Journal of Arts and Social Sciences
https://ojs.jass.pk

Role of Personal Factors in Epistemological Access to Higher Education: Comparison of Public and Private Universities in Pakistan

Dr. Irfana Rasul*, Dr. Seema Arif, Dr. Muhammad Nadeem*****

** PhD, University of Management and Technology, irfana.omer1@gmail.com.*
*** Associate Professor,University of Management and Technology, seema.arif@umt.edu.pk.*
**** Principal Officer in Mines & Minerals Department, mnadeem439@gmail.com.*

ARTICLE INFO

Article history:
Submitted 08.02.2021
Accepted 23.06.2021
Published 29.06.2021

Volume No. 8
Issue No. I
ISSN (Online) 2414-8512
ISSN (Print) 2311-293X
DOI:

Keywords: Epistemological access, personal competency, personal effort for improvement, willingness to learn, participation in university activities

ABSTRACT

The aim of this study was to find the difference between the perceptions of students of public and private universities regarding relationship of personal factors (comprising four sub-factors (personal competency, participation in university activities, personal efforts for improvement, personal willingness) and epistemological access. A survey was held with undergraduate students of eight universities (4 public & 4 private) in Pakistan. Multistage sampling technique was used to select the sample that targeted 1600 under-graduate students of 6th semester from two faculties (Information and Technology, and Business School) of 8 universities (4 private and 4 public) situated in the province of Punjab and Islamabad (Capital Territory) in Pakistan. The data were collected through a self-constructed questionnaire during the academic session 'Fall 2018-2019.' Data was recorded on SPSS and treated statistically; after confirmatory factor analysis, one-way ANOVA was conducted to find the difference between perceptions of students of public and private universities across 5 factors stated above. The results showed that significant difference existed between perceptions regarding provision of epistemological access among four out of five factors. In three cases (personal competency, participation in university activities and personal willingness for improvement) the perceptions of private students were better than the students of public universities, whereas, the public university students' perceptions were better in personal efforts for improvement. It was deduced from the results of Pearson correlation that there existed a positive relationship among the mentioned constructs— personal competency, personal effort for improvement, and epistemological access. However, no significant difference was found between students of public & private universities regarding provision of epistemological access in their respective universities.

Introduction

Like education, epistemology is developmental (Arslantaş, 2015; Roos & Von Krogh, 2016) and exists in the form of beliefs which affect learning (Muis, Pekrun, Sinatra, Azevedo, Trevors, Meier &Heddy, 2015; Muis, Chevrier& Singh, 2018). Existing epistemological beliefs also affect the way students respond to the instruction and a change in the belief also changes the interpretation of the instruction (Hofer &Pintrich, 2004; Hofer & Sinatra, 2010; Hofer, 2016). Mostly faculty and university authorities do not value students' beliefs (Twombly, 1992; Becker, 2017; Bowen, 2018) and impose organizational epistemology for the choice of programs, courses, and professors. This is how professional neutrality is affected by the heads and planners' perspective who design curriculum according to their interests (Land & Jonassen, 2012; Sloan & Bowe, 2014) and ignore personal competency and interests of the students. Many higher education

Correspondence concerning this article should be addressed to Dr. Irfana Rasul, irfana.omer1@gmail.com.

theorists blame this organizational epistemology approach as barrier to academic autonomy (Willingham-McLain, 2015; Khawar & Arif, 2019) and quality of learning (Akalu, 2016; Dill, 2016). It demands not only to merge organizational epistemology with personal epistemology, but also to reshape students' personal epistemology that helps in self-regulated learning by forming the foundation of life-long learning (Hofer & Sinatra, 2010; Bryson, 2014, 2016; Tafreshi & Racine, 2015; Sekret, 2018). The provided space to personal values and beliefs of the students will affect the personal factors — personal efforts for improvement, participation in university activities, personal competency, and personal willingness— for meaningful access.

Personal Factors Affecting Epistemological Access

Lifelong learning is an intentional learning which shows willingness of the learner to develop his competencies (Barnett, 1997; Martínez-Mediano & Lord, 2012; Quendler & Lamb, 2016; Tekkol&Demirel, 2018) and it is imperative to develop self-consciousness among the students to help them be aware of their weaknesses and strengths; thus more conscious of their competencies required on a learning path (Ferrell & Barbera, 2015; Baik, Larcombe & Brooker, 2019) and improve personal efforts (Pendlebury, 2009; Taylor, 2017; Mrazek, Ihm, Molden, Mrazek, Zedelius & Schooler, 2018; Omar & Chaudhary, 2019) for maximum utilization of the available resources— in the form of workshops, conferences, seminars etc.— provided at HEIs for genuine access.

Evidence (Carmichael, Newmann & King, 2015; Joyce, Gitomer & Iaconangelo, 2018) supports the fact that active learning can be pursued through active participation of students but at certain times even active participants follow illusory path— where only participation in an activity is taken as the criteria for learning— resulting in the production of shallow and surface-level intellectual work. This low standard of intellectual activity where students are mere passive learners spoon-fed by the teachers further weakens students' willingness to learn as they don't find themselves capable of taking new challenges and switching to the new learning approaches (Rahim &Ros, 2016; Omar &Arif, 2019b; Arif& Omar, 2019). Moreover, conventional academic achievement criteria certifies success in the form of grades which can be easily secured by retrieval and imitation of the knowledge transmitted by the teacher without any in-depth exhaustive thinking and elaborative effort on the part of students in exploring sources outside classroomfor a valued end (Skourdoumbis, 2014; York, Gibson & Rankin, 2015; Cachia, Lynam & Stock, 2018). Even those who can produce high quality work are not willing to put effort because they soon realize that the quizzes and exams are just a test of memory, and plagiarized assignments and projects are safely credited by the teachers. This contravention of ethical policies mirrors up the existing philosophies of the teachers and demands fresh thinking on collective norms of academic values (Walker, 2018).

The research also shows that students' willingness to learn is under threat due to lack of collaboration in the workplace and education (Castaño Muñoz, Redecker, Vuorikari & Punie, 2013; McLaughlin, Sherry, Doherty, Carcary, Thornley, Wang & Heusing, 2014) which needs to be re-contextualized because the more the students will associate themselves with the contextualization framework, the more they will direct personal effort to internalize knowledge (Ossiannilsson, Altınay &Altınay, 2017). Robust and potent support structures of the universities that provide partnership opportunities to students is escalating (Healey, Flint & Harrington, 2016; Barnett & Bengtsen, 2017; Joo, 2017; De Silva & Rossi, 2018; Peters & Mathias, 2018) in the developed countries and active participation of the students in such schemes justifies their creativity and problem solving skills if they are given the leadership role. Creation of new ideas and internalization of knowledge is visibly invisible in higher education institutes of Pakistan as students find less opportunities for active enquiry (Arif, Ilyas & Hameed, 2017; Omar & Arif, 2018), and such missedopportunities block their willingness to learn resulting in low level competencies.

Existing practices of most of the students amount to bedevil the system as most of them practice and promote negative word of mouth by taking universities as degree mills where they enter to purchase the service and not to earn the degree. The authorities need to wipe out this philosophy by promoting personal efforts of the students for purposeful access as no one else can run their race (Fullan, 2016). To ensure success in academic access, we not only need restructuring but also re-culturing at higher education institutes (Yu, 2016; Kunnari, 2018).

Correspondence concerning this article should be addressed to Dr. Irfana Rasul, irfana.omer1@gmail.com.

Research Questions

The study addressed following research questions:

1. What is the role of demographic variables (age, gender and CGPA) of students in experiencing epistemological access?
2. What is the difference between efforts of public and private universities to provide their students with epistemological access?

Conceptual Framework of the Study

The research framework has been constructed on the basic assumption:

Personal Efforts ⟶ *Epistemological access*

The detailed examination of the related studies enabled the researchers to conclude that personal factors i.e., personal competency (PCOM), participation in university activities (PUA), personal effort for improvement (PEI), and personal willingness (PW) are important ingredients for epistemological access (EA) to the provided resources (Morrow, 2009). To avoid unjustified wastage of physical and intellectual resources for purposeful access, personal efforts of the students shall be improved. In Pakistani context this concept has been further elaborated to get an overall picture of the phenomenon (Omar &Arif, 2018, 2019a, 2019b; Omar & Chaudhary, 2019). Thus, epistemological underpinning brings forth that to get enrolled in a program does not mean that a student is equipped with the required skills (Maphosa, Sikhwari, Ndebele &Masehela, 2014; Muller, 2014, 2015; Young & Muller, 2016) rather true effort of the user for real achievement ensures meaningful access. The outcomes of these studies have led to conceptualize the following variables as a framework.

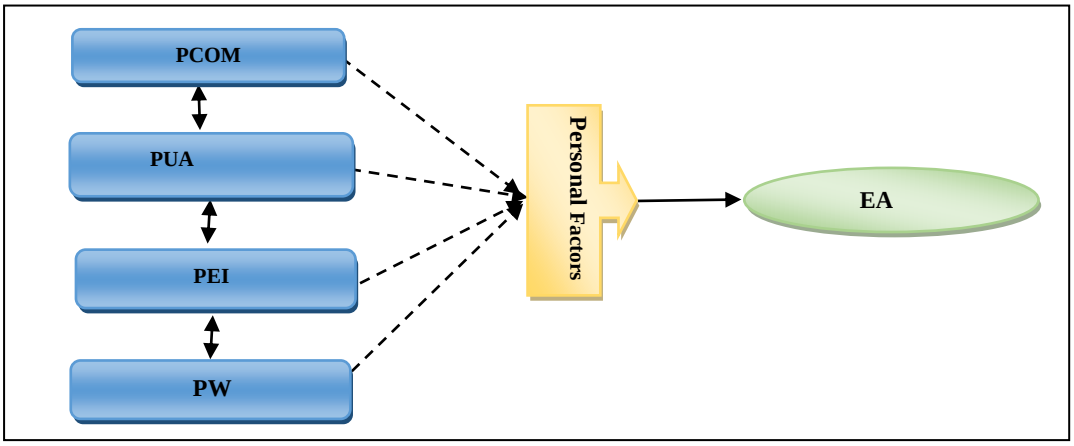

Figure 1.*Conceptual framework of the study*

Method

Survey method was chosen to conduct the research.Target sample was achieved from eight universities (four public and four private) of Punjab and Islamabad Capital Area using multi-stage sampling technique. information and technology, and business school, with a criterion of being old, established and offering professional education were selected for the study from each university. the data were collected from students of 6thsemester using simple random sampling during the Fall semester, 2019 (October – February), personally and with the help of colleagues and friends. Overall, 800 students from each faculty out of 8 universities (4 private and 4 public) were selected which resulted in a total of 1600 students for the study.

Following delimitations were considered: Only HEC recognized W4 category universities were part of the study; only public and private sector universities offering co-education were made part of sample; only registered students at the time of study of public and private sector universities were made part of the sample after seeking their formal consent.

Correspondence concerning this article should be addressed to Dr. Irfana Rasul, irfana.omer1@gmail.com.

To record perceptions of undergraduate students,a self-constructed questionnaire with closed ended items was administered. The questionnaire consisted of three parts: Part I gathered information about demographic features of the respondents such as gender, age, university-type, and CGPA secured; Part II extracted information about personal factors related to students like personal competency, participation in university activities, personal effort for improvement, and personal willingness; Part III sought opinions of the respondents regarding epistemological access. The items for the questionnaire were constructed on a five-point Likert-scale, using options as 1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree, 5 = strongly agree. The questionnaire was pilot tested for face and content validity and reliability through conducting a pilot. Needed improvement were made and the final questionnaire's reliability was improved from 0.783 to 0.925.

Data Analysis

Demographic Description

Data were collected from eight universities (4 public and 4 private) of Punjab and ICT, Pakistan. Two faculties (i. Information and technology ii. Business school) consisting of 800 students each were part of the sample.

There were three demographic variables of the study, gender, age and CGPA. Data were collected from 1600 undergraduates consisting of 630 females (39%) and 970 males (61%).The age of all students ranged within 20-23 years, out of which 93% students were within the range of 20-21 and 7% students were within the range of 22-23.The CGPA of students ranged between 2.0- 4.0: 27 students (2%) secured within the range of 2.0-2.5, 523 students (33%) got within the range of 2.6-3.0, 488 students (31%) earned within the range of 3.1-3.30, 472 students (31%) scored within the range of 3.4-3.7, and 472 students obtained within the range of 3.8-4.0.

Confirmatory Factor Analysis

Kaiser-Meyer-Olkin Measure of Sampling Adequacy was applied after calculating Cronbach Alpha. The results are mentioned in the table below:

Table 1. *KMO and Bartlett's Test for Sampling Adequacy*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.903
Bartlett's Test of Sphericity	Approx. Chi-Square	68787.6
	df	6105
	Sig.	.000

Different items included in the questionnaire measuring various aspects of epistemological access to higher education were factorized using common factor analysis. Internal consistency of each subscale (factor) was measured by using Cronbach's Alpha which was found to be more than 0.6 for all factors meeting the minimum cut point (Wang, 2003). The Cronbach's coefficient for personal willingness was 0.650, for personal competency it was 0.882, for personal efforts for improvement it was 0.783, for participation in university activities it was 0.837, and for epistemological access it was 0.849.The overall reliability found to be 0.903.

Personal Competency (PCOM)

The factorability of 7 items was examined and the resultant alpha was .882; however, KMO was 0.8 and Bartletts' test of Sphericity was significant (χ^2=6.118). All factor loadings were found above 0.6, confirming the presence of strong factor personal competency. Further details of the items and their subsequent values are mentioned below:

Table 2. *Confirmatory Factor Analysis and Reliability Analyses (Personal Competency)*

No	Factors	Items	Factor loading	Alpha

Correspondence concerning this article should be addressed to Dr. Irfana Rasul, irfana.omer1@gmail.com.

		I feel competent in the skills (English Language) needed to complete my degree.	.663	.882
		I feel competent in the skills (Mathematics) needed to complete my degree.	.787	
		I feel competent in the skills (Statistics) needed to complete my degree.	.765	
4	Personal Competency	I feel competent in the skills (Analytical skill) needed to complete my degree.	.699	
		I feel competent in the skills (Information Technology) needed to complete my degree.	.605	
		I feel competent in the skills (Communication Skills) needed to complete my degree.	.765	
		I feel competent in the skills (Social Skills) needed to complete my degree.	.732	

Participation in University Activities (PUA)

The factorability of 9 items was examined and the resultant alpha was .837; however, KMO was 0.86 and Bartletts' test of Sphericity was significant (χ^2= 4.669). All factor loadings were found above 0.4, confirming the presence of strong factor participation in university activities. Further details of the items and their subsequent values are mentioned below:

Table 3. *Confirmatory Factor Analysis and Reliability Analyses (Participation in University Activities)*

No.	Factors	Items	Factor loading	Alpha
1		I take part in the sports activities during study	.455	.837
2		I take part in the debates during study	.615	
3		I take part in the dramatics during study	.590	
4	Participation in University Activities	I take part in the quiz competitions during study	.648	
5		I take part in the scientific exhibitions during study	.642	
6		I take part in the art exhibitions during study	.643	
7		I take part in the cultural festivals during study	.643	
8		I take part in the study or recreational tours during study	.562	
9		I take part in the writing competitions during study	.573	

Personal Efforts for Improvement (PEI)

The factorability of 9 items was examined and the resultant alpha was .783; however, KMO was .801 and Bartletts' test of Sphericity was significant (χ^2= 3.993). All factor loadings were found above 0.5, confirming the presence of strong factor personal efforts for improvement. Further details of the items and their subsequent values are mentioned below:

Table 4.*Confirmatory Factor Analysis and Reliability Analyses (Personal Efforts for Improvement)*

No.	Factors	Items	Factor loading	Alpha
1	Personal efforts for improvement	I avail access to free workshops and trainings for the skills I lack, for example English Language	.548	.783
2		I avail access to free workshops and trainings for the skills I lack, for example Mathematics	.670	
3		I avail access to free workshops and trainings for the skills I lack, for example Statistics	.623	
		I avail access to free workshops and trainings for the skills I lack, for example Information Technology	.658	
5		I avail access to free workshops and trainings for the skills I lack, for example Communication Skills	.776	
6		I avail access to free workshops and trainings for the skills I lack, for example Social Skills	.743	
7		I spend sufficient time in computer lab/on PC to increase my knowledge.	.511	
8		I spend sufficient time in library to increase my knowledge.	.627	
9		I take extra coaching to improve my learning.	.594	

Personal Willingness (PW)

The factorability of 7 items was examined and the resultant alpha was .650; however, KMO was .731 and Bartletts' test of Sphericity was significant (χ^2= 1.377). All factor loadings were found above 0.4, confirming the presence of strong factor personal willingness. Further details of the items and their subsequent values are mentioned below:

Table 5.*Confirmatory Factor Analysis and Reliability Analyses (Personal Willingness)*

No.	Factors	Items	Factor loading	Alpha
1	Personal Willingness	I was willing to take admission in this university.	.641	.650
2		I was willing to take admission in this degree program.	.517	
3		I was willing to take admission in this city.	.579	
4		I am willing to work with my senior students of the department/university in various projects.	.468	
5		I am willing to take all courses offered in the degree program.	.548	
6		I am willing to work in group projects and activities for better acquisition of knowledge.	.641	
7		I am willing to work with my instructors as Teaching Assistant (TA) or internee to learn.	.602	

Correspondence concerning this article should be addressed to Dr. Irfana Rasul, irfana.omer1@gmail.com.

Epistemological Access (EA)

The factorability of 8 items was examined and the resultant alpha was .738; however, KMO was .719 and Bartletts' test of Sphericity was significant (χ^2= 3.623). All factor loadings were found above 0.3, confirming the presence of strong factor epistemological access. Further details of the items and their subsequent values are mentioned below:

Table 6.*Confirmatory Factor Analysis and Reliability Analyses (Epistemological Access)*

No.	Factors	Items	Factor loading	Alpha
1	Epistemology-cal Access	I get comprehensive feedback by teachers on my performance for improvement in my learning.	.393	.738
2		I can access teachers beyond the classrooms to learn a content that was unclear in the class.	.591	
3		My teachers talk in easy and understandable language.	.474	
4		My teachers are very affectionate.	.500	
5		My teachers listen to my problems carefully.	.649	
6		My teachers give me guidance to solve my problems.	.658	
7		I like to associate myself with my teachers.	.806	
8		I role-model the personality of my teachers.	.796	

One-Way ANOVA

One-way ANOVA was conducted to determine the comparisons of means of the perceptions of students between public and private universities regarding factors of epistemological access (EA) for demographic variables: gender, age, university-type, and CGPA.

Table 1. *ANOVA: Gender-Wise Comparisons of Student Perceptions about Epistemological Access*

No.	Factors		Sum of Squares	df	Mean Square	F	Sig.
1	PCOM	Between Groups	.072	1	.072	.069	.793
		Within Groups	1655.230	1598	1.036		
		Total	1655.302	1599			
2	PUA	Between Groups	.783	1	.783	1.329	.249
		Within Groups	941.638	1598	.589		
		Total	942.421	1599			
3	PEI	Between Groups	.389	1	.389	.658	.417
		Within Groups	943.252	1597	.591		
		Total	943.640	1598			
4	PW	Between Groups	2.476	1	2.476	4.072	.044
		Within Groups	971.824	1598	.608		
		Total	974.301	1599			
5	EA	Between Groups	.898	1	.898	1.246	.264
		Within Groups	1151.650	1598	.721		
		Total	1152.548	1599			

Correspondence concerning this article should be addressed to Dr. Irfana Rasul, irfana.omer1@gmail.com.

The Analysis of Variance Test (ANOVA) was conducted to measure gender differences (if any) existing in the male and female students' perceptions about Epistemological Access. The results told us that gender differences for university students were significant for PWat .05 level. Male students expressed more willingness to learn and hoped for success than female students of Pakistani universities. There was no significant difference in the perceptions of male and female students regarding PCOM, PEI, PUA, and EA.

Table 2. *ANOVA: University-Type Comparisons of Student perceptions about Epistemological Access*

No.	Factors		Sum of Squares	df	Mean Square	F	Sig.
1	PCOM	Between Groups	35.646	1	35.646	35.169	.000
		Within Groups	1619.656	1598	1.014		
		Total	1655.302	1599			
2	PUA	Between Groups	11.328	1	11.328	19.442	.000
		Within Groups	931.093	1598	.583		
		Total	942.421	1599			
3	PEI	Between Groups	22.729	1	22.729	39.415	.000
		Within Groups	920.912	1597	.577		
		Total	943.640	1598			
4	PW	Between Groups	24.774	1	24.774	41.693	.000
		Within Groups	949.527	1598	.594		
		Total	974.301	1599			
5	EA	Between Groups	.023	1	.023	.032	.859
		Within Groups	1152.526	1598	.721		
		Total	1152.548	1599			

ANOVA university-wiseresults reflected a significant difference between perceptions of epistemological access between students of public & private universities regarding personal factors. For PCOM, PUA and PW the group mean of private universities was greater than mean public universities; whereas, for PEI the group mean of public universities was greater than mean of private universities. There was no significant difference between perceptions of epistemological access between students of public & private universities. There is no mean difference in-group means.

Table 3. *ANOVA: University-Type Comparisons of Student perceptions about Epistemological Access (Post-hoc)*

	University Type	N	M	SD	Tukey's HSD Comparisons
PCOM	public				
	private	801	3.0979	1.01057	Public<Private p<.001
	Total	1600	2.9488	1.01745	
PUA	public	799	1.8786	.74458	
	private	801	2.0469	.78157	Public<Private p<.001
	Total	1600	1.9628	.76771	
PEI	public	799	2.5366	.77848	

Correspondence concerning this article should be addressed to Dr. Irfana Rasul, irfana.omer1@gmail.com.

	private	800	2.2982	.73980	Public>Private p<.001
	Total	1599	2.4173	.76845	
PW	public	799	3.1142	.78852	
	private	801	3.3631	.75280	Public<Private p<.001
	Total	1600	3.2388	.78059	
EA	public	799	2.6492	.84771	
	private	801	2.6417	.85079	Public =private
	Total	1600	2.6455	.84900	

Table 4. *ANOVA: Age-Wise Comparisons of Student perceptions about Epistemological Access*

Factors		Sum of Squares	Df	Mean Square	F	Sig.
PCOM	Between Groups	16.039	1	16.039	15.635	.000
	Within Groups	1639.263	1598	1.026		
	Total	1655.302	1599			
PUA	Between Groups	1.057	1	1.057	1.795	.181
	Within Groups	941.364	1598	.589		
	Total	942.421	1599			
PEI	Between Groups	.729	1	.729	1.234	.267
	Within Groups	942.912	1597	.590		
	Total	943.640	1598			
PW	Between Groups	3.098	1	3.098	5.098	.024
	Within Groups	971.202	1598	.608		
	Total	974.301	1599			
EA	Between Groups	5.980	1	5.980	8.334	.004
	Within Groups	1146.568	1598	.718		
	Total	1152.548	1599			

ANOVA results of age-wise comparisons told us that there was significant difference among perceptions of students of different age groups regarding personal factors (PCOM and PW), and epistemological access (EA). Age mattered: older students felt themselves more competent than younger; younger students were more willing than the older; older students were keener for epistemological access than younger students. However, the mean difference was not found significant for personal factors (PUA, PEI).

Table 5. *ANOVA: CGPA-Wise Comparisons of Student perceptions about Epistemological Access (*Post-hoc)

		Sum of Squares	df	Mean Square	F	Sig.	Tukey's comparisons
PCOM	Between Groups	272.795	4	68.199	78.695	.000	2.6-3.0>3.1-3.30>3.4-3.7>3.8-4.0> 2.0-2.5
	Within Groups	1381.401	1594	.867			
	Total	1654.196	1598				
PUA	Between Groups	55.976	4	13.994	25.194	.000	2.6-3.0>2.0-2.5>3.1-3.30>3.8-4.0>3.4-3.7
	Within Groups	885.369	1594	.555			
	Total	941.345	1598				
PEI	Between Groups	4.103	4	1.026	1.740	.139	2.0-2.5>3.8-4.0>2.6-3.0>3.1-3.30>-3.30>3.4-3.7
	Within Groups	939.198	1593	.590			
	Total	943.301	1597				
PW	Between Groups	20.519	4	5.130	8.574	.000	2.6-3.0>3.1 3.30>

	Within Groups	953.724	1594	.598			3.4-3.7>3.8-4.0>2.0-2.5
	Total	974.244	1598				
EA	Between Groups	22.977	4	5.744	8.107	.000	2.6-3.0>3.1-3.30>3.4-3.7>3.8-4.0>2.0-2.5
	Within Groups	1129.415	1594	.709			
	Total	1152.392	1598				

ANOVA results of CGPA-wise comparisons of student perceptions for personal factors of epistemological access told us that there was significant difference among perceptions of students of different CGPA-wise groups regarding personal factors (PCOM, PUA and PW). The group means of CGPA group (2.6-3.0) was the highest and the CGPA group (2.0-2.5) was the lowest. However, the mean difference was not found significant in personal factor (PEI).

It was found that CGPA mattered: PCOM analysis reflected that students with too high and too low CGPA were lesser concerned about their personal competence whereby students with higher CGPA might take competence as guarantee of future success while students with lowest CGPA might not feel self-efficacious as their counterparts; PW analysis showed that students with too high and too low CGPA appeared to be less willing and interested in participation in university activities; EA analysis brought forth that students with lower levels of CGPA could not make use of resources for epistemological access as with higher CGPAs. The students at the borderline with CGPA of (2.6-3.0) were observed to exert at their best to reach upper levels.

Discussion

Factor wise descriptive analysis signaled that students were found to be more dissatisfied than satisfied with both variables: personal factors and epistemological access.Personal factors were measured through four sub-factors: personal competency, personal effort for improvement, participation in university activities, and personal willingness. The descriptive analysis of factors informed that the students did not make justified use of the provided facilities and worked less on self-improvement. A vast majority of the students did not participate in the co-curricular activities and confined themselves to the academic tasks only; consequently, they lacked in personal grooming and soft skills. Students' conception of the university was limited to teaching and learning place and the only objective was to get the degree in desirable grades. Hence, many graduates went in the market with unpolished skills, especially interpersonal and soft skills, and remained unemployable for longer period.

Lesser number of students found their access to universities purposeful; students perceived themselves deficient in deep learning, problem solving, meeting lesson objectives, and creativity. Students were less willing to take readmission in their respective universities and they were found to lack in Mathematical and Statistical skills (the key skills needed for business and IT programs).

ANOVA university-wise comparisons underlined a significant difference between perception of students of public and private universities regarding personal factors. Students of public universities expend more efforts on personal improvement and they were found to be more research-oriented and self-directed in their studies. They had less physical resources, and they less depended on directed teaching and explored the resources themselves for conceptual clarity to meet up their academic deficiencies. Comparatively, students of private universities depended more on the teachers for academic advising, rather they were spoon fed by the teachers to get through the assessments and exams. This spoon feeding did not leave any margin for the development of cognitive thinking and thus no internalization of knowledge. Moreover, private university students were more engaged in building their social skills while public university students spent more time in improvement of their academic skills. There remained a clear deficiency in the performance of both and both did not reach to landmark of success generally except the few.

Based upon the results of ANOVA gender-wise comparisons, it was concluded that gender made the difference in perceptions of students of public and private universities of Pakistan; male students were more hopeful for their success and enthusiastic for learning than female students. Cultural role of keeping women subdued to males in Pakistan was reflected through results of this study.

The results confirmed the relationship among variables as assumed in conceptual framework. It was deduced from the results of Pearson Correlation that there existed a positive relationship among the mentioned constructs (PCOM, PEI, EA); however, all these factors would remain meaningless without

Correspondence concerning this article should be addressed to Dr. Irfana Rasul, irfana.omer1@gmail.com.

students' willingness to learn. The weak personal willingness was also an indicator of poor self-efficacy beliefs. The data corroborated the literature (Ferrell &Barbera, 2015) that willingness to learn is a critical component for epistemological access to the resources at campus and it is indispensable for the teachers to inculcate this desire to learn. It was observed that students failed to take personal initiative for learningand they were not ready to avail provided opportunities which reflected their lack of willingness to learn; for example, students were not ready to use plagiarism software; students who could do creative writing also tried to copy and paste the assignments because teachers accepted and credited those assignments.Even those who were willing to learn did not use university facilities positively to reach level of satisfaction and became part of the culture.So, the findings concluded that lack of willingness became a dominant influencing factor that did not create conducive academic culture which is inevitable for epistemological access. The findings were in line with other researches (Altbach, 2015), i.e. internationalization of higher education as a commodity, in the form of skills, to be purchased by a customer led to the mere increase in number of 'degree mills' which offer products to be bought or sold in the market place Furthermore, education as a selling product has negatively affected the student willingness to work on self-competency which resulted in dissatisfaction of students with academic experiences at the campus.

The findings validated the existing literature (Cydis, 2015; Barnett & Bengtsen, 2017) that real learning demands deeper and exhaustive thinking on the part of students to ensure internalization of knowledge rather than shallow and surface-level comprehension of the concepts. Our students lacked in conceptual clarity since their schooling whereby they were trained for replication of the content provided by the teachers or offered in the form of text books. This constant practice resulted in deficiency of basic skills, as a prerequisite for high level performance, which impeded the way for the development of cognitive work (Nold, 2017; Omar, Asif & Madad, 2020).

The in-depth literature review on the topic compared with results unfolded a gap between re-culturing and restructuring regarding personal efforts for epistemological access, which was more of a restructuring attemptaccording to pronounced standards of HEC; hereby re-culturing was the missing ingredient reflected in traditional attitudes and beliefs of students who were not ready to strive for transformative learning (Fullan, 2014; Onurkan Aliusta & Özer, 2017).

The collected data regarding academic advising confirmed the evidence on relevant literature (Kolenovic, Linderman& Karp, 2013; Cintrón & McLean, 2017; Pardy, 2016; Mrazek, Ihm, Molden, Mrazek, Zedelius & Schooler, 2018) that students perceived less or no effort on the part of management for individual or group academic advising. There was a dire need to use proactive delivery model (Finnie, Fricker, Bozkurt, Poirier, Pavlic& Pratt, 2017) as an intervention to facilitate students to better direct their efforts. The data also corroborated the literature (Vianden & Barlow, 2015) that the more the management is supportive in academic advising the more the students are engaged in the academic activities increasing the probability of opting the same university for further higher studies.

Dissatisfaction of students with provided facilities at higher education places not only resulted in wastage of existing physical and intellectual resources (Omar & Chaudhry, 2019) but also prohibited willingness of students for purposeful access. Accurate perception of the misuse of accessible resources at HEIs in Pakistan through 'epistemic justification' lens mirrored up the fact that personal efforts of the students for a justified use of the available resources need to be addressed (Omar & Chaudhry, 2019; Omar & Arif, 2020). We need to develop culture of willingness to learn among students so that they can be self-directed and work with self-efficacy to access the provided resources meaningfully (Blömeke, Zlatkin-Troitschanskaia, Kuhn, &Fege, 2013; Putwain, Sander, & Larkin, 2013; Rodríguez, Regueiro, Pena, Valle, Piñeiro & Menéndez, 2014).

Conclusion

The results of this study ascertained the dynamic hypothesis that personal factors is a critical factor which leads to epistemological access. Personal factors—PCOM, PUA, PEI, and PW—is a necessary pre-requisite for epistemological access to the higher education institutes. Correlation results confirmed a significant positive correlation among all five sub- factors: PCOM, PUA, PEI, PW, EA. Personal competency and personal effort for improvement played a significant role in epistemological access. Moreover, significant difference existed in the perceptions of students of public and private universities regarding most of the personal factors.

Implications

Correspondence concerning this article should be addressed to Dr. Irfana Rasul, irfana.omer1@gmail.com.

The students shall take higher education institute as a 'bastion of critical inquiry' (Ruben, 2004; Saunders, 2015; Gourlay & Stevenson, 2017) where new questions are asked, fresh concepts are explored, curiosity for unknown stays, and excitement for learning prevails. The findings correlate with Barnett (2018) who argued for a shift to working to learn rather than learning to work to prepare our students for an unknown future. These claims have been well taken recently by other researcher (Biggs, 2011, 2014; Fullan& Gallagher, 2017; Fullan, Quinn, &McEachen, 2018, Fullan, Gardner & Drummy, 2019). The same has been emphasized for the developing world, especially Pakistan (Omar & Chaudhary, 2019; Khawar & Arif, 2019).

There is a dire need to spend more on the development of personal grooming of the students through curricular as well as extra-curricular activities as it may allow the students to have diverse personalities: even those who are weak at academics, find the opportunity to show their strength in other activities. This ontological philosophy boosts their morale and they find themselves competent in other skills which reduces the gap between successful and unsuccessful. Research also confirms that students can be involved in diligent practice and self-regulated learning through incorporating technology and offering students digital exercises (Brun & Hinostroza, 2014; Arif & Omar, 2019).

Green (2018) promulgates that student participation benefits students a lot on their road to success; especially students from lower socioeconomic backgrounds get benefitted from role modeling. However, higher education institutions have to exert more in learning about students' perspectives and use it as evidence for potential improvement to meet student needs (Kahu & Nelson, 2018).

The business oriented approach of private universities opens the door for ill-prepared students to access the place for higher education but as they are not equipped with requisite competencies to move on to higher leaning, they either drop out or remain unskilled to turn access into success. The quality of students at entry point does not matter much, if the university is ready to take responsibility of their development and success and not only retention. Universities can benefit by increasing student involvement in programs aimed at widening higher education participation (Brennan, 2018; Green, 2018). Students bring individual and collective strengths to learning; recognizing and developing these is important in an agentic approach to engagement (Zepke, 2018).Since Private university students are more participative than public university students, the public universities must send their students to mixed events so that students from low-socioeconomic backgrounds may get benefitted through interaction with their counterparts belonging to influential families. Such participations would not only enhance students' capability but influences students' cognitive and social outcomes as well (Kahu & Nelson, 2018).

References

Akalu, G. (2016). 'Higher Education 'Massification' and challenges to the professoriate: Do academics' conceptions of quality matter?'.*Quality in Higher Education, 22*(3), 260–276.

Altbach, P. (2015). Knowledge and education as international commodities. *International higher education*, *1*(2), 33-51.

Antwi, S. K., & Hamza, K. (2015). Qualitative and quantitative research paradigms in business research: A philosophical reflection. *European Journal of Business and Management, 7*(3), 217-225.

Arif, S. Omar, I. (2019). Effectiveness of Flipped Classroom in Teaching Basic English Courses. *Yükseköğretim-Turkish Journal of Higher Education, 10*(2), 1-11.

Arif, S., Ilyas, M. & Hameed, A. (2017). Using structure equation modeling to construct student satisfaction models for private universities of Pakistan. *International Journal of Quality and Technology Management, 14*(2), 39-73.

Arslantaş, H. A. (2015). Epistemological beliefs and academic achievement. *Journal of Education and Training Studies*, *4*(1), 215-220.

Baik, C., Larcombe, W., & Brooker, A. (2019). How universities can enhance student mental wellbeing: The student perspective. *Higher Education Research & Development, 38*(4), 674-687.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. NY: Routledge.

Bandura, A. (2010). Self-efficacy. *The Corsini encyclopedia of psychology*, *4*, 1-3.

Barnett, R. (1997). *A will to learn*. UK: Society for Research into Higher Education & Open University Press.

Barnett, R. (2018). The ecological university. A Feasible Utopia. NY: Routledge.

Barnett, R., &Bengtsen, S. (2017). Universities and epistemology: From a dissolution of knowledge to the

Correspondence concerning this article should be addressed to Dr. Irfana Rasul, irfana.omer1@gmail.com.

emergence of a new thinking. *Education Sciences*, *7*(1), 38-50.
Barnett, R., &Bengtsen, S. (2017). Universities and epistemology: From a dissolution of knowledge to the emergence of a new thinking. *Education Sciences*, *7*(1), 38-50.
Becker, H. S. (2017). Making the grade: The academic side of college life. NY: Routledge.
Becker, T. E., Atinc, G., Breaugh, J. A., Carlson, K. D., Edwards, J. R., & Spector, P. E. (2016). Statistical control in correlational studies: 10 essential recommendations for organizational researchers. *Journal of Organizational Behavior*, *37*(2), 157-167.
Biggs, J. (2011). Teaching for quality learning at university: What the student does. UK: Open University Press-McGraw.
Biggs, J. (2014). Constructive alignment in university teaching. *HERDSA Review of higher education*, *1*(1), 5-22.
Blömeke, S., Zlatkin-Troitschanskaia, O., Kuhn, C., &Fege, J. (2013). Modeling and measuring competencies in higher education. In *Modeling and measuring competencies in higher education* (pp. 1-10). Rotterdam: Sense publishers.
Bowen, H. (2018). Investment in learning: The individual and social value of American higher education. NY: Routledge.
Brennan, J. (2018). Success factors of quality management in higher education: intended and unintended impacts. *European Journal of Higher Education*, *8*(3), 249-257.
Brun, M., &Hinostroza, J. E. (2014). Learning to become a teacher in the 21st century: ICT integration in Initial Teacher Education in Chile. *Journal of Educational Technology & Society*, *17*(3), 222-238.
Bryson, C. (2014). Understanding and developing student engagement. NY: Routledge.
Bryson, C. (2016). Engagement through partnership: Students as partners in learning and teaching in higher education, *International Journal for Academic Development*, *21*(1), 84-86.
Cachia, M., Lynam, S., & Stock, R. (2018). Academic success: Is it just about the grades?. *Higher Education Pedagogies*, *3*(1), 434-439.
Carmichael, D. L., Newmann, F. M., & King, M. B. (2015). Authentic intellectual work: Common standards for teaching social studies. In *Social Studies Today* (pp. 63-74). NY: Routledge.
Castaño Muñoz, J., Redecker, C., Vuorikari, R., &Punie, Y. (2013). Open Education 2030: planning the future of adult learning in Europe. *Open Learning: The Journal of Open, Distance and e-Learning*, *28*(3), 171-186.
Christensen, L. B., Johnson, B., Turner, L. A., & Christensen, L. B. (2011). *Research methods, design, and analysis*. NY: Pearson.
Cintrón, R., & McLean, M. (2017). Purposeful Course Scheduling: Increasing Enrollment and Promoting Academic Progression. In *Accelerated Opportunity Education Models and Practices*, IGI Global.100-121
Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. CA: Sage.
Cydis, S. (2015). Authentic instruction and technology literacy. *Journal of Learning Design*, *8*(1), 68-78.
De Silva, M., & Rossi, F. (2018). The effect of firms' relational capabilities on knowledge acquisition and co-creation with universities. *Technological Forecasting and Social Change*, *133*, 72-84.
Dill, D. D. (2016). Enhancing academic quality and collegial control: Insights from US policy on the ethical conduct of human subjects' research. *Higher Education Policy*, *2*, 1-20.
Durik, A. M., Vida, M., & Eccles, J. S. (2006). Task values and ability beliefs as predictors of high school literacy choices: A developmental analysis. *Journal of Educational Psychology*, *98*, 382-393.
Eccles, J. S. (2005). Subjective task values and the Eccles et al. model of achievement related choices. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 105–121). NY: Guilford.
Ferrell, B., &Barbera, J. (2015). Analysis of students' self-efficacy, interest, and effort beliefs in general chemistry. *Chemistry Education Research and Practice*, *16*(2), 318-337.
Finnie, R., Fricker, T., Bozkurt, E., Poirier, W., Pavlic, D., & Pratt, M. (2017). *Academic Advising: Measuring the Effects of "Proactive" Interventions on Student Outcomes.* Toronto: Higher Education Quality Council of Ontario.
Fullan, M. (2014). Teacher development and educational change. NY: Routledge.
Fullan, M. (2016). *The new meaning of educational change* (5thed.). NY: Routledge.
Fullan, M., & Gallagher, M. J. (2017). *Transforming systems, deep learning and the equity hypothesis*. Palo Alto, CA: Learning Policy Institute.
Fullan, M., Gardner, M., &Drummy, M. (2019). Going Deeper. *Educational Leadership*, *76*(8), 64-69.
Fullan, M., Quinn, J., &McEachen, J. (2018). *Deep learning: Engage the world change the world*. CA:

Corwin Press.
Gorges, J., Schwinger, M., &Kandler, C. (2013). Linking university students' willingness to learn to their recollections of motivation at secondary school. *Europe's Journal of Psychology, 9*(4), 764-782.
Gourlay, L., & Stevenson, J. (2017). Teaching excellence in higher education: Critical perspectives. *Teaching in Higher Education, 22*(4), 391-395.
Green, A. (2018). The influence of involvement in a widening participation outreach program on student ambassadors' retention and success. *Student Success*, *9*(3), 25-37.
Healey, M., Flint, A., & Harrington, K. (2016). Students as partners: Reflections on a conceptual model. *Teaching & Learning Inquiry*, *4*(2), 1-13.
Hofer, B. K. (2016). Epistemic cognition as a psychological construct: Advancements and challenges. In *Handbook of epistemic cognition* (pp. 31-50). NY: Routledge.
Hofer, B. K., &Pintrich, P. R. (2004). Personal epistemology: The psychology of beliefs about knowledge and knowing. Hove, UK: Psychology Press.
Hofer, B. K., & Sinatra, G. M. (2010). Epistemology, metacognition, and self-regulation: musings on an emerging field. *Metacognition and Learning*, *5*(1), 113-120.
Iroegbu, M. N. (2015). Self-efficacy and work performance: a theoretical framework of Albert Bandura's model, review of findings, implications and directions for future research. *Psychology and Behavioral Sciences*, *4*(4), 170-173.
Joo, B. A. (2017). Service quality and value creation in institutions of higher learning. *AsianJournal of Research in Banking and Finance, 7*(3), 9-17.
Joyce, J., Gitomer, D. H., &Iaconangelo, C. J. (2018). Classroom assignments as measures of teaching quality. *Learning and instruction, 54*, 48-61.
Kahu, E. R., & Nelson, K. (2018). Student engagement in the educational interface: Understanding the mechanisms of student success. *Higher Education Research & Development, 37*(1), 58-71.
Khawar, A., &Arif, S. (2019). Building world-class university in Pakistan: Opportunities and constraints. *Journal of Management and Research*, *6*(2), 1-28.
Kolenovic, Z., Linderman, D., & Karp, M. M. (2013). Improving student outcomes via comprehensive supports: Three-year outcomes from CUNY's Accelerated Study in Associate Programs (ASAP). *Community College Review*, *41*(4), 271-291.
Kunnari, I. (2018). Teachers changing higher education: From coping with change to embracing change. *Kasvatustieteellisiätutkimuksia, 34*.
Land, S., &Jonassen, D. (2012). *Theoretical foundations of learning environments*. NY: Routledge.
Maddux, J. E. (2016). *Self-efficacy. In Interpersonal and intrapersonal expectancies*. NY: Routledge.
Manavipour, D., &Saeedian, Y. (2016). The role of self-compassion and control belief about learning in university students' self-efficacy. *Journal of Contextual Behavioral Science*, *5*(2), 121-126.
Maphosa, C., Sikhwari, T. D., Ndebele, C., &Masehela, M. (2014). Interrogating factors affecting students' epistemological access in a South African university. *The Anthropologist, 17*(2), 409-420.
Martínez-Mediano, C., & Lord, S. M. (2012). Lifelong learning competencies program for engineers. *International Journal of Engineering Education*, *28*(1), 130-143.
McCune, V. (2009). Final year biosciences students' willingness to engage: teaching–learning environments, authentic learning experiences and identities. *Studies in Higher Education*, *34*(3), 347-361.
McLaughlin, S., Sherry, M., Doherty, E., Carcary, M., Thornley, C., Wang, Y., ...&Heusing, T. (2014). E-Skills: *The International dimension and the Impact of Globalisation-Final Report 2014.* (Report No. 212) European Commission, Brussels.
Morrow, W. (2009). Bounds of democracy: Epistemological access in higher education. Cape Town: HSRC Press.
Mrazek, A. J., Ihm, E. D., Molden, D. C., Mrazek, M. D., Zedelius, C. M., & Schooler, J. W. (2018). Expanding minds: Growth mindsets of self-regulation and the influences on effort and perseverance. *Journal of Experimental Social Psychology*, *79*, 164-180.
Mrazek, A. J., Ihm, E. D., Molden, D. C., Mrazek, M. D., Zedelius, C. M., & Schooler, J. W. (2018). Expanding minds: Growth mindsets of self-regulation and the influences on effort and perseverance. *Journal of Experimental Social Psychology*, *79*, 164-180.
Muis, K. R., Chevrier, M., & Singh, C. A. (2018). The role of epistemic emotions in personal epistemology and self-regulated learning. *Educational Psychologist*, *53*(3), 165-184.
Muis, K. R., Pekrun, R., Sinatra, G. M., Azevedo, R., Trevors, G., Meier, E., &Heddy, B. C. (2015). The curious case of climate change: Testing a theoretical model of epistemic beliefs, epistemic emotions, and complex learning. *Learning and Instruction*, *39*, 168-183.

Muller, J. (2014). Every picture tells a story: Epistemological access and knowledge. *Education as Change, 18*(2), 255-269.
Muller, J. (2015). The future of knowledge and skills in science and technology higher education. *Higher Education, 70*(3), 409-416.
Nold, H. (2017). Using Critical Thinking Teaching Methods to Increase Student Success: An Action Research Project. *International Journal of teaching and learning in Higher Education*, *29*(1), 17-32.
Omar, I. &Arif, S. (2018). From Epistemological Pedagogical Access to Student Success. *Paper presented in 6th International Conference on Research in Education (ICORE).* The University of Punjab, Lahore, Pakistan.
Omar, I. &Arif, S. (2019a). Epistemological Access to Higher Education: Comparison of Public and Private Universities in Pakistan. *Paper presented in 7th International Conference on Research in Education (ICORE).* The University of Punjab, Lahore, Pakistan.
Omar, I. &Arif, S. (2019b). University Efforts for Quality to Ensure Epistemological Access to Higher Education in Pakistan. *Paper presented in the 4th International Conference on Higher Education Studies (IHEC).* CanakkaleOnsekiz Mart University, Canakkale, Turkey.
Omar, I. &Arif, S. (2020). From Epistemological Pedagogical Access to Student Success: New Framework for Studying Access to Higher Education. *Research Journal of Social Sciences & Economics Review, 1*(3), 45-55.
Omar, I., & Chaudhry, M. S. (2019). University efforts for quality to ensure epistemological access. *UMT Education Review, 2*(1), 81–105.
Omar, I., & Chaudhry, M. S. (2019). University efforts for quality to ensure epistemological access. *UMT Education Review, 2*(1), 81–105.
Omar, I., Asif, M., &Madad, A. (2020). Epistemological access to technology blended with pedagogy as a congruent component for students' achievements. *Iqbal Review, 58*(2), 26-32.
OnurkanAliusta, G., &Özer, B. (2017). Student-centered learning (SCL): roles changed?.*Teachers and Teaching, 23*(4), 422-435.
Ossiannilsson, E., Altınay, Z., &Altınay, F. (2017). Towards fostering quality in open online education through OER and MOOC practices. In *Open Education: from OERs to MOOCs* (pp. 189-204). Springer, Berlin, Heidelberg.
Pardy, L. (2016). *Academic Advising in British Columbia.* British Columbia, Canada: BCAT.
Pendlebury, S. (2009). Meaningful access to basic education. In L. Berry, K. Hall, L. Lake, D. H. Marera, S. Pendlebury& C. Smith (Eds.). *South African Child Gauge* (pp. 24-29). South Africa: Children's Institute.
Peters, J., & Mathias, L. (2018). Enacting student partnership as though we really mean it: Some Freirean principles for a pedagogy of partnership. *International Journal for Students as Partners, 2*(2), 53-70.
Privitera, G. J. (2018). *Research methods for the behavioral sciences*. Sage Publications.
Putwain, D., Sander, P., & Larkin, D. (2013). Academic self-efficacy in study-related skills and behaviours: Relations with learning-related emotions and academic success. *British Journal of Educational Psychology, 83*(4), 633-650.
Quendler, E., & Lamb, M. (2016). Learning as a lifelong process-meeting the challenges of the changing employability landscape: competences, skills and knowledge for sustainable development. *International Journal of Continuing Engineering Education and Life Long Learning, 26*(3), 273-293.
Rahim, S., &Ros, P. (2016). Moving away from spoon-feeding as a teaching style in radiology. *American Journal of Roentgenology, 207*(6), 1232-1238.
Redding, S. (2014). Personal Competency: A Framework for Building Students' Capacity to Learn. *Center on Innovations in Learning, 1,* 1-40.
Rodríguez, S., Regueiro, B., Pena, R. B., Valle, A., Piñeiro, I., & Menéndez, R. C. (2014). Teacher self-efficacy and its relationship with students' affective and motivational variables in higher education. *European journal of education and psychology, 7*(2), 107-120.
Roos, J., & Von Krogh, G. (2016). *Organizational epistemology*. Springer.
Ruben, B. D. (2004). Pursuing excellence in higher education: Eight fundamental challenges. San Francisco: Jossey-Bass.
Saunders, D. (2015). Resisting excellence: Challenging neoliberal ideology in postsecondary education. *Journal of Critical Policy Education Studies, 13*(2), 391–413.
Sekret, I. (2018). Methodology of the personal epistemology study. *Pedagogical Advances in Technology-Mediated Education, 1*(1), 40-67.

Correspondence concerning this article should be addressed to Dr. Irfana Rasul, irfana.omer1@gmail.com.

Skinner, E., Furrer, C., Marchand, G., &Kindermann, T. (2008). Engagement and disaffection in the classroom: Part of a larger motivational dynamic?.*Journal of educational psychology*, *100*(4), 765-781.

Skourdoumbis, A. (2014). Teacher effectiveness: Making the difference to student achievement?.*British journal of educational studies*, *62*(2), 111-126.

Sloan, A., & Bowe, B. (2014). Phenomenology and hermeneutic phenomenology: The philosophy, the methodologies, and using hermeneutic phenomenology to investigate lecturers' experiences of curriculum design. *Quality & Quantity*, *48*(3), 1291-1303.

Smith, J., &Spurling, A. (1999). *Lifelong learning: Riding the Tiger.* NY: Cassell

Tafreshi, D., & Racine, T. P. (2015). Conceptualizing personal epistemology as beliefs about knowledge and knowing: A grammatical investigation. *Theory & Psychology*, *25*(6), 735-752.

Taylor, E. W. (2017). Transformative Learning Theory. In A. Laros, T. Fuhr& E. W. Taylor (Eds.). *Transformative Learning Meets Bildung: An International Exchange* (pp. 17-29). Rotterdam: Sense.

Tekkol, İ. A., &Demirel, M. (2018). An investigation of self-directed learning skills of undergraduate students. *Frontiers in psychology*, *9*, 2324.

Twombly, S. B. (1992). Student perspectives on general education in a research university: An exploratory study. *The Journal of General Education*, *2*, 238-272.

Twyman, J. S. (2014). Competency-Based Education: Supporting Personalized Learning. Connect: Making Learning Personal. *Center on Innovations in Learning, Temple University*, *1*, 1-10.

Van Dinther, M., Dochy, F., &Segers, M. (2011). Factors affecting students' self-efficacy in higher education. *Educational research review*, *6*(2), 95-108.

Vianden, J., & Barlow, P. J. (2015). Strengthen the bond: Relationships between academic advising quality and undergraduate student loyalty. *The Journal of the National Academic Advising Association*, *35*(2), 15-27.

Walker, M. (2018). Failures and possibilities of epistemic justice, with some implications for higher education. *Critical Studies in Education*, *41*(2), 1-16.

Willingham-McLain, L. (2015). Using a scholarship of teaching and learning approach to award faculty who innovate. *International Journal for Academic Development*, *20*(1), 58-75.

York, T. T., Gibson, C., & Rankin, S. (2015). Defining and measuring academic success. *Practical assessment, research, and evaluation*, *20*(1), 5.

Young, M., Muller, J. (2016). *Curriculum and the Specialization of Knowledge*. London: Routledge.

Yu, S. O. (2016). Re-culturing: the key to sustainability of private universities. *International Journal of Teaching and Education*, *4*(2), 88-105.

Zepke, N. (2018). Student engagement in neo-liberal times: What is missing? *Higher Education Research & Development*, *37*(2), 433-446.

Zimmerman, B. J. (2013). From cognitive modeling to self-regulation: a social cognitive career path. *Educational Psychology*, *48*, 135–147.

Zimmerman, B. J., &Schunk, D. H. (2011). Self-regulated learning and performance: An introduction and an overview *Handbook of self-regulation of learning and performance* (pp. 15-26) NY: Routledge

Correspondence concerning this article should be addressed to Dr. Irfana Rasul, irfana.omer1@gmail.com.