Students' attitude towards assessment, its relation with their academic achievement, and factors that shape their attitude

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Article Info	ABSTRACT
	Student assessment is a crucial part of the teaching-learning process that shapes students' learning. Students' attitudes towards assessment play an important role in determining how actively they will participate in assessment activities. It also involves exploring the complex interplay between students' expectations and experiences regarding assessment. Therefore, this study aims to explore Bangladeshi tertiary level students' attitude towards assessment, its relation with their academic achievement, and factors shaping their attitude. A sequential mixed-method design was employed. A total of 162 graduate and undergraduate students were surveyed with a scale to measure their attitude. Based on the attitude score, six students were interviewed for deeper insights. The findings show that students generally have a neutral attitude toward their institution's assessment system. Among different types of assessments, students showed the most positive attitude towards classroom assessment. There is a positive but weak relationship between attitude towards assessment and students' academic achievement. The interviews revealed that because of the subjective experience of assessment, the same assessment activities could yield different attitudes towards assessment among students. The study will provide insights into how students' experiences with assessment contribute to developing their attitude towards assessment in an educational setting. This study may also help policy makers and educators to develop a student friendly assessment system in higher education.

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1. INTRODUCTION

Assessment has always been a fundamental aspect of education, widely recognized as a regular process designed to illustrate the level of students' performance, progress and achievement according to their learning goals [1]. Through assessment, educators can determine if students are acquiring the intended knowledge, skills and values, assess the effectiveness of the curriculum in imparting essential knowledge and skills within the discipline, and measure the students' ability to integrate learning from various courses into a comprehensive educational experience that prepares them for future endeavors [2]. According to study by Black and Wiliam [3], the term assessment includes all activities carried out by teachers and students to evaluate themselves, providing valuable information for modifying teaching and learning approaches. They

also stated that it not only facilitates improvements in teaching and learning but also offers a quick overview of students' competence and achievements at a specific point in time.

In the context of higher education, assessment plays a crucial role and is considered the heart of the academic setting, as the progress of students predominantly focuses on assessment [4]. Assessments are used to reassure stakeholders that graduates have completed the program with sufficient mastery of the curriculum and have been given a certificate attesting to their achievement [5]. According to Sadeghi and Rahmati [6], assessment in higher education serves diverse purposes. It functions as a final evaluation for grading and promoting academic advancement, leading to certification of accomplishment, considered as summative. Another purpose is to enhance the learning process. By providing insights into how students perform on different tests or assignments, they can better evaluate their own achievements and identify areas for improvement, enhancing their ability to learn more effectively within the program. This is considered as formative assessment. Usually various assessment processes including examinations, tests, quizzes, coursework, projects, theses, and more, are used now to gather evidence that justifies the validity of student scores, grades, or rankings [5].

The assessment process extends beyond mere evaluation; it significantly shapes how students approach their learning journey, influencing their learning strategies and overall experience [7]. Scholars argue that students' attitudes towards assessment play a crucial role in determining their learning approaches, impacting whether they adopt deep or surface learning strategies [8]. These attitudes are shaped by various learning experiences. If the experience is positive, a favorable attitude is formed, and vice versa [9]. According to Vargas-Sánchez et al. [10], an individual's attitude refers to their perspective and evaluation of something or someone, their inclination or propensity to respond positively or negatively to a certain concept, item, person, or circumstance. They also highlighted that it is typically organized into three categories: i) cognitive (relating to perceptions and beliefs); ii) affective (preferences, emotions, or feelings); and iii) behavioral (actions or intentions toward the object, influenced by cognitive and affective responses). Ajzen [11] stated that an attitude is a predisposition to respond positively or negatively to an object, person, institution, or event. When an individual holds a positive attitude towards something, they are usually more likely to engage in related actions, whereas a negative attitude towards something typically leads to a lack of interest in engaging in those actions [12]. Research by Khamlichi and Chkirbane [13] highlighted the significance of students' attitude towards assessment, emphasizing that it determines the nature of their learning. If seen merely as a method to secure grades, this perspective could potentially diminish the enjoyment of learning and shift the focus more towards exams. Another study revealed that students' attitude towards assessment is positive when they believe that assessment enhances their learning and view the assessment process as fair [14]. A positive attitude towards assessment fosters a commitment to deeper understanding and better learning outcomes. In contrast, having a negative attitude where students perceive assessments or teaching methods as unsuitable can result in a surface approach to learning [15]. Therefore, students' attitudes towards assessments are crucial to recognize as it plays a significant role in shaping the quality of their learning experience [7].

Moreover, academic achievement in higher education is closely linked with the assessment process, making it a critical factor in determining students' success [4]. Molnár and Kocsis [16] stated that the academic achievement of students is an outcome influenced by both their cognitive and non-cognitive characteristics. Assessment can have a long-lasting effect on how students' approach learning [17], which shapes not only their academic results but also their career prospects [18]. According to Lynam and Cachia [19], students have different perspectives on assessment. They view it as: i) a tool for enhancing academic performance; ii) a method for holding them responsible; iii) lacking relevance; and iv) capable of being enjoyable. Researcher also asserted that students who view assessment as a positive force for personal responsibility and actively engage with it tend to achieve higher grades and those who do not take assessment seriously or ignore it resulting in lower grades. Additionally, academically successful students generally view assessment as a tool to enhance their learning and performance [20]. Flores et al. [21] further revealed that students view assessment primarily to identify and correct errors they made, which helps to improve their academic performance. This perspective indicates that students are using the information from assessments to learn and boost their academic outcomes. However, Quainoo et al. [22] pointed out that if students view assessments merely as a ranking tool, they may be less motivated if tasks do not carry a measurable score. They also stated that if students solely focus on scoring and high-stakes outcomes, it might lead them to prefer passive learning strategies, like memorization, instead of engaging in critical thinking or active learning. Similarly, Winstone and Boud [23] claimed that students are primarily concerned about earning grades rather than developmental information. This focus likely arises from their belief that grades directly influence their immediate future and determine whether they can advance to the next level of education [24]. They also stated that when students feel that their assessment results are unfair, they might disregard the assessment process. Most of the students appreciate having a choice between two assessment options. Providing such options is seen as a progressive approach in higher education, aiming to reduce stress associated with exams.

Students emphasized the importance of flexibility in assessment methods which suggests that students should be able to choose the assessment style that suits them best [25].

Recognizing students' attitudes towards assessments is important because the way assessments are conducted at institutions has a strong influence on students overall learning and motivation, in both positive and negative ways [26]. Positive experience can enhance students' confidence and motivation which leads to higher levels of achievement, while negative experiences may cause anxiety and disengagement which hinders their academic success. In the specific context of Bangladesh, numerous factors, including age, gender, religion, past academic track, and socio-economic factors, have been identified as influencers of academic achievement [27]–[29]. However, the role of students' attitudes towards assessments remains a crucial yet underexplored aspect in Bangladesh. Therefore, this study aims to bridge this gap by investigating students' attitude towards assessment and its relationship with their academic achievement. The study is focused on the following research questions:

- What is the overall attitude of the students towards the assessment practice of higher education?
- What is the relationship between students' attitude towards assessment and their academic achievement?
- What factors contribute in developing more positive or negative attitude of the students towards assessment?

2. METHOD

2.1. Research approach and design

The overall attitude of tertiary level students towards assessment, and its relationship with their academic achievement were measured using a quantitative approach. The study also aimed at understanding why these students possess a more positive or negative attitude towards assessment which required a qualitative approach to inquire in depth subjective experience of the students. Therefore, we used a mixed method approach for this research [30], [31]. As the students for the interview were selected from two different categories (students showing most positive and most negative attitude) which was identified based on the quantitative data collected, the study followed sequential explanatory mixed method research where quantitative data were collected and analyzed in the first phase and then further built on qualitative data collection and analysis as the 2nd phase [32].

2.2. Research participants

In the year of data collection, there were total 450 undergraduate students (in three cohorts or years) and 150 graduate students. The power calculation for sample size shows that we need 207 undergraduate and 103 graduate students. We invited total 250 undergraduate and 87 graduate students to participate in the study. A total of 162 students from 4 cohorts responded depicting their attitude towards assessment that they experienced in their educational institution. Though the sample size is small compared to the population size, the specific location of the population (one institute in a public university) might have decreased the variability in the sample. Due to resource and time constraints, this was the number of research participants we could include. However, the sample size rule of thumb shows that you should collect a minimum of 30 data points for each group for continuous data and 50 for attribute data [33]. Table 1 shows the demographics of the participants. Based on students' scores of attitudes towards assessment, we identified six students: three with a very positive attitude and three with a very negative attitude. The highest and lowest score of the mean attitude score towards assessment was 4.14 and 1.72. The participants for interview were selected from outside of+2 SD and -2 SD of the mean distribution.

Table 1. Respondent's profile

Level	Gender		Total
	Male	Female	
Undergraduate students	59	49	108
Graduate students	33	21	54
Total	92	70	162

2.3. Instrument for data collection

Quantitative data were collected using a questionnaire. There were two parts in the questionnaire. The first part included questions related to demographic variables: gender, level of study (undergraduate or graduate), and cumulative grade point average (CGPA). The second part was an attitude scale developed by the researchers to yield a score indicating the direction and intensity of the individual's attitude [34]. Our scale consisted of 36 statements, organized into nine different concepts i.e., classroom assessment, class

test/in-course exam, assignment, practical exam, internship, semester final exam, end of the year viva, fairness of assessment, and overall attitude towards assessment. The first seven of these sections are specifically related to different assessment types of the specific higher education institution of the students who were the research participants. The last two were general concepts on assessment. The statements were fully anchored into a five-point scale: strongly disagree, disagree, neutral, agree, and strongly agree. The language used was Bangla, which was the native language of the research participants. The reliability statistics of this scale measured through Cronbach's alpha, using the collected data, were high (α=0.87). This indicates that the different sets of items are highly consistent. The items of this scale were reviewed by two assessment experts to ensure the validity of the scale. Besides, the scale was pilot tested among 10 participants of the population before finalizing the tool. We used in-depth interviews to investigate the factors that influenced students to possess a highly positive or negative attitude towards the assessment of their institution. Consents were taken before collecting data. The interview questions were also validated through expert review and was piloted before using.

2.4. Data analysis

The total mean score for the scale, and section wise mean were calculated. Spearman coefficient of correlation was calculated to measure the correlation between students' attitude towards assessment and their academic achievement, as both are continuous variables [33]. Inferential statistics were used to see if there are significant differences in the attitude of the students towards different types of assessment and based on their demographic variables. We used thematic analysis to develop codes and themes emerging from the qualitative data collected [35].

2.5. Limitations and delimitations of the study

The study collected data from the students of only one institution at tertiary level in Bangladesh. However, the number of research participants was big enough for quantitative inferences. Because of exploring students' attitude towards assessment within one educational institution, we had the scope to prepare an attitude scale which is relevant to their context. It is important as the attitude is built up based on contextual experiences [9]. Therefore, it was easy for the researchers to put the research participants in real context during the interview as they all had gone through similar assessment experiences. However, this tool may not be used directly to measure students' attitude towards assessment for other contexts.

3.   RESULTS AND DISCUSSION

3.1. Students' attitude towards assessment practice

The attitude score was divided into five levels: highly negative (1-1.80), negative (1.81-2.60), neutral (2.61-3.40), positive (3.41-4.20), and highly positive (4.21-5.00). The findings suggested that overall, the students showed a neutral attitude towards assessment (M=3.19, SD=0.44). Table 2 presents the attitude scores of the specific types of assessment along with overall attitude score of male and female students. It also presents the p value to see if the difference between male and female students' attitudes are statistically significant or not. Among the different types of assessment practiced in the institution, both male (M=3.61, SD=0.64) and female students (M=3.63; SD=0.72) showed more positive attitudes towards 'classroom assessment' compared to other types of assessment practices in their institution. While female students had a positive attitude towards 'in-course exam' (M=3.46, SD=0.72), male students showed a neutral attitude (M=3.33, SD=0.85) towards it. In terms of 'assignment', 'practical/laboratory', 'internship', 'semester final', 'year-end viva', 'fairness in assessment', and 'overall institutes assessment' both male and female students exhibited a neutral attitude towards the assessment system in their institution. Additionally, the findings revealed a statistically significant difference between male and female students' attitude in 'comprehensive exam' (t=-2.31, p=0.02; p<0.05) and 'fairness in assessment' (t=-2.59, p=0.01; p<0.05).

T-test analysis was conducted to assess whether there were significant differences in the overall mean scores of students concerning their attitude towards assessment practice based on their gender and academic level. Table 3 reveals that there were no statistically significant differences in the students' overall attitude towards assessment in terms of gender (t=-1.10, p=2.72; p>0.05). Similarly, there was no significant difference in attitude towards assessment based on their academic level (t=-1.79, p=0.07; p>0.05).

3.2. Relationship between students' attitude towards assessment and their academic achievement

The findings in Table 4 reveal a positive but very weak relationship between the students' overall attitude towards assessment and their CGPA for the undergraduate students, r(108)=0.05 and p=0.61, indicating the relationship is not statistically significant (p>0.05). Similarly, graduate students showed a weak positive correlation but not statistically significant, r(54)=0.13 and p=0.34; p>0.05. However, concerning graduate students, a statistically significant and weak positive relationship was found between

'in-course exam' and academic achievement, r(54)=0.37 and p=0.01; p<0.05. Contrarily, negative correlations were identified between certain variables. Both undergraduate and graduate students showed a negative and weak relationship between their attitude towards 'classroom assessment' and academic achievement, which is not statistically significant. For undergraduates, r(108)=-0.02, p=0.87; p>0.05 and for graduates, r(54)=-0.05, p=0.74; p>0.05. Additionally, undergraduates demonstrated a negative correlation between their attitude towards 'in-course exam' and academic achievement, r(108)=-0.01, p=0.94; p>0.05, as well as between their attitude towards 'semester final' and academic achievement, r(108)=-0.07, p=0.47; p>0.05. Moreover, for graduate students, there was also a negative correlation found between their attitude towards 'internship' and academic achievement which is statistically significant, r(54)=-0.28, p=0.04; p<0.05.

Table 2. Students' attitude towards different components of assessment of the institute

Attitude towards	Gender	Mean	SD	t	df	p
Attitude towards classroom assessment	Male	3.61	0.64	-0.25	160	0.81
	Female	3.63	0.72			
In-course exam	Male	3.33	0.85	-1.00	160	0.32
	Female	3.46	0.72			
Assignment	Male	3.15	0.82	-0.37	160	0.72
	Female	3.20	0.83			
Practical/laboratory	Male	3.02	0.79	-0.43	160	0.67
	Female	2.96	1.01			
Internship	Male	3.30	0.91	-0.18	160	0.86
	Female	3.33	0.79			
Semester final	Male	3.26	0.69	-0.74	160	0.46
	Female	3.35	0.86			
Year-end viva (comprehensive exam)	Male	2.98	0.91	-2.31	160	0.02*
	Female	3.29	0.74			
Fairness in assessment	Male	2.83	0.74	-2.59	160	0.01*
	Female	3.12	0.67			
Overall institute's assessment	Male	3.10	0.54	0.21	160	0.83
	Female	3.09	0.50			

*Result is significant at the 0.05 level (2-tailed)

Table 3. Students' overall attitude towards assessment based on their gender and academic level

	Respondents	Mean	SD	t	df	p
Gender	Male (n=92)	3.15	0.46	-1.10	160	2.72
	Female (n=70)	3.23	0.43			
Academic level	Undergraduate students (n=108)	3.14	0.47	-1.79	160	0.07
	Graduate students (n=54)	3.28	0.37			

Table 4. Correlation coefficient

Attitude towards	Undergraduate students (n=108)			Graduate students (n=54)		
	Mean	SD	Correlation with result of undergraduate level	Mean	SD	Correlation with result of graduate level
1. Classroom assessment	3.63	0.72	-0.02	3.60	0.56	-0.05
2. In-course	3.42	0.80	-0.01	3.33	0.80	0.37**
3. Assignment	3.16	0.85	0.03	3.20	0.78	-0.03
4. Practical/lab	2.89	0.88	0.01	3.20	0.86	0.03
5. Internship	3.37	0.87	0.07	3.20	0.83	-0.28*
6. Semester final	3.21	0.81	-0.07	3.47	0.65	0.24
7. Comprehensive final	3.03	0.87	0.01	3.28	0.78	0.08
8. Fairness in assessment	2.91	0.75	0.17	3.05	0.65	0.13
9. Overall institute's assessment	3.03	0.55	0.01	3.23	0.43	0.14
10. Total attitude	3.14	0.47	0.05	3.28	0.37	0.13

*Correlation is significant at the 0.05 level (2-tailed); **Correlation is significant at the 0.01 level (2-tailed)

3.3. Factors affecting students' attitude towards assessment: students' perspectives

The students talked about different experiences that shaped their attitude towards assessment during the interviews. Different factors as themes emerged from these descriptive data regarding their experience of assessment. These factors can be divided broadly into three categories: assessment policy and structure; teachers' assessment practice; and assessment environment. These three domains of factors are not watertight compartments; rather they influence each other and create a combined effect to contribute in building students' attitude.

3.3.1. Assessment policy and structure

Students who had a more positive attitude towards assessment focused mostly on the broad policy and structure of assessment. The findings presented on Table 5 summarize the factors related to assessment policy and structure of the institution separately contributing to students' both positive and negative attitude. On the same matter or issue, some students counted positive aspects of the matter, and some counted negative aspects critically analyzing the underlying policy and practice related discrepancies. For example, the students who have a more positive attitude towards assessment appreciated that their institution has a published and accessible curriculum. However, the students with a negative attitude towards assessment think that the assessment structure is not clear and open enough. Zarifa said, "*each teacher should give exact ideas about all assessment activities such as assignments with rubrics beforehand. Rarely any of the teachers have given us such clear ideas on all assessment activities and teacher expectations aligned with possible marks to them which can guide our learning.*"

Though all students appreciated that there are provisions of different types of assessment methods such as essay type, multiple choice questions (MCQ), practical, and assignments, some students with more negative attitude towards assessment told that most of the tasks are paper-pencil based assessment, and there is very little scope created by few teachers to involve students in meaningful assessment experiences which are based on real life problem solving, experiential, and authentic. One positive aspect about the assessment of the institution was mentioned as the assessment-activities are spread throughout the whole semester. Riha thinks, "*these formative assessments give students flexibility in learning and having more chances for getting good grades.*" However, Navid believes, "*these exams are not actually formative assessments as most of the teachers do not publish the results of these assessment tasks on time and even if they do, they do not give feedback and guidance for our learning.*"

Table 5. Policy related factors that contribute in developing students' attitude towards assessment

Factors contributing to positive attitude	Factors contributing to negative attitude
1. Fixed structure and number of distributions of assessment in curriculum	1. Assessment system not open and clear, and there is no follow-up
2. Provisions of different types of assessment	2. Still the provisions focus more on paper-pencil tests
3. Scope of assessing skills from different domains including higher order learning	3. No standard moderation system
	4. No accountability of teachers; No provision for teacher evaluation by the students
4. Provision of formative assessment along with summative	5. Not enough scope of experience-based assessment like internship and practicum
5. Unique components in assessment structure such as internship, year, and viva-voce	6. Reducing flexibility in assessment: reducing to 2 in-course exams instead of prevision of 3
6. Flexibility: for example, in language for responding to the assessment task	7. Special need students' assessment provisions are not flexible enough
7. Flexibility for the special need students	8. Students are not involved in assessment discussions related to policy and practice
	9. Administration friendly assessment system, not students or learning friendly

Students with positive attitudes treasured that they have the scope to exhibit different types and levels of skills measuring different levels of skills such as comprehension, analysis, and creation. Conversely, Ashok thinks "*though there are different types of assessment methods used, most of these focus on lower order learning such as memorization and comprehension. Higher order learning such as creation and evaluation are measured rarely through the assessment process.*" Though some students mentioned some unique features of assessment of this higher education institution such as internship and practical assessment (such as language speaking tests), some students were not satisfied as they think that these are a small fraction of their total assessment experience.

On a positive note, students depicted the assessment system as inclusive and friendly to students with disabilities as students with special needs get extra time during the exam. In contrast, other students believe that giving students only extra time is not always helpful. The visually impaired students have to sit their exam with writers whom they need to find and bring with them; this makes their life very stressful before the exam. In a similar manner though some students took it positively that the students have the freedom to respond to the questions in examination either in English or Bangla, other students felt that for this policy, the students grow proficiency not in both languages but only in one preferred language which may affect their performance in future employment.

All three students also attributed the closed and administration friendly assessment to the negative attitude towards assessment. They think that the overall assessment system is closed as it does not put teachers accountable for whatever they do regarding assessment which has made the teachers create a tyranny where they can do whatever they want without being accountable by the system. Ashok gave an example, "*sometimes the teachers put us in tremendous stress as they decide on different submission deadlines which are very close to our final examinations and our voice is not heard.*" In this regard, they

regretted not having an evaluation system for students to evaluate teachers. The system also does not create any scope for the students to be involved in any dialogue, discussion and policy decision making process regarding assessment. The students described the system as administration friendly as the decisions are made and revised to ease administrative labor. For example, they think that the decision of having less frequent tests is a decision to ease administrative work and the students, who were the most relevant stakeholder, were not involved in this policy change discussion. The students think that most of the teachers do not possess any positive attitude towards them and their learning; they mostly underestimate them.

3.3.2. Teachers' assessment practice

It was evident from the students' interviews that the students who held a very negative attitude towards assessment mostly criticized the teacher related factors. The findings presented on Table 6 summarize the factors related to teacher practice that act as building blocks for developing both positive and negative attitudes of the students. The only positive statement related to teachers was that the teachers are fair and not biased in their assessment and grading. Two of the students told this and both of their CGPAs are above average. All three students holding negative attitudes strongly alleged the teachers to be biased and unfair, creating a system that systematically excludes students from participation in classes and assessment. Both students explained teachers' 'fair' and 'unfair' assessment behavior with their personal experience. One student described her experience as, "*when I got admitted in this institution, I was not sure if the teachers would be fair enough or not. But from the very first exam, I found that though they do not know me personally, and I am introvert, I scored well, and I wrote well in my exam sheet. I always felt that the teachers genuinely read the exam papers and assign marks accordingly.*" On the other hand, one student commented that, "*most of the teachers are biased. They give more marks to the students whom they like. Some teachers over-grade female students. In a group project I worked really hard. But the teacher gave the highest marks to the girl who was in our group, which was totally unfair as she did not work hard in the project.*"

Table 6. Teacher related factors that contribute in developing students' attitude towards assessment

Factors contributing to positive attitude	Factors contributing to negative attitude
Fair and unbiased grading practice of teachers	1. Teachers' unfair and biased assessment 2. Assessment quality varies a lot from teacher to teacher; no discussion or collaboration among teachers 3. Pedagogy not matched with assessment 4. Low quality assessment items (only knowledge based MCQs, old-fashioned essay type questions, not creative, not meaningful, or real experience based, not application based, number not clearly specified 5. Teachers not giving enough time and importance for assessment related activities 6. No rubrics for the assignments 7. Formative test results not published on time; no feedback 8. Number based assessment, not feedback based; no continuous monitoring of learning 9. Teacher's assigning most of the tasks at the end of the semester 10. Power and authority on assessment skewed towards teachers; students have no power or decision-making authority 11. Teachers' low and negative attitude towards students and their learning 12. Content reduction by the teachers 13. Teachers are not trained on assessment

All the students, either with negative or positive attitude towards assessment, argued that the assessment system is heavily driven by teachers' own individual practice which varied extremely from teacher to teacher. The students with a more negative attitude towards assessment felt that this variation is mainly because of two reasons. First, the policy and curriculum structure are not very specific to guide all teachers in a standardized way. Another reason that they mentioned is that the teachers plan and implement assessment related tasks (preparing question papers/test items, and grading) in isolation without discussing with each-other.

The students mentioned that sometimes the teachers' pedagogy was not suitable for the specific assessment process. For example, for some courses they did not have any specific book or articles to read which made it difficult for them to prepare for and respond to the MCQs. Another example is the mismatch between language of instruction in class and language of the question paper/test. Ashok stated, "*many teachers explain the terms of the subject matter in English in class and prepare the questions for assessment in Bangla. For technical subjects like the research methodology course where we do not have sufficient good quality books in Bangla, it becomes harder.*" Lastly, the students also said that some teachers reduce the course content while teaching, and then the assessment does not match with the reduced content.

The students, even one student with a positive attitude, criticized the standard or quality of question paper or test development and grading practice of the teachers. Tania said, "*most of the teachers prepare MCQs which are mostly knowledge based and cannot assess higher order learning, especially whether we can apply the learning in a new context.*" Navid explained, "*teachers prepare questions which are very old-fashioned and typical such as-what do you know by? Describe the model of, present the classification of. These questions are very broad and not specific. It does not give us any hint on what specific attributes the teachers are trying to assess.*" Ashok thinks that the teachers have no specific and effective training on how to prepare exam questions and grade papers. The teachers, they think, usually assess them like the way they were assessed when they were students. These students also think that many teachers do not give sufficient time, effort, and energy in preparing standard good quality questions but repeat the same questions or just modify the questions a little bit to administer each year. Regarding the marking, the students expressed their frustration as there is rarely any rubrics from any teacher for any assignment or assessment tasks such as presentation or group work. Zarifa articulated as, "*We do not get a clear idea what aspects to cover and to what extent.*"

3.3.3. Assessment environment

All the policy, structure, teacher and students' practice and experience of assessment creates an environment within the institution. There is a complex interplay among these domains creating an assessment environment for the students. Table 7 summarizes the factors related to assessment environment that contribute in developing both positive and negative attitudes of the students. The students with more positive attitude told that there is a friendly relationship between the teachers and students which made it easy for them to ask questions to teachers, get important information, contact them, and participate fully in the assessment activities. However, the students who had a more negative attitude towards assessment felt that there is a teacher-dominant environment which lacks trust among teachers, students, and administration. The teachers and students are not sensitive to each other's differentiated and subjective experience. An advantaged and disadvantaged group is created based on the assessment results and the first group enjoys a certain level of power, access to information, good communication with teachers, further good grades, and other advantages while the latter group is deprived of these advantages.

Table 7. Teacher related factors that contribute in developing students' attitude towards assessment

Factors contributing to positive attitude	Factors contributing to negative attitude
Friendly teacher-student relationship	1. Teachers dominated environment
	2. No trust among teachers, students and administration
	3. Environment is closed and opaque
	4. Advantaged and disadvantaged groups are created

3.3.4. Students' basis of assessment related judgment

Students judged and evaluated the assessment of the institution based on their own experiences or from their friends. While evaluating the experience and deciding on whether it goes towards more positive or negative side, they compared it with the following standard:
- With international standard (example-criticized reducing formative ongoing tests as the international trend is to have more frequent on-going assessment)
- With other universities, private or public (example-they mentioned that most of the good private universities have the provision of students' assessment of teachers)
- With other departments of the same university (example-they compared their assessment structure with other departments and agreed that they have more varieties in assessment tasks compared to other universities)
- Personal evaluation (example-how much the teacher is fair in grading? The students decided on this based on their own personal judgment)

While analyzing the data, it was observed that students who viewed the overall aims and objectives of assessment as 'to prepare for final examinations', 'to evaluate a year's performance', or 'to make students prepare for the next year/semester' had a more positive attitude towards assessment. However, students who described the aim of assessment as 'holistic development as humans', or 'to bring out the best from the students' viewed the assessment more critically. These students possessed a more negative attitude towards assessment compared to other students.

3.3.5. Students' suggestions

For most of the issues related to students' negative attitude they mentioned some measures to be taken. All the suggestions are related to introducing new policies or structure of assessment or bringing

changes in the old assessment policy and structure. They assume that making positive changes in policy will bring positive changes in teachers' practice. For example, for solving the issue that assignment deadlines, exam dates, presentation-all coming together at the end of the course/semester, they suggested having a specific assessment timeline to be published by the authority.

3.4. Discussion

The findings of the study indicate that overall students showed a neutral attitude towards assessment. Among the different types of assessment prevailing in that institution, students (both male and female) had the most positive attitude towards 'classroom assessment' showing their inclination towards formative assessment. The mixed-methods study approach allowed the qualitative data to complement and enhance the quantitative findings. During the interview, the students stated that different types of formative assessment activities gave them more flexibility in their studies and more opportunities to earn good grades. Similar results were found in previous studies where students showed positive attitude towards this assessment as it helps them to meet classroom expectations, encouraged them to improve their performance and given them more chances to learn effectively [36]. Regarding 'in-course exams', female students showed a positive attitude towards assessment, while male students were neutral. Across other types of assessments, both male and female students had similar attitudes. Male students had the lowest attitude score towards 'fairness', while female students rated 'practical/laboratory work' the lowest among all assessments. Previous research has suggested that students hold a more positive attitude towards assessment when they believe that assessment system is fair in their institution [37]. Additionally, statistically significant differences were found between attitudes of male and female students towards 'fairness' and 'comprehensive exam'. During the interview, male students claimed assessment system is unfair due to biasness in their grading. They think that teachers tend to give higher marks to students they like, and some teachers give female students more marks than they deserve. This finding is consistent to one earlier study which found that teachers' grading practices tend to disadvantage male students, consistently resulting in lower scores for them compared to female students [38]. Despite these differences in attitudes towards specific aspects of assessment, there were no statistically significant differences found between the attitudes of male and female students, or between undergraduate and graduate students towards the overall assessment system of the institution.

The correlation between students' attitude towards assessment and their academic achievement suggests that both graduate and undergraduate students with a positive attitude towards assessment tend to achieve higher grades and vice versa. This is because assessment has a strong influence on how students approach learning [17], affecting not only their academic performance but also their future career prospects [18]. The overall findings indicate that students who view the assessment system of their institution more positively are more likely to engage enthusiastically in assessment-related activities and are more likely to succeed [13], because they find learning enjoyable [19]. Interestingly, graduate students showed a slightly stronger positive relationship between their attitude towards assessment and academic achievement compared to undergraduate students. Component wise analysis shows several negative correlations between students' attitude and their academic achievements. Particularly, graduate students with higher academic achievement tend to have a more negative attitude towards assessment through internships and this relationship is statistically significant. However, during the interview, both those with positive and negative attitude towards assessment appreciated internships as a significant form of assessment and they find this assessment more meaningful. Thus, fostering a supportive learning environment with diverse assessment methods could help create a favorable attitude towards assessment among students, engage them more effectively, and promote deeper learning.

Since assessment can significantly influence how students approach learning [17] which in turn impacts their academic results and their career prospects [18], we explored the factors that shape students' positive or negative attitude towards assessment. Students with a more positive attitude towards assessment generally appreciated the institution's structured curriculum and the availability of different modes of assessment. Different assessment approaches can evaluate various skills and competencies [14], which is crucial because universities aim to produce graduates with the required expertise in their chosen fields. Therefore, it is fundamental for institutions to have a well-organized curriculum and a diverse set of assessment methods to ensure effective learning. However, students with negative attitudes claimed a lack of transparency in the assessment structure, limited scope for meaningful real-life problem solving, and an overemphasis on paper-pencil based traditional assessments. This aligns with earlier research suggesting that teachers often prefer these types of assessment because they believe that students are familiar with them, and their main aim is to pass the course [39]. To fix this, a shift in mindset is needed, where all assessments whether formative or summative, should focus primarily on promoting learning, breaking down the traditional distinctions between formative and summative assessment [40]. Additionally, some students criticized the

absence of timely feedback and lack of guidance which limited the effectiveness of formative assessment. Without feedback on their overall progress, students find it hard to self-regulate their learning [26].

The lack of accountability for teachers leads to inconsistent grading practices and no opportunities for students to evaluate their teachers. A common complaint was that teachers often used outdated or broad questions, and there were no standardized rubrics for grading, which led to confusion and frustration. This underscores the need for using rubrics as it helps make the assessment process more precise, fairer and clarify the learning goals [41]. Moreover, students with positive attitudes described a friendly relationship with teachers, where they felt comfortable asking questions and engaging in assessment-related activities. However, students with negative attitudes felt that the assessment environment was dominated by teachers, creating a lack of trust and communication. They observed that the system created advantages for certain groups while disadvantaging others, leading to unequal opportunities for success. These issues highlight the need for changes to create a more transparent, student-friendly, and equitable assessment process. There needs to be flexibility in assessment methods where individuals should be able to choose the assessment style that best suits their needs [25].

4. CONCLUSION

The research reveals that the tertiary level students showed a neutral attitude towards the assessment of their institution. Personal experiences of the students shape their attitude either positive or negative. The same assessment experience can build more positive or more negative attitude of the students depending on how the students analyzing and interpreting the experience. It was clear from the interviews that students who possess more positive attitude towards assessment view education and assessment as a more functional aspect, while students with negative attitude perceive education and assessment from a critical aspect where the power distance between students and teachers' and more administration friendly assessment environment silence their voice and hinder their participation in assessment. Further research can explore the relationship between students' sociological viewpoints of education and how they view assessment. This research sheds light on the complex interplay between student's attitude towards assessment, and factors that contribute to developing the attitude. The findings will help policy makers and educators to develop a better assessment system for the students of higher education in Bangladesh and other countries of similar context.

AUTHOR CONTRIBUTIONS STATEMENT

This journal uses the Contributor Roles Taxonomy (CRediT) to recognize individual author contributions, reduce authorship disputes, and facilitate collaboration.

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
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C : **C**onceptualization	I : **I**nvestigation	Vi : **Vi**sualization
M : **M**ethodology	R : **R**esources	Su : **Su**pervision
So : **So**ftware	D : **D**ata Curation	P : **P**roject administration
Va : **Va**lidation	O : Writing - **O**riginal Draft	Fu : **Fu**nding acquisition
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INFORMED CONSENT

We have obtained informed consent from all individuals included in this study.

ETHICAL APPROVAL

The research related to human use has been complied with all the relevant national regulations and institutional policies and has been approved by the authors' thesis examination committee.

DATA AVAILABILITY

The data that support the findings of this study are available from the corresponding author [SA], upon reasonable request.

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