Factors Influencing Student Engagement in Public Universities of Pakistan

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Abstract--- This qualitative study explores students' perceptions toward factors influencing student engagement in public universities of Pakistan. In-depth interviews were conducted with nine undergraduate students from three public universities of Pakistan. These students were nominated by their respective universities and known as the most actively engaged with their campuses. The interview sessions were guided by the interview protocol and each interview session lasted for 40-45 minutes which was recorded and later transcribed verbatim. Each interview transcript was then emailed to respective participants for validation. The validated interview transcripts were analysed thematically using NVivo12 software. The initial analysis revealed a total of 59 codes (nodes) were discovered which later were grouped into 22 categories. Further analysis of the 22 categories revealed five advanced themes called behavioural, cognitive, emotional, psychological, and social engagement. This study discovered that behavioral, emotional, cognitive, social and psychological were first to fifth dimensions that mostly stated by the students. The findings of this study indicated that student engagement was a dynamic component for student development and quality learning outcomes while it was the most avoided component from the perspective of Pakistani public universities. The five dimensions revealed from this study can become core dimensions to develop a quantitative instrument to measure student engagement in public universities of Pakistan.

I. INTRODUCTION

For the past two decades, the notion of student engagement has been known as one of the important factors contributing to necessary academic outcomes [1]. The definition and the tools used in assessing student engagement diverged from studies to studies [2]. [3] defined student engagement as individual student participation in academically related practices on campus which leads to measurable outcomes. [4] described student engagement as the amount of time the student is involved in activities that are linked with high-quality learning outcomes. [5] defined student engagement as the quality of effort the students devoted to educational activities that directly contributed to desired learning outcomes. By way of distinction, [6] described student engagement as the process where universities deliberate initiatives to involve and empower students in shaping the learning experience. Combining these two perspectives, [1] defined student engagement as the amount of time and effort students allocate to activities that are linked to outcomes of college experience and things that institutions do to induce students to participate in these activities. Nevertheless, other researchers defined student engagement as the amount of interaction between the time or the learning resources that develop learning outcome and experience [7]. The above definitions indicated that when students are highly engaged in their learning, they can improve their academic

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achievements, such as critical thinking and grades, and then apply the acquired knowledge to real-life [8].

Scholars agreed that student engagement is fundamental to succeed in higher education [9-11]. Students' active involvement and student engagement are important in transforming higher education institutions into sustainable enterprises [11]. In support of this notion, Malaysian public universities for example, mobilized various on-campus services and programmes to elevate student engagement, including the employment of faculty model of academic advising for diverse groups of students advising needs [12-15]; the setting up of clubs and societies for students with diverse abilities and interests; the development of special leadership training programmes for student leaders [16]; and the application of various modes of service-learning in support of critical and innovative pedagogy of teaching and learning [17-21]. Additionally, many studies were conducted to measure the influence of various factors on student engagement (e.g. [9,22-31]. Those studies produced many interesting findings. [25] revealed that student interactions and university environment can directly affect student engagement. [24], based on data collected from 49,609 students from Taiwan, suggest that student experiences resulted in a positive change in student engagement over time and those students perceived themselves as more willing to engage in their learning. [10], based on data drawn from 45 student teachers in Turkey, suggested that the application of technology in teaching and learning activities was considered as a vital factor for student engagement. [9], based on 279 undergraduate students from Libya, suggested that for active usage of the university's information communication and technology (ICT) resources, the university's reputation and teachers' activating influence on students can most efficiently predict student engagement in higher education institutions (HEIs). The study showed that the teachers and their competencies to employ active learning techniques are considered very influential in promoting student engagement.

Student engagement is a very thought-provoking activity. Although the conception of student engagement was broadly discussed in the literature, there is limited research about this influential construct to guide the university management, faculty members, educational policymakers and students in the context of Pakistan. Unlike many other universities of the world, student engagement is an ignored concept in public universities of Pakistan [32]. Since higher education system is grappling to meet the demands of about 500000 students enrolled in HEIs of Pakistan [33], only seven studies were published regarding student engagement during the last decade. From those seven studies, only two studies were conducted in higher education level, in which one of them was done in public university while another was done in the private university of Punjab, Pakistan. The subsequent paragraphs will elaborate briefly each of those studies.

[34] conducted a quantitative study to measure self-efficacy which is considered a component of student engagement, commitment, instructional methodologies and classroom administration for public schools. The study showed that gender difference was not a significant predictor of student engagement and more qualified, young and permanent teachers can manage their classrooms better. Unfortunately, this study only emphasized on various attributes of teachers at the public schools, while very little attention was paid to students at school and university. Additionally, the study failed to address various factors and dimensions of student engagement. Thus, the current study fulfils the above gaps by using university students to measure the influence of various aspects and dimensions of student engagement on students' academic achievement.

[32] conducted a quantitative study to examine three indicators of academic achievement at universities in

Pakistan: commitment, engagement and locus of control. The study employed demographic characteristics of students and found that commitment, engagement, and locus of control were moderate indicators of academic achievement while demographics of students did not influence academic achievement. The study found that students' demography (father's income, mother's education, and living locality) did not influence commitment, locus of control, student engagement, and academic achievement, which is in contrast to the study of [35] and [36] that students' demography directly influenced their academic achievement. The findings were not surprising since the researchers merely adapted NSSE Student Engagement Scale, which was developed based on western context, for data collection in Pakistan which has different context from the west. No locally developed instrument for measuring student engagement was reported from this study. Thus, the current study addresses this gap by exploring the factors influencing student engagement in Pakistani public universities.

[37] conducted a qualitative study to examine factors affecting student engagement with classroom activities in Pakistani private university. The results showed that the appearance of teacher, practical subjects, and lecture material internally motivated students while classroom activities influenced the degree of engagement. This study was conducted on a single private university, thus prevented the researchers from generalizing the results to a larger group due to lack of representation [38]. Secondly, the application of merely private university as a sample cannot depict the true problems of public university management, teachers and students [39]. The study also ignored the influential dimensions of student engagement. No test was conducted to examine the validity of the existing dimensions of student engagement. Therefore, the current study fulfils the gaps by exploring influential dimensions of student engagement in public universities of Pakistan.

[40] conducted a quantitative study to explore the relationship between student engagement and ownership. The study showed that usual connotation between on-campus students and students' degree of ownership for the institution was not significant due to the lack of students' satisfaction. The study put total focus towards satisfaction and treated satisfaction as a synonym of student engagement. Another researcher, [41] conducted a quantitative study to boost student engagement using cooperative learning technique with language upkeep classes in public university. The results showed that cooperative learning heightened the spirit of teamwork among students. Unfortunately, this study was a small-scale study, constrained to one college, one class for one semester, and with numerous exercises scratched off. The student engagement was not assessed scientifically, logically and closely due to the dearth of learning and unavailability of equipment. The researcher did not address the influential factors and dimensions of student engagement. Based on the above information, the current qualitative study would be able to address all the gaps identified in the literature by exploring various influential factors to increase the university student engagement in Pakistan.

II. METHODOLOGY

This qualitative study explored the perception of public university students on student engagement. For that purpose, a self-designed interview protocol was employed to steer the interview sessions. A total of nine students from three Pakistani public universities were interviewed. The students were nominated by their respective university teachers based on their regular attendance, positive behaviour, good academic results and best performance inside and outside class and on-campus activities. The interview session was guided by the self-

designed interview protocol. Before the interview session, the respondents were assured of the confidentiality of the interview. Each interview session took place between 40 to 45 minutes and was held on-campus at designated room assigned by the respective universities. All interview sessions were recorded and later transcribed verbatim. Next, each interview transcript was emailed to the respective student for verification. The students were asked to go through the interview transcripts carefully. They could make changes, modifications, or additions if they deemed important to include. They were given two weeks to make the verification on their interview transcripts. Once the transcripts were verified, the interview transcripts were then analysed thematically using NVivo12 software.

III. RESULTS

The initial thematic analysis revealed that there were 59 codes (nodes) related to students' perceptions toward student engagement. With the assistance of NVivo 12, these 59 codes can be clustered into 22 categories. The 22 categories were further analysed using an advanced thematic of data analysis and yielded five big advanced themes namely behavioural (22 nodes), emotional (13 nodes), cognitive (11 nodes), social (10 nodes), and psychological engagement (3 nodes). The advanced themes later were regarded as types of student engagement. The detail of nodes and advanced themes are demonstrated in Table 1 (Appendix). All themes mentioned below describe the factors influencing student engagement in public universities of Pakistan from the perspective of students. Below are responses related to student engagement from Pakistani university students' perspective?

Table 1: Category of Nodes and Themes (Part 1)

No.	Nodes	Students (09) Source	Students (09) Reference	Category of Themes	Advanced Themes
1	Exams' results	6	8	Achievement	Behavioural
2	Feedback	7	9		
3	Co-curricular activities	9	16	Class activities	
4	Demonstration	7	15		
5	Discussion	8	15		
6	Modelling/Imitation	7	13		
7	Presentations or assignments	8	12		
8	Role playing	5	7		
9	Self-reports	6	9		
10	University activities	9	14	University organization	
11	Attendance	7	11	Participation of students	
12	Time spent on academic tasks	6	9		
13	Teacher's disposition and beliefs	9	15	Teacher's characteristics	
14	Teachers' responsibility	8	14		
15	Attention	7	10	Students' characteristics	
16	Behaviour	6	8		
17	Commitment towards studies	4	5		
18	Family engagement	5	6		
19	Learners' learning style	8	14		
20	Self-efficacy	8	11		
21	Students' experiences	9	17		
22	Parents' education	6	8	Student demographic characteristics	
23	Attitude	8	16	Students' individualities	Emotional
24	Classroom environment	9	15	Class management	
25	Classroom size	6	8		
26	Appreciation	6	9	Impetus	
27	Campus Opportunities	9	14		
28	Interest	7	10		
29	Institutional support	5	7	University management	
30	University facilities	9	16		
31	University environment	9	17		
32	Good relations	9	17	Interactions	
33	Interaction with teachers	9	11		
34	Interaction among peer students	9	16		
35	Interaction with staff members	8	15		

Table 1: Category of Nodes and Themes (Part 2)

No.	Nodes	Students (09)		Category of Themes	Advanced Themes
		Source	Reference		
36	Formative assessment	4	4	Assessment	Cognitive
37	Summative Assessment	8	14		
38	Case Study	4	7	Class conducts	
39	Problem solving	9	16		
40	Questioning session	8	11		
41	Rubrics	4	4	Class organization	
42	Classroom planning	9	17		
43	Arrangement/Scheduling	7	13	Planning	
44	Preparation/Development	8	11		
45	Institutional planning	4	4	University administration	
46	Mental health of students	9	13	Students' mental characteristics	
47	Communication	5	6	Collaborative activities	Social
48	Conference	5	5		
49	Dialogue	6	7		
50	Group work activities/ Teamwork	8	13		
51	Peer activities	8	11		
52	Project work	5	7		
53	Seminars	4	4		
54	Workshops	5	5		
55	Class duration	6	8	Class administration	
56	Parents' income (Financial living status)	7	11	Family status of students	
57	In class/out Rewards	7	10	Motivation	Psychological
58	Encouragement	6	9		
59	Healthy competition	6	8		

3.1 Behavioural Engagement

The initial thematic analysis revealed that there were 22 nodes that can be sorted into seven categories: achievement, class activities, university organization, student participation, teachers' characteristics, students' characteristics and student demographic characteristics. Further analysis indicated that these seven categories can be placed under the advanced theme of "behavioural". This shows that the foremost focus of interview outcomes from the perspective of public university students is on the behavioural aspect. During the interview, the students suggested that if their teachers involved them behaviourally then they would be more engaged in their teaching and learning process to get maximum results.

One student stated that "… there are a number of factors that can positively influence students' engagement in the class e.g., students' participation in various in-class or on-campus activities, on time completion of assignments, forming good relations on campus, self-reports of the students, teacher's instructional style etc." (RA: 1. 1.1)

Another student indicated that "…there may be several factors that can lead the teaching and learning process

towards the peak of learning such as role playing, classroom activities, classroom discussion, classroom dialogue, communication, demonstration by the teacher and imitation." (RA: 1, 1.1, 1.2)

Another student indicated that,

"a well-trained teacher knows how to shape these activities, according to course outline he planned everything before starting the classes. He communicates to his students about the routine and patterns of the class, he already formed groups of the class, make their pairs. By doing so, he can avoid a lot of time. During classes he can use maximum time by engaging his students in such activities. He can also make these activities attractive for his class by using audio/visual aids to gauge their interest." (RA: 1.4, 2.3 & 2.4)

3.2 Emotional Engagement

The initial thematic analysis revealed that there were 13 nodes that can be grouped into five categories: students' individualities, class management, impetus, university management, and interactions. Further analysis indicated that these five categories can be further refined under the advanced theme of "emotional". This shows that the second main focus of interview outcomes from the perspective of public universities' students is on the emotional factor.

One student in this study stated,

"I think, the core purpose of engaging students in such activities is to sharpen their interests and forming their attitudes. If students are feeling any encouragement or appreciation, then learning is not guaranteed. It is necessarily important to provide them institutional facilities to increase their interest and motivation. University constant support also forces them to tend positively towards their education. Such engagement provides a platform to students to take part in classroom activities to make teaching and learning interesting and useful." (RA: 1, 1.2, 1.3, 2.1 & 2.5)

Another student indicated that,

"A teacher is the one who can increase or decrease students' interest in the class. He should motivate his students on their tasks and performance, he should also support them in their problems, and he should be there whenever they need their teacher. Rewards also play an important role to maintain students' interests in the class. Next, a healthy competition is also imperative in class" (RA: 2.3 & 2.4)

3.3 Cognitive Engagement

The initial thematic analysis revealed that there were 11 nodes that can be grouped into six categories: assessment, class conducts, class organization, university administration, planning, and student mental characteristics. Further analysis indicated that these six categories can be grouped together under the theme of "cognitive engagement". This shows that the third key focus of the interview outcomes from the perspective of public university students is on the cognitive dimension.

One student in this study stated that,

"I think, when a teacher is engaging his students in such activities, he also planned measurement/assessment techniques to measure their performance in relation to particular activity. He can also design a rubric of these factors to note down students' performance. He can also monitor their activities by taking test, quiz, and formative

assessment based on these factors." (RA: 1.3, 2.2, 2.3 & 2.4)

Another student indicated that,

"According to my opinion, a teacher can arrange questioning session, or can plan a problem-solving activity to engage the students. He can make arrangement/scheduling to inculcate knowledge in them." (RA: 1.3, 2.2, 2.3 & 2.4)

3.4 Social Engagement

The initial thematic analysis revealed there were 10 nodes that can be considered into three categories: collaborative activities, class administration, and family status. Further analysis indicated that the three categories can be grouped together under one theme of "social". This shows that the fourth focus of the interview outcomes from the perspective of public university students is on the social factor.

One student noted that,

"I am sure students can be more engaged by joining various academic social activities and events. This will not only enhance their social skills but also improve their soft skills. They must join various workshops, seminars, conferences, peer activities, and teamwork/group work activities." (RA: 1.4, 2.2, 2.3 & 2.4)

Another student revealed that,

"I think, the core purpose of engaging students in such activities is to sharpen their interpersonal and intrapersonal skills. If students are passive listeners, then learning is not guaranteed. Such engagement provides a platform for students to take part in classroom activities to make teaching and learning interesting and useful." (RA: 2.2, 2.3 & 2.4)

3.5 Psychological Engagement

The initial thematic analysis revealed there were 4 nodes that can be grouped into one category: motivation. Further analysis indicated that the term can be under "psychological" theme. This shows that the fifth focus of the interview outcomes from the perspective of public university students is on the psychological factor.

One student noted that,

"A teacher is the one who can increase or decrease students' interest in the class. He should motivate his students on their tasks and performance, he should also support them in their problems, and he should be there whenever they need their teacher. Rewards also play an important role to maintain students' interests in the class. Next, a healthy competition is also imperative in class." (RA: 2.2, 2.4 & 2.5)

IV. DISCUSSION

This qualitative study explores the total aspects of the leading construct of student engagement. Each dimension of the construct has its own influence on students and teaching-learning process. Similar to [42], this study reveals that students' observable contribution and participation in various activities establish the behavioural dimension of student engagement. This behavioural dimension may include on-task behaviour, class discussion, laboratory usage, and interaction with peers and faculty members.

The finding of this study is in tandem with the study of [43] who indicated that cognitive engagement is positively associated with completing education, mastering the work, handling difficulties, and producing passing grades. Indicators of cognitive engagement may include the nature of students' queries, answers, and remarks in class dialogues. [44] Indicated that the excellence of cognitive engagement reveals the quality of students' struggle while working on task, whereas the simple quantity of struggle depicts the behavioural engagement. The finding is also similar to [45] who noted that cognitive engagement covers the amount of effort and willingness that students invest in working on task, while [46] and [47] looked into how long the students persisted. It is essential to notice that effort is needed in both types of engagement: behavioural and cognitive definitions of engagement. In this study, cognitive engagement refers to the quality of student engagement in classroom activities whereas sheer effort is referred to as the quantity of classroom activities for student engagement [48].

The finding of this study is parallel to the study of [49] who regarded the emotional dimension of student engagement as the feelings of curiosity, pleasure, anxiety, and irritation when students perform achievement-related activities. This study, however, is contradictory to the study of [50] who defined emotional engagement as the extent to which students experience a sense of belonging and the extent they become concerned about their schools. In this case, the emotional dimension of student engagement is more related to pleasant and unpleasant emotions and student connection with teachers, peers, and school compared to the feelings they possess during learning activities.

The finding of this study is in tandem to [51] who noted that the social dimension of student engagement is a blend of the students' sense of association and acceptance with fellow students and peers, worthy interface with faculty members, and the general acknowledgement of the concept of education. Most researchers agreed that students who are dissatisfied with the level of engagement, incline to be bored, unhappy, or angry during the instruction session [52]. Likewise, disengaged students are often disconnected from their classmates, some may demonstrate rebellious behaviour and disobey their teachers and other faculty members [48]. In crux, students who sense socially lonely fail to achieve the goals of education and is further likely not to function efficiently [53]. Additionally, the conceptions of sense of belonging and esteeming university are reflected to be vital for psychological student engagement and excellence of learning outcomes [54-55]. It may well be explicit that the sense of belonging and valuing denote to psychological engagement. [56] concentrated on student engagement by highlighting the themes of university engagement, and sense of belonging and valuing. The perceptions of identification and recognition with the university, valuing and belonging signify the emotional and psychological engagement [51]. This situation indicates that students feel contented and peaceful in an environment which they rate highly and which they feel they belonged to that university. This make them enjoy participating in social activities.

The finding of this study is similar to the study of [54] who indicated that student engagement is a multi-dimensional construct. Based on this, it is important to take into consideration not only the students' viewpoints about the notion of education and university but also about out-of-class and in-campus social and psychological engagement (valuing and belongingness). Precisely, it would be easy to say that for having quality outcomes of the teaching-learning process it is necessary to cover total dimensions of student engagement.

This current study rendered its endeavour to address all previously discussed gaps by adopting various remedial measures including that: i) previous studies on student engagement in Pakistan was mostly conducted in school setting while this study is conducted in university setting; ii) previous studies ignored public sector universities while this study covers public universities; iii) previous study addressed satisfaction as a synonym of student engagement whereas this study addresses student engagement originally not synonymously; iv) previous studies just focused on two or three dimensions of student engagement while this study focuses on five dimensions of student engagement; v) previous studies ignored influential factors of student engagement while this study explored various factors to measure their influence on student engagement; and finally, vi) in contrast to previous studies, this study focused on students as main respondents of the study to guide the teachers, administration and management of the institutions on how to use data of their own student population when making decisions or strategies on how to best teach them and how to best serve them.

Additionally, this study would also add to the present literature by developing: vii) a new contextual -based student engagement for Pakistan as the previous studies adapted NSSE Student Engagement Scale to be used in Pakistan. So, these factors influence the findings of previous research as about 50 % sample of the previous studies was based on students from rural areas. (viii) Moreover, the leading aim of the previous researches was to advance the quality of education of Pakistan to meet the international standards of education where the dropout rate of tertiary education has increased up to 37% and the overall literacy rate has declined from 60% to 57.9% [33]. Then it can be concluded that it must be a leading aim of not only Pakistani researchers but also the management of higher education institutions that it is crucial to improve the quality standards of education nationally before making an effort to meet the requirement of international standards. By summing up this argument, it can be stated that the results of previous studies cannot be generalized in Pakistani context because of the findings of those studies were influenced by western descriptive statistics and scale while the context of Pakistani students is visibly different from the foreign students. Further, previous discussion has also strengthened the need for new research in this field of higher education. In this current study, a scale of student engagement can be developed by keeping in view the local context of students in public universities of Pakistan. ix) Moreover, a new student engagement working plan would be proposed to guide the university management, faculty members, educational policymakers and students about this influential construct of student engagement. x) This study also tries to escalate the problems of public universities regarding student engagement. Finally, this study would add to the current literature by developing a new contextual-based student engagement for Pakistan.

V.   CONCLUSION

The current study fulfils the gaps by exploring factors influencing student engagement in public universities of Pakistan. This study found that behavioural, emotional, cognitive, social and psychological engagement represent the first, second, third and fourth most stated themes respectively whereas the fifth theme, that is, psychological engagement was barely stated by the Pakistani public university students. This finding indicates that student engagement influences all major aspects of students' life. This finding shows that student engagement succours students in getting engaged while they are in class or on campus. This finding contributes to the existing literature

by developing a new contextual-based student engagement for Pakistani public universities.

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REFERENCES

[1]   Kuh, G. D. What student affairs professionals need to know about student engagement? *Journal of College Student Development,* 50(6), 2009, pp. 683-706.
[2]   Dunleavy, J. and Milton, P. What did you do in school today? Exploring the concept of fostering learning. *Learning Environment Research,* 3, 2009, pp. 135-158.
[3]   Kuh, G. D. What student engagement data tell us about college readiness? *Peer Review*, 9(1), 2007, pp. 4-8.
[4]   Krause, K. L. and H. Coates, H. Students' engagement in First-year University. *Assessment & Evaluation in Higher Education*, 33(5), 2008, pp. 493-505.
[5]   Hu, S. and Kuh, G. D. Being (dis)engaged in educationally purposeful activities: The influences of student and institutional characteristics. *Research in Higher Education,* 43(5), 2001, pp. 555-575.
[6]   Higher Education Funding Council for England. *Tender for a study into student engagement*. Higher Education Funding Council for England, Bristol, 2008.
[7]   Lewis, A. D., Huebner, E. S., Malone, P. S. and Valois, R. F. Life satisfaction and student engagement in adolescents. *Journal of Youth and Adolescence*, 40(3), 2011, pp. 249-262.
[8]   Carini, R. M., Kuh, G. D. and Klein, S. P. (2006). Student engagement and student learning: Testing the linkages. *Research in Higher Education,* 47(1), 2006, pp. 1-32.
[9]   Almarghani, E. M. and Mijatovic, I. Factors affecting student engagement in HEIs-it is all about good teaching. *Teaching in Higher Education*, 22(8), 2017, pp. 940-956.
[10]   Gunuc, S. The relationships between student engagement and their academic achievement. *International Journal on New Trends in Education and Their Implications*, 5(4), 2014, pp. 16-231.
[11]   Murray, J. Student-led action for sustainability in higher education: A literature review. *International Journal of Sustainability in Higher Education*, 19(6), 2018, pp. 1095-1110.
[12]   Van, N. T., Said, H., Rameli, M. R. M., Karim, N. A., Tajuddin, N. and Chai, T. T. Role of academic advising in mitigating the challenges of ethnic minority students at Universiti Teknologi Malaysia. *International Education Studies*, 8(13), 2015, pp. 52-59.
[13]   Van, N. T., Said, H., Awang, Z. and Khan, A. Student perspective on learning and development outcomes of academic advising at Universiti Teknologi Malaysia. *Man in India*, 96(1-2), 2016, pp. 675-688.
[14]   Van, N. T., Said, H. and Khan, A. Components of an academic advising program standard for Malaysian public universities. *Man in India*, 96(6), 2016, pp. 1691-1702.
[15]   Van Nguyen, T., Said, H., Khan, A. and Ghani, F. A. Academic advising models and practices of two Asian universities. *Man in India*, 97(19), 2017, pp. 33-41.
[16]   Said, H., Pemberton, C. L. A. and Ahmad, I. Effectiveness of leadership training programs in public universities of Malaysia in developing students' knowledge of leadership. *World Applied Sciences Journal,* 28(1), 2013, 1-8.
[17]   Said, H., Ahmad, I., Hassan, Z. and Awang, Z. Service learning as critical pedagogy: Implications for student community awareness and citizenship development. *Mediterranean Journal of Social Sciences,* 6(2), 2015, pp. 471-478.
[18]   Said, H., Ahmad, I, Mansor, S. S. S. and Awang, Z. Exploring different perspectives on limitations and promises of service-learning as an innovative pedagogy: Review of literature. *Mediterranean Journal of Social Sciences*, 6(4S1), 2015, pp. 311-317.
[19]   Ahmad, I. and Said, H. Application of Astin's theory of students' involvement in service learning at higher education. *Man in India*, 96(1-2), 2016, pp. 231-245.
[20]   Ahmad, I., Said, H., Janan, M. J. M. and Sholihan, S. Assessment of service-learning in higher education: Challenges and possibilities. *Man in India*, 96(6), 2016, pp. 1623-1633.
[21]   Ahmad, I., Said, H. and Mohamad Nor, F. Exploring service-learning practices: Evidence from Pakistan vocational education. *Malaysian Journal of Learning and Instruction*, 16(2), 2019, pp. 125-154.
[22]   O'Brien, M. K. Factors influencing the academic engagement of upper-division undergraduate international

students: A case study of the University of Minnesota-twin cities. PhD Dissertation, University of Minnesota, 2015.

[23]   Clark, T. The impact of urbanicity on student engagement at small, residential, liberal arts colleges. PhD Dissertation, University of Nebraska, 2014.

[24]   Hu, Y. L., Ching, G. S. and Chao, P. C. Taiwan student engagement model: Conceptual framework and overview of psychometric properties. *International Journal of Research Studies in Education*, 1(1), 2012, pp. 69-90.

[25]   Kahu, E. R. Framing student engagement in higher education. *Studies in Higher Education*, 38(5), 2011, pp. 758-773.

[26]   Lee, S. (2014). An exploration of learning environmental factors affecting student cognitive engagement: Implications for instructional design research. *Educational Technology International*, 15(2), 2014, pp. 143-170.

[27]   Pather, S., Norodien-Fataar, N., Cupido, X. and Mkonto, N. First year students' experience of access and engagement at a University of Technology. *Journal of Education* (University of KwaZulu-Natal), 69, 2017, pp. 161-184.

[28]   Russell, B. and Slater, G. R. Factors that encourage student engagement: Insights from a case study of 'first time' students in a New Zealand university. *Journal of University Teaching & Learning Practice*, 8(1), 2011, pp. 1-15.

[29]   Senior, R. M., Bartholomew, P., Soor, A., Shepperd, D., Bartholomew, N. and Senior, C. The rules of engagement: Student engagement and motivation to improve the quality of undergraduate learning. *Frontiers in Educational Psychology*, 3(32), 2018, pp. 48-56.

[30]   Vaca, M. E. Student engagement: Factors affecting the academic performance and persistence of Hispanic women in STEM. *EdD Dissertation, University of Miami,* 2016.

[31]   Schreiber, B. and Yu, D. (2016). Exploring student engagement practices at a South African university: Student engagement as reliable predictor of academic performance. *South African Journal of Higher Education,* 30(5), 2016, pp.157-175.

[32]   Sarwar, M. and Ashrafi, G. M. Students' commitment, engagement and locus of control as predictor of academic achievement at higher education level. *Current Issues in Education*, 17(3), 2014, pp. 1-10.

[33]   HEC. Six key challenges faced by the education sector in Pakistan. Retrieved from website Higher Education Commission of Pakistan at https://www.hec.gov.pk/english/news/Documents1/NewsViews/2018/JulyAugust-2018.pdf, 2018.

[34]   Shaukat, S. and Iqbal, H. M. Teacher self-efficacy as a function of student engagement, instructional strategies and classroom management. *Pakistan Journal of Social and Clinical Psychology,* 9(3), 2012, pp. 82-85.

[35]   Astin. A. W. Student involvement: A developmental theory for higher education. *Journal of College Student Development*, 40(5), 1999, pp. 518-529.

[36]   Pascarella, E. T. and Terenzini, P. T. *How college affects students: A third decade of research*. Jossey-Bass, San Francisco, 2005.

[37]   Kashif, M. and Basharat, S. Factors impacting university students' engagement with classroom activities: Qualitative study. *International Journal of Management in Education*, 8(3), 2014, pp. 209-224.

[38]   Gay, L. R. and Airasian, P. *Educational research: Consequences for analysis and applications*. Pearson, Upper Saddle River, 2003.

[39]   Hodson, D. and Peterson, J. *The institutions of the European Union* (4th ed.). Oxford University Press, Luxembourg, 2017.

[40]   Hasan, S. A. and Subhani, M. I. Relationship between on-campus student engagement and student ownership of the institution. The European Proceedings of Social and Behavioural Sciences (p. 458-469), Future Academy, 2016.

[41]   Panhwar. A. H. Using cooperative learning to enhance student engagement with language support classes in Pakistani higher education. PhD Thesis, Anglia Ruskin University, 2016.

[42]   McCormick, A. C. Toward reflective accountability: Using NSSE for accountability and transparency. *New Directions for Institutional Research*, 141, 2009, pp. 97-106.

[43]   Fredricks, J. A., Blumenfeld, P. C. and Paris, A. H. School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 2004, pp. 59-109.

[44]   Linnenbrink, E. A. and Pintrich, P. R. The role of self-efficacy beliefs in student engagement and learning in the classroom. *Reading &Writing Quarterly*, 19(2), 2003, pp. 119-137.

[45]   Corno, L. and Mandinach, E. B. The role of cognitive engagement in classroom learning and motivation.

Educational Psychologist, 18(2), 1983, pp. 88-108.

[46]   Richardson, J. C. and Newby, T. The role of students' cognitive engagement in online learning. *American Journal of Distance Education*, 20(1), 2006, pp. 23-37.

[47]   Walker, C. O., Greene, B. A. and Mansell, R. A. Identification with academics, intrinsic/extrinsic motivation, and self-efficacy as predictors of cognitive engagement. *Learning and Individual Differences*, 16(1), 2006, pp. 1-12.

[48]   Pintrich, P. R. A motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology*, 95(4), 2003, pp. 667-686.

[49]   Skinner, E. A. and Belmont, M. J. Motivation in the classroom: Reciprocal effects of teacher behaviour and student engagement across the school year. *Journal of Educational Psychology*, 85(4), 1993, pp. 571-581.

[50]   Sciarra, D. T. and Seirup, H. J. The multidimensionality of school engagement and math achievement among racial groups. *Professional School Counselling,* 11(4), 2008, pp. 218-228.

[51]   Appleton, J. J., Christenson, S; L., Kim, D. and Reschly, A. L. Measuring cognitive and psychological engagement: Validation of the student engagement instrument. *Journal of School Psychology*, 44(5), 2006, pp. 427-445.

[52]   Chapman, E. Alternative approaches to assessing student engagement rates. *Practical Assessment, Research & Evaluation*, 8(13), 2003, pp. 1-10.

[53]   Gunuc, S. and Dogan, A. The relationships between Turkish adolescents' internet addiction, their perceived social support and family activities. *Computers in Human Behaviour*, 29(6), 2013, pp. 2197-2207.

[54]   Hausmann, L. R., Schofield, J. W. and Woods, R. L. (2007). Sense of belonging as a predictor of intentions to persist among African American and White first-year college students. *Research in Higher Education*, 48(7), 2007, pp. 803-839.

[55]   Kember, D., Lee, K. and Li, N. Cultivating a sense of belonging in part-time students. *International Journal of Lifelong Education,* 20(4), 2001, pp. 326-341.

[56]   Voelkl, K. E. Measuring students' identification with school. *Educational and Psychological Measurement,* 56(5), 1996, pp. 760-770.