. 169. Moreover, the values of other fit indices, such as NFI, CFI, GFI, A GFI, and TLI are also above the value of 0.9 recommended by McDonald and Marsh (1990) and Bagozzi and Yi (1988). The RMSEA value is 0.040, which is well below the maximum value of 0.08 recommended by Browne and Cudeck (1992). Finally, the SRMR value of the structural model is 0.0417 and complies with Hu and Bentler (1998) requirement of less than 0.1 (see Table-5 for further details in the following table). Based on these results, it can be said that the measurement and structural models perfectly fit the collected data.

Table-5:

Analysis of Measurement and Structural Model

The goodness of fit measures	CMIN/DF	NFI	GFI	AGFI	CFI	TLI	RMSEA	SRMR
Recommended value	≤3 <sup>1</sup>	≥0.9²	≥0.9²	≥0.9²	≥0.9²	≥0.9²	≤0.08³	≤0.08⁴
Measurement Model	1.169	0.917	0.918	0.923	0.910	0.911	0.034	0.0542
Structural Model	1.180	0.928	0.920	0.927	0.914	0.930	0.040	0.0417

<sup>&</sup>lt;sup>1</sup> (Richard R Bagozzi & Yi, 1988)

<sup>&</sup>lt;sup>2</sup> (Bentler & Bonett, 1980b; McDonald & Marsh, 1990b)

<sup>&</sup>lt;sup>3</sup> (Browne & Cudeck, 1992b)

<sup>&</sup>lt;sup>4</sup> (Hu & Bentler, 1998)

#### **Testing of Hypotheses**

The researcher analyzed the formulated hypotheses using SEM. The value of the statistical significance of each structural parameter facilitated the validation of path hypotheses. The results indicated that Learner Identity has a significant positive impact on the students' academic performance with a beta value of 0.232 and p 0.004. Grade Goal also indicated a significant positive impact on students' academic performance with a beta value of 0.239 and p-value 0.003. Likewise, Learner Identity demonstrated a significant positive impact on Customer orientation with b¼ 0.209 and p ¼ 0.009. Hence, the hypotheses H1, H2, and H3 are accepted. Similarly, the analysis of other hypotheses indicated that all the path coefficient, except for H4, H5, H6, and H7 explained statistically significant results and are accepted. The detailed hypotheses can be seen in given below.

Table-6: Examining the Hypotheses

Hypothesis	Constructs	Estimate	Critical ratio	p-Value	Decision
H <sub>1</sub>	Lrn. Idt→ Act. Perf.	0.232	2.843	0.004*	Accepted
H2	Grd. Goal $\rightarrow$ Acd. Perf.	0.239	2.913	0.003*	Accepted
Н3	Lrn. Idt $\rightarrow$ Cus. Ornt.	-0.209	-2.612	$0.009^{*}$	Accepted
H4	Grd. Goal $\rightarrow$ Cus. Ornt.	-0.199	-2.131	0.031*	Accepted
H5	Cus. Ornt. $\rightarrow$ Act. Perf.	-0.281	-2.542	0.001*	Accepted
Н6	Lrn. Idt $\rightarrow$ Cus. Ornt. $\rightarrow$ Act. Perf.	0.192	1.835	0.036*	Accepted
H7	Grd. Goal $\rightarrow$ Cus. Ornt $\rightarrow$ Acd. Perf.	0.209	2.312	0.021*	Accepted

#### **Discussion and Conclusion**

Students at universities in Islamabad and Rawalpindi are being increasingly treated as a customer by the private and government regulating authorities. In higher education, marketing is being considered as a well-established instrument to sell their product because most universities adopted this approach that the students have an intention to purchase a degree from them. However, there is a piece of empirical evidence about the effects of paying heavy tuition fee and give the impression from a student's point of view, that a customer orientation approach negatively affects their academic performance. The significant path between learner identity, grade goal, fee responsibility, and subject needs more research so it will eliminate the negative impact on the academic performance of students.

Standard of education in Pakistan is on improving stage. Many HEIs are making their future policies to attract new and retain the existing students. Our study focuses on the customer-oriented approach of HEIs towards students and its impact on their academic performance. The authors focused on four variables, namely grade goal, learner identity, customer orientation, and students' academic performance. Principally, the authors studied how learner identity and grade goal impacts on students' academic performance. Following this, it was also examined what is the relationship between these two variables and student as customer orientation/approach. The authors also examined the impact of the student as customer approach on students' academic performance. Finally, it was examined how student as customer approach mediates the relationship between learner identity, grade

goal, and students' academic performance. It is found that learner identity and grade goal has a significant positive impact on students' academic performance. A negative relationship is found between learner identity, grade goal and customer orientation. Moreover, student as customer approach/orientation also found to have a significant negative impact on students' academic performance. Finally, customer orientation is found to act as a partial mediator between grade goal, learner identity, and students' academic performance. The current research also offers valuable insights to the management of HEIs that they must avoid treating students as a customer since it hinders their potential to learn and accelerate. It also creates a sense of superiority in students' mind and students started believing that their demands must be acknowledged and fulfilled, irrespective of their contribution in the field.

#### References

- Abbas, J. (2019). Impact of total quality management on corporate sustainability through the mediating effect of knowledge management. *Journal of Cleaner Production*, 244, 118806. https://doi.org/10.1016/j.jclepro.2019.118806
- Abbas, J. (2020a). Impact of total quality management on corporate green performance through the mediating role of corporate social responsibility. *Journal of Cleaner Production*, 242, 118458. https://doi.org/10.1016/j.jclepro.2019.118458
- Abbas, J. (2020b). Service Quality in Higher Education Institutions: Qualitative Evidence from the Students' Perspectives using Maslow's Hierarchy of Needs. *International Journal of Quality and Service Sciences*, *12*(3), 371–384. https://doi.org/10.1108/IJQSS-02-2020-0016
- Abbas, J. (2020c). HEISQUAL: A modern approach to measure service quality in higher education institutions. *Studies in Educational Evaluation*, *67*, 100933. https://doi.org/10.1016/j.stueduc.2020.100933
- Ahsan, M. U., Nasir, M., & Abbas, J. (2020). Examining the Causes of Plastic Bags Usages and Public Perception about its Effects on the Natural Environment. *International Journal of Academic Research in Business and Social Sciences*, 10(10), 80–96. http://dx.doi.org/10.6007/IJARBSS/v10-i10/7919
- Awang, Z. (2012). A handbook on structural equation modeling using AMOS. University technologi MARA press, Malaysia.
- Bagozzi, R. R., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, *16*(1), 074–094.
- Bagozzi, R. R., & Yi, Y. (1988). On the evaluation of structural equation models. J.Acad.Mark.Sci.16, 074–094.
- Bailey, D., & Bennet, J. (1996). *The Realist Model of Higher Education. Quality Progress*, 77–79.
- Ball, C. (2015). Top ten degree subjects for graduate starting salaries.
- Bejou, D. (2005). Treating Students Like Customers. BizEd. pp.44-47.
- Bentler, P. M., & Bonett, D. G. (1980a). Significance tests and goodness of fit in the analysis of covariance structures. Psychol, Bull 88, 588–606.
- Bentler, P. M., & Bonett, D. G. (1980b). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588–606.
- Boone, J. (2006). Oxford Draws up Student study Contracts.
- Boyer, E. L. (1987). College: The Undergraduate experience in America. 12.
- Browne, M. W., & Cudeck, R. (1992a). *Alternative ways of assessing model fit. Sociol, Methods Res.21*, 230–258.

- Browne, M. W., & Cudeck, R. (1992b). Alternative ways of assessing model fit. *Sociological Methods & Research*, 21(2), 230–258.
- Bunce, L., Baird, A., & Jones, S. E. (2017). *The student-as-consumer approach in higher education and its effect on academic performance*.
- Byrne, B. M. (1989). A primer of LISREL: Basic application and programming for confirmatory factor analytic models (Springer-Veriag).
- Collins, H. (2003). In Collins Consice Dictionary and Thesaurus ((3rd Ed). Glasgow).
- Crawford, F. (1991). Total Quality Management Committee of Vice-chancellors and Principal Occasional Paper.
- Douglas, J., & Douglas, A. (2006). The student as customer.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Res 18, 39–50.
- Habib, M., Abbas, J., & Noman, R. (2019). Are human capital, intellectual property rights, and research and development expenditures really important for total factor productivity? An empirical analysis. *International Journal of Social Economics*, 46(6), 756–774. https://doi.org/10.1108/IJSE-09-2018-0472
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (2010). *Multivariate Data Analysis* (Seventh). Pearson.
- Hill, F. (1995). Managing Service Quality in Higher Eduction: The Role of the student as primary consumer. Quality Assurance in Education. Vol.3, No.3, 10–21.
- Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnairs. Res. Methods 1, 104–121.
- Hirvonen, P., & Helander, N. (2001). *Towards joint value creation processes in profesional services. The TQm magazine*. *Vol.13 No. 4*, 281–291.
- Hu L., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. Psychol. Methods 3, 424–453.
- Imran, M., & Abbas, J. (2020). The Role Of Strategic Orientation In Export Performance Of China Automobile Industry. In *Handbook of Research on Managerial Practices and Disruptive Innovation in Asia* (pp. 249–263). IGI Global.
- Kaiser, H. F., & Rice, J. (1974). Little jiffy, mark iv. Educ. Psychol. Meas 34, 111–117.
- Mahmood, H. K., Abbas, J., & Hussain, F. (2015). Information security management for small and medium size enterprises. *Science International-Lahore*, *27*(3), 2393–2398.
- Mahmood, H. K., Hashmi, M. S., Shoaib, D. M., Danish, R., & Abbas, J. (2014). Impact of TQM Practices on Motivation of Teachers in Secondary Schools Empirical Evidence from Pakistan. *Journal of Basic and Applied Scientific Research*, 4(6), 1–8.
- Mahmood, H. K., Hussain, F., Mahmood, M., Kumail, R., & Abbas, J. (2020). Impact of E-Assessment at Middle School Students' Learning An Empirical study at USA Middle School Students. *International Journal of Scientific & Engineering Research*, 11(4), 1722–1736.
- McDonald, R. P., & Marsh, H. W. (1990a). *Choosing a multivariate model: Noncentrality and goodness of fit. Psychological Bull.* 107, 247–255.
- Molesworth, M., Nixon, E., & Scullion, R. (2009). "Having, Being and Higher Education: The Marketisation of the University and the Transformation of the student into consumer. Teaching in Higher Education 14(3), 277–287.
- Muzaffar, A., Abbas, J., Mahmood, H. K., Ramzan, M. A., & Rizvi, S. S. ul H. (2014). Impact of Technology on Performance of Employees (A Case Study on Allied Bank Ltd, Pakistan). *World Applied Sciences Journal*, 29(2), 271–276.

- Muzaffar, A., Abbas, J., Shoaib, M., & Mahmood, H. K. (2014). Do Business Schools Really Fulfill Industry Requirements? An Investigation of Industrial Performance of Business Graduates. *World Applied Sciences Journal*, *31*(7), 1378–1384.
- Oxford University, P. (1999). The concise Oxford Dictionary of Current English (9th Ed).
- Peterson, R. A. (1994). *Meta-analysis of alpha cronbach's coefficient. J.Consum. Res.21*, 381–391.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. Annu.Rev.Psychol 63, 539–569.
- Redding, P. (2005). The Evolving interpretations of Customers in Higher Education: Empowering the Elusive. International Journal of Consumer Studies. Vol. 29, No. 5, pp. 409–417.
- Robinson, A., & Long, G. (1987). *Marketing Further Education: Products or People. NAFTHE Journal*. 42–51.
- Rowley, J. (1997). Beyond services Quality Dimensions in Higher Education and Towards a service Contract. Quality Assurance in Education. Vol. 5, No. 1, 7–14.
- Sagsan, M., & Abbas, J. (2019). Identification of key employability attributes and evaluation of university graduates' performance: Instrument development and validation. *Higher Education, Skills and Work-Based Learning, 10*(3), 449–466. https://doi.org/10.1108/HESWBL-06-2019-0075
- Sağsan, M., & Abbas, J. (2019). Impact of knowledge management practices on green innovation and corporate sustainable development: A structural analysis. *Journal of Cleaner Production*, 229, 611–620. https://doi.org/10.1016/j.jclepro.2019.05.024
- Saundars, D. B. (2014). They do not buy it: Exploring the extent to which enterning first year student view themselves as customers. Journal of marketing for higher education 25, 5–28.
- Saxton, J. (2000). Investment in education: Private and public returns. Joint Economic Committee Study.
- Schneider, B., Hanges, P., Goldstein, H., & Braverman, E. (1994). Do customer service perception generalize? The case of chair ratings of faculty effectiveness. Journal of Applied Psychology, . 685–690.
- Schwarz, A., Rizzuto, T., Carraher-Wolverton, C., Roldan, J. L., & Barrera-Barrera, R. (2017). Examining the impact and detection of the "'urban legend'" of common method bias. Database Adv. Inf. Syst. 48, 93–119.
- Singh, G. (2002). Educational consumers or Educational Parners: A Critical Theory Analysis. Critical perspective on accounting. Vol. 13, 681–700.
- Sirvanic, M. (1996). Are the students the true customers of Higher Education. Quality Progress. 99–102.
- Slack, E. (1995). Operation Management. Pitman Publishing, London.
- Tomlinson, M. (2014). Exploring the impacts of policy changes on student attitudes to learning. York: Higher Education academy. 50pp.
- Yorke, M. (1999). Assuring Quality and Standards in Globalised Higher Education. Quality Assurance in Education. Vol. 7, No.1, 14–24.