







Assessment Metrics: Insights into Students' Perceptions across Higher Education Institutions

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ABSTRACT

In every facet of educational practices, assessment is recognized as a driving force, and students' views on it serve as a crucial measure of its overall effectiveness. The current quantitative research pursuit primarily aims to determine how the assessment metrics affect students' perceptions studying in higher education institutions. The study represents a population of 41,427 from seven public sector higher education institutions conveniently selected throughout the various regions of Punjab, Pakistan. Through a random sampling, the study examined students' experiences amongst a total of 1324 students, which were composed of 485 male participants and 839 female participants, for a better understanding of phenomena. The survey was conducted with the use of the Students' Perceptions of Assessment Questionnaire (SPAQ), which was a specifically designed tool for gathering data about students' experiences with assessment metrics. The investigation used descriptive techniques like means and ANOVA tests to analyze the students' views on the assessments. The results showed notable differences in the way students from different higher education institutions perceive the suitability, clarity, and fairness of certain assessment methods. These insights are significant for the key stakeholders and policymakers in the process of upgrading assessment strategies and ensuring fair and authentic practices in academics.

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1. Introduction

Students may have varied experiences and views on assessment metrics and as a matter of fact their perceptions shape the assessment process Higher Education Institutions. Students are vital in the assessment process as their experiences and perspectives are fundamental for the attainment of the learning outcomes. Certainly, students are directly involved in the decision of the effectiveness of the assessment mechanism (Yun, Oh, & Kim, 2020). Within this context, Neupane (2023) emphasized that the teaching, the educational process, and assessment are linked in a triangle, with each component strengthening the others. Therefore, learners are continuously and proactively involved in the process of instruction and learning, and consequently, assessment metrics plays an instrumental part in this process. The assessment metrics may not only lead to the enhancement of academic performance but also to the students' motivation to change the learning process and their cognitive structure as a result of the new knowledge (Brown, 2022). As Kane (2008) indicated it in that the quality of the assessment is not only based on its characteristics but the context in which it is implemented effectively. Furthermore, Segers, Martens, and Van den Bossche (2008) also stressed on the comprehensive consideration of students' viewpoints on the

effectiveness, as well as the fairness and the methods of assessments to design the ones that will foster learning. Additionally, Iskandar et al. (2021) underline the fact that such students experiences and perspectives serve as a powerful instrument for the assessment of teaching success as well as making careful choices on educational and pedagogical strategies. Moreover, Torkildson et al. (2016) reported that assessment benefits decision-making for instructors and students by using available data and responding accordingly. Besides, Alkharusi (2013) proved that the assessment metrics being able to accommodate students as an individual has a favorable effect on their motivation and zeal which, in turn, affects the whole educational achievement.

In addition to this, Thaidan (2019) emphasized that in assessment metrics and different mechanism used for assessment process in educational institutions serve as beneficial tool that always help to remarkably change the procedures according to the expected outcomes. Also, Fulcher (2012) concludes the significance of assessments in education by describing the fact that they reveal the current skill level of learners, the level of progress that they have made, and the student-specific support that they require from educators. As McCallum and Milner (2021) noted when learners see a positive outcome from their participation in frequent assessment leads to a higher degree of engagement, and in this way to the increased satisfaction with the learning process. Furthermore, they highlight the value of fostering excellent assessment experiences as a means to further improve outcomes for learning. In addition to this, Holzinger, Lettner, Steiner-Hofbauer, and Capan Melser (2020) asserts that assessments within educational institutions perform multiple functions, such as awarding scores, measuring instructional effectiveness, and promoting the educational experience for students. Furthermore, Manzoor, Naeem, and Rehman (2023) believes that assessments are related to the careful collection and description of data and their purpose is to conclude the procedures of learning and instruction, in addition to a student, through the use of established standards for comparing results. Following this, Bourke (2014) indicated that the vast majority of students who had favorable attitudes towards assessment metrics as well as practices acknowledged that it supported their self-determination and confidence and helped learners cultivate the abilities to think critically and analyze throughout the learning process.

In the words of Saleem, Saleem, and Batool (2021), assessment is deemed an essential educational approach for learning as well as instruction. Further, as stated by Vellanki, Mond, and Khan (2023), assessment is an essential tool for offering feedback to better understand the progress of a pupil, and instructors may employ different assessment methods in their teaching spaces. Assessment is an extremely important and vital component of academics because it enables learners to gauge their progress their performance while receiving consistent input as well as support for their educational progress. The investigation of assessment practices at various institutions in Punjab, Pakistan may provide valuable insights into the strengths and weaknesses of current assessment practices in the field of higher education. In this respect, several studies confirm that students in higher education demonstrate a range of mutually exclusive emotions, with considerable overlap in unfavorable sentiments concerning assessment practices (Javed, Juan, & Nazli, 2013). Hence, it was indispensable to look into students' perspectives about different assessment practices, because learners are prone to exhibit higher levels of inspiration and consequently accomplish higher levels of achievement if assessed according to their preferred methods of assessment. The objective of the current study was to inquire into the perceptions of students about assessment metrics within the higher educational context. Furthermore, the main intent of the survey was to undertake an in-depth comparison of the perspectives of students in identifying the concerns they experience through the assessment process across different higher education institutions. The results of this research endeavor may additionally contribute to the formation of potential requirements for increasing competency in using methods of assessment. Eventually, this research investigation might offer beneficial insights into students' perspectives on how assessments are conducted and their level of feelings of satisfaction. These insights could serve as an important tool for strengthening assessment techniques and achieving the highest possible standard of education and learning.

2. Review of the related Literature

Indeed, in higher education institutions, engaging in the educational and assessment processes is crucial for the development of the capabilities and competencies of learners within

educational institutions (Gulikers, Runhaar, & Mulder, 2018). For instance, Crisp (2012) indicated in their research study that student perspectives can be valid in assessing teacher excellence as perspectives from learners are valuable in understanding their sense of instructional quality as well as their knowledge of the educational objectives and standards for success with the domain of education. Students are the central agent in self-assessment; therefore, their perceptions are crucial for successful assessment practices. Another research study by Den Brok, Brekelmans, and Wubbels (2006) concluded that students play an important role as stakeholders in the assessment process since they possess the ability to provide feedback about the learning process. Similarly, Sultana (2019) in a research endeavor highlighted the significance of considering the significant role of assessment within education, it is necessary for learners to fully understand the importance and application of assessment practices. Furthermore, Biggs, Tang, and Kennedy (2022) in their research investigation also recognized assessment as widely recognized and a fundamental component of students' educational journey, not just as the end goal. Moreover, in a study conducted by Bevitt (2015), the researcher investigated the influence of assessment choices and experiences on learners. The students' perspective ought to be seen as another factor within an intricate assessment model, and it helps to facilitate the ongoing process of an assessment in an academic setting. In addition to this, Wolterinck-Broekhuis, Poortman, Schildkamp, and Visscher (2024) also indicated in their research that the necessary abilities, as well as knowledge necessary for learners to strengthen their evaluation and constructive criticism proficiency, could potentially serve the purpose of augmenting students' engagement in assessments and reinforcing their self-regulated educational capabilities. In the same way, Laily, Suparno, and Ngadiso (2023) indicated in their research that, according to students' experiences, assessments were perceived as a positive means of encouraging students in their learning journey using numerous mechanisms, consequently fostering desirable improvements in the educational experience.

3. Material and Methods

A quantitative inquiry was conducted by researchers to acquire an in-depth understanding of students' perspectives to improve insight into learners' perceptions of assessment procedures in public sector universities in Punjab, Pakistan. The current research pursuit used a descriptive survey research approach. The investigation's population featured 41,427 students, with 63.4% representing female and 36.6% male. The study's total sample had a total of 1324 participants, with (485 males and 839 females) representing Bachelor of Science (BS) students regularly enrolled in different academic programs offered by the universities located in Punjab, Pakistan. The subjects who participated in the current research were selected through a simple random sampling technique from the three academic faculties: languages, natural sciences, and social sciences of seven universities including the Women's University of Multan, the University of Education Lahore, the University of Sargodha, Punjab University Lahore, and the Islamia University of Bahawalpur. For the quantitative collection of the information, the Students' Perceptions of Assessment Questionnaire (SPAQ), originally developed by Waldrip, Fisher, and Dorman (2008) was utilized in this research. The survey encompassed a total of 27 items that were linked with the five sub-scales: the notion of authenticity refers to the degree to which assessments include real-world circumstances or events that apply to the learner. Secondly, Congruence with the intended knowledge refers to the level to which assessments are in line with the educational program's objectives, aims, and activities. Similarly, Diversity signifies the degree to which each learner is given a fair opportunity to accomplish assessment assignments. Additionally, Student consultation encompasses the degree to which learners are involved in and supplied with information on the different types of assessment tasks that are being used. Finally, the concept of transparency pertains to the degree to which the objectives and types of assessment assignments are clearly and explicitly communicated to the pupils. The SPAQ scales necessitated the participants communicating their level of acceptance regarding the level of quality of the assessment using a five-point scale, in which 5 symbolizes "strongly agree," 4 indicates "agree," 3 reflects "neutral," 2 stands for "disagree," and 1 signifies "strongly disagree." Moreover, to ascertain the credibility of the research, a preliminary study was undertaken before the implementation of the research instrument. The main tool of the study for conducting the research was approved after the review to determine its suitability by academic experts in the domain of Education. The students enrolled in the final exam were subjected to these assessment procedures at the end of the semester, on both campuses of the university. The study established the SPAQ by the reliability coefficient of ($\alpha = .80$). The survey was administered

following ethical guidelines that protect participants and help them feel comfortable around the survey.

4. Data Analysis and Discussion

Data gathered underwent SPSS (Statistical Package for the Social Sciences) analysis via descriptive statistics using means and standard deviations to analyze students' experiences on SPAQ's five levels. Further, to identify and label the differences regarding opinions of assessment metrics practiced by an institution ANOVA test was conducted.

Table 1: Descriptive Analyses of Students' Perceptions regarding Assessment from Different Higher Education Institutions (n = 1324)

Variable	Universities	N	Mean	SD
Students' Perception of Assessment	BZU Multan	241	3.58	.516
	WU Multan	129	3.80	.329
	UOE Multan	165	3.71	.486
	GCU Faisalabad	121	3.70	.487
	UOS Sargodha	173	3.61	.492
	PU Lahore	243	3.66	.449
	IU Bahawalpur	252	3.80	.438
	Total	1324	3.69	.471

The results showed students' attitudes toward assessment to be different across universities, at IUB, students displayed a positive and high perception of assessment metrics while those at Bahuddin Zakariya University, and The Islamia University, Bahawalpur had a lower mean suggesting relatively lower perception towards assessment metrics. On this, point, investigation well aligns with Nausheen, Alvi, and Shahbaz (2014) who surveyed the students found that students usually either have overall positive feelings about their assessment metrics towards certain assessment aspects.

Table 2: ANOVA for Students' Perceptions of Assessment from Different Higher Education Institutions (N = 1324)

Variance	Sum of Squares	df	Mean Square	F	Sig
Between Groups	10.359	6	1.727	8.009	.000
Within Groups	283.924	1317	.216		
Total	294.284	1323			

Results are quite evident in Table 2 because students from different higher education institutions have different outlooks on the assessment ($F = 8.009$; $p < 0.000$). Students' distinct perceptions and experiences of assessments regarding the institutions surveyed reflect the distinctive features found in each of these institutions. Additionally, the evidence emphasizes the fact that apart from the physical environment of the institution, the student's perceptions about the same are an important determining factor. This also defines that education doesn't mean only teaching but it also includes how students are engaged in assessment procedure as members of the academic community.

4.1. Students' Perceptions of Assessment on the basis of Factors from Different Higher Education Institutions

The insights depicted in Table 3 illustrate significant differences between students from various universities regarding their perception of the congruence between assessment and planned learning ($F=4.107$, $p < .000$). This suggests that students' perceptions of how well the assessment aligns with the intended learning objectives vary across higher education institutions. The aforementioned results emphasize the critical importance of taking into account the institutional setting and its influence on the students' assessments of the congruence of assessments.

Table 3: Students' Perceptions regarding Congruence of Assessment with Planned Learning from Different Higher Education Institutions (N = 1324)

	Sum of squares	Df	Mean square	F	Sig
Between groups	7.445	6	1.241	4.107	.000
Within groups	397.919	1317	.302		
Total	405.364	1323			

* The mean difference is significant at the 0.05 level

Table 4: Students’ Perceptions regarding Authenticity of Assessment from Different Higher Education Institutions (N = 1324)

	Sum of squares	Df	Mean square	F	Sig
Between groups	15.944	6	2.657		
Within groups	746.295	1317	.567	4.689	.000
Total	762.239	1323			

The results displayed in Table 4 suggest substantial differences in the perception of assessment authenticity among students representing various higher education institutions. (F=4.689, p< .000). These findings highlight the influence of the institutional context on students' perceptions of assessment authenticity. It indicates that the design and implementation of assessment tasks may differ among higher education institutions, leading to variations in how students perceive the authenticity of the assessments they encounter. The studies of Khemchand and Kang (2023) correspond with the observed results in which it was found that an interesting variance exists in the students' opinion of authenticity in the assessment procedure.

Table 5: Students’ Perceptions regarding Consultation of Assessment from Different Higher Education Institutions (N = 1324)

	Sum of squares	Df	Mean square	F	Sig
Between groups	28.054	6	4.676		
Within groups	704.642	1317	.535	8.739	.000
Total	732.696	1323			

The data presented in Table 5 demonstrates a substantial variance in the perception of the consultation of assessment across students from different higher education institutions (F=8.739, p<.000). The assertion posits that there could exist differences in the easy availability and scope of consultation opportunities among institutions, resulting in divergent perceptions among students regarding their capacity to seek support or guidance during the assessment process.

Table 6: Students’ Perceptions regarding Transparency of Assessment from Different Higher Education Institutions (N = 1324)

	Sum of squares	Df	Mean square	F	Sig
Between groups	8.231	6	1.372		
Within groups	442.739	1317	.336	4.081	.000
Total	450.971	1323			

The statistical analysis of the data presented in Table 6 reveals that there is considerable variation among the students about their perception of assessment transparency (F=4.081, p<.000). The findings highlight the significant role that the institutional environment plays in shaping students' views on the transparency of assessment processes, suggesting that these perceptions can vary based on the university and the clarity, openness, and information provided regarding these systems. On the contrary, conclusions drawn by Devi and Challa (2013) indicated a negative perception of students regarding the transparency of assessment.

Table 7: Student’s Perceptions regarding their Capabilities of Assessment from Different Higher Education Institutions (N = 1324)

	Sum of squares	Df	Mean square	F	Sig
Between groups	20.557	6	3.426		
Within groups	535.219	1317	.406	8.431	.000
Total	555.776	1323			

The findings displayed in Table 7 suggest that there are statistically significant variations in the way students from various higher education institutions perceive the evaluation of their abilities (F=8.431, p<.000). This indicates that university-specific differences exist in students' perceptions of the assessment's ability to accurately measure their skills and abilities. The outcomes of the present inquiry highlight possibilities for variations in the degree to which higher education institutions accurately and efficiently assess students' abilities, which consequently may affect students' perceptions of the assessment of their abilities. However,

the findings do not correspond to the outcomes of the research study undertaken by Tong and Adamson and Coulson (2015) in which students were not satisfied with assessment practices.

5. Conclusions

The main target behind this study was to get a better understanding of the perspectives of learners on assessment procedures through a thorough examination of their perceptions of assessment. The research investigation concluded that an important proportion of the population experienced a positive outlook regarding the assessment. The outcomes of the analysis suggest that learners at various higher education institutions perceive assessment procedures as simultaneously positive and useful. This study's results imply that there exists a broad spectrum of perspectives on assessment among learners across different institutions of higher learning; highlighting how diverse students are in the perspectives they have on this matter. Learners assume an important position in ensuring the successful execution of assessments. The study researchers performed points out that the inclusion of students in the assessments and the carrying out of a comparison analysis of panoramas across various institutions might boost the effectiveness of the assessment system. Hence, it would be of scholarly interest to direct future investigations toward the proactive participation of students in keeping track of their learning process and the building of an optimal learning atmosphere. In addition, the investigation's results suggest that there's a requirement for learners to further develop their assessment literacy skills. This field of research has the potential to promote more student engagement in the assessment process. The study aspires to offer guidelines for future investigators in evaluating successful approaches to strengthen students' understanding of assessment and raise overall performance on assessments. A significant limitation of the study is its entire focus on students' opinions and self-reported data, potentially limiting the accurate representation of the results of the study. Finally, it is crucial to keep in mind that students' attitudes toward assessment approaches are impacted by factors other than the primary one such as economic, cultural, and structural distinctions across the institutions settings must also be taken into account. Nevertheless, the data collected in this investigation is limited to statistical information obtained from a small group of participants, so to extend its application and to generalize the results empirically it would be useful to replicate it to broader.

5.1. Suggestions and Implications for Future Research

The findings of this study could be used to give critical information to higher education institutions to think about their priorities, processes, and policies to address issues that arise during assessment process in higher education institutions.

1. The research could be replicated in a different and better setting with more participants.
2. The research's scope might be extended to private higher education institutions and other areas to see how it works and identify even more exciting conceptions.

5.2. Recommendations

The findings of the insights given by the respondents in the study may remain useless unless they are adopted well in the formulation of effective policy making to improve the assessment metrics within higher education institutions.

1. Teachers, in collaboration with administrators, ought to come up with a robust and the most productive assessment metrics to realize maximum student's satisfaction.
2. Additionally, teachers should also consider the students' point of view regarding the assessment system to strengthen the assessment procedures.
3. Furthermore, teachers should take initiatives to engage students in the assessment procedures to focus attention to address concerns within the required areas.

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