International Journal of Education and Practice
2026 Vol. 14, No. 1, pp. 183-201
ISSN(e): 2310-3868
ISSN(p): 2311-6897
DOI: 10.18488/61.v14i1.4686

Students' attitudes toward national evaluations and their impact on learning: A mixed method study of the NAFS test

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Article History
Received: 17 July 2025
Revised: 4 October 2025
Accepted: 22 December 2025
Published: 12 January 2026

Keywords
Learning evaluation
Mixed-methods study
NAFS test
National assessments
Saudi Arabia
Students' attitude.

ABSTRACT

This study investigates students' attitudes toward national evaluations and their perceived impact on learning, focusing on the National Assessment for Learning Standards (NAFS) test in Saudi Arabia. Using a mixed-methods approach, the research combines quantitative and qualitative data to gain a comprehensive understanding of students' perceptions, experiences, challenges, and suggestions for improvement. The quantitative phase is based on questionnaire data from 533 first-year secondary students, who had previously taken the NAFS test during their final year of intermediate school. The qualitative phase includes semi-structured interviews conducted with a sub-sample of 15 students. Results show a generally negative attitude towards the test's effectiveness, with significant differences favoring private school students, whereas no significant gender-based differences were observed. The challenges arose from the unsuitable timing for the test's implementation, unclear test questions, a lack of motivation among students to take the test, as well as the absence of feedback that would benefit them due to the disconnect between test results and their academic performance. Some students provided suggestions and opinions regarding this test, including integrating the test components into the curriculum, offering both moral and material incentives for high achievers, extending the test duration, and using the test as a tool to identify each student's strengths and weaknesses. The findings highlight the need for national assessments to align more closely with students' academic contexts and emotional needs.

Contribution/Originality: This study aims to examine students' attitudes toward the effectiveness of the national assessment NAFS in evaluating learning using a mixed-methods approach (quantitative and qualitative). It highlights the challenges students may face during test administration and presents actionable suggestions from students to improve the assessment process.

1. INTRODUCTION

Assessment is an important process that helps reveal student performance and identify their strengths and weaknesses, as well as understand how to improve the educational process and develop educational policies to achieve quality education, allowing for the formulation of solutions to enhance learning outcomes (Alonzo, 2024; Stiggins, 2005). By focusing on curriculum evaluation, it is possible to measure student progress and understand their performance (Guskey, 2003; Hattie & Timperley, 2007). Standardized tests such as PISA and TIMSS provide a fair

comparison of student performance on a global scale, aimed at helping countries improve education and enhance its quality (Scherer, 2022).

National examinations provided by countries and administered to their students are standardized evaluations that align with each country's standards, aimed at improving the quality of learning through the collection and analysis of student performance data (Rahman, 2019). These examinations are characterized by their consideration of each country's circumstances through their alignment with national standards, which contributes to the implementation of various educational comparisons. These evaluations encompass several aspects, such as curriculum assessment, teaching methods, student performance, and more (Hudovernik & Volk, 2025). These examinations assist decision-makers in making data-driven decisions based on the findings from these assessments, thereby evaluating the current educational situation and attempting to bridge the gap between what currently exists and what is desired (Gonzalez & Karp, 2018; Ibrahem, 2022).

NAFS tests are recent national assessments in the Kingdom of Saudi Arabia, launched by the Education and Training Evaluation Commission in 2021. They are based on approved evaluation frameworks focusing on reading, mathematics, and science, drawing from international assessments such as TIMSS and PIRLS, while adapting them to fit the local educational context (Education and Training Evaluation Commission, 2024). These assessments are administered to students in Grade 3, Grade 6, and the third year of middle school. They aim to collect reliable data about the extent to which national curriculum outcomes have been achieved. It also includes additional tools to measure factors influencing learning and classroom and educational practices (Al Muhaidly, Al Yami, Al Khalaf, Al Rasheed, & Al Mutairi, 2024).

The national tests "NAFS" are conducted across all primary and middle schools, with the aim of improving the quality of education, promoting positive competitiveness, and supporting evidence-based educational decision-making. The results of these tests help evaluate the effectiveness of curricula in countries and develop teaching methods and strategies by connecting students' lives to what they learn. This contributes to preparing and equipping them for their future requirements, with a strong focus on their real-life situations (Al-Atwi, 2024; Al-Mutairi, 2024).

However, the success of assessment tools such as NAFS tests is not limited to the accuracy of their design, but is also linked to students' active participation in those tests, their seriousness in dealing with them, and their awareness of their importance, which stems from their attitudes towards them. Attitude is a mental state that shapes and forms an individual's beliefs, inclinations, emotions, and behaviors, which contribute to how they think, feel, and act in different situations and contexts (Syyeda, 2016).

Attitudes can be positive, negative, or neutral, and they largely depend on the degree of an individual's liking or disliking of the subject itself. When individuals view a subject positively, it contributes to their development and manifests in traits such as high confidence and optimism. Conversely, others may perceive the situation or subject negatively, leading to a pessimistic outlook and negative perceptions about it (Nleonu, Chijioke, & Gabrial, 2024). Alorki, Tahiru, and Tahiru (2024) defined attitude as a tendency to respond in a certain way to specific situations or tasks. Attitudes can play a pivotal role in influencing students' learning outcomes and their acceptance of new assessment tools, as they are key motivating factors for active participation (Al-Shaarawi & Abu Al-Fadl, 2023). Aiken (2002) described attitudes as cognitive, emotional, and behavioral tendencies to respond positively or negatively to various stimuli, while Gül, Çokluk, and Gül (2015) considered them to be acquired tendencies used to evaluate individuals and issues in certain ways. They significantly influence individuals' behaviors and how they interact in various situations (Al Furaikh, Al Omairi, & Ganapathy, 2017), in addition to affecting their educational levels and academic achievements (AlAli & Al-Barakat, 2024).

Considering the critical importance of national assessments in formulating educational policies and improving learning outcomes, and the clear impact of student attitudes on their level of academic engagement and performance, there is a need to understand how students view and interact with these assessments. Tests such as NAFS are designed to improve the quality of education and ensure its compliance with national and international standards, but

their success depends largely on students' acceptance of them and their belief in their importance. From this perspective, analyzing students' attitudes toward these tests is essential to a deeper understanding of their impact on motivation, achievement, and overall learning experience. Accordingly, this study aims to investigate students' attitudes towards NAFS tests and their impact on the learning process, in addition to identifying the challenges faced during their experience with performance, and reviewing proposals for developing and improving those tests.

1.1. Research Problem

Attitudes toward national examinations are feelings and tendencies that influence students' behavior and performance. These attitudes include three components: affect, behavior, and cognition. Affect is the emotional component, consisting of feelings and emotions that the test evokes in the individual. Behavior is the action component, consisting of tendencies related to the individual's intention or willingness to behave in a certain way during the test. Cognition is a mental component that consists of beliefs and perceptions an individual holds about the test (Mazana, Montero, & Casmir, 2019).

Positive attitudes contribute to improved performance and motivation, while negative attitudes reduce incentives and lead to decreased academic success (Rahman, 2019). Therefore, understanding attitudes is essential for teachers, as it helps motivate students and significantly enhances their academic achievement (Baker, 2018; Hattie, 2009).

The relation between students' attitudes towards national examinations and their academic performance can be well understood through the lens of Expectancy-Value Theory Wigfield, 1994). This theory highlights key motivational elements, including students' self-beliefs in their abilities, their perceptions of the task's importance, and the practical benefits they anticipate. Essentially, when students have confidence in their potential for success and recognize genuine value in their tasks, they are more likely to remain motivated and achieve higher performance levels. Expectancy-Value Theory offers a detailed framework to grasp how students' success expectations, along with the value they place on a task or goal, influence their motivation and overall performance outcomes (Wakhata, Balimuttajjo, & Mutarutinya, 2024).

National assessments are crucial for influencing educational policies and enhancing learning outcomes (Darling-Hammond, 2020; OECD, 2019). In Saudi Arabia, the NAFS tests are particularly significant as they provide a means to evaluate students' academic performance and generate reliable data on learning outcomes (Education and Training Evaluation Commission, 2024). Despite their critical role, recent research has highlighted a troubling decline in student performance on the NAFS exams, which has been attributed to a lack of seriousness, limited awareness, and inadequate preparation (Al-Zahrani & Al-Saeedi, 2025; Al Muhaidly et al., 2024; Alshehry, 2025). However, the majority of existing research has focused on teachers' perspectives and educational leaders, while students' attitudes have been largely overlooked. This creates a gap that necessitates exploration of students' attitudes toward "NAFS" assessments and their awareness of the tests' role in evaluating their learning.

The lack of attention to students' perspectives and attitudes toward the NAFS assessments in previous research can be attributed to several interconnected factors: many of these studies focused on teachers' perspectives (Al-Jedran, 2025; Al-Zahrani & Al-Saeedi, 2025; Al Muhaidly et al., 2024) and educational leaders (Aldosari & Almengash, 2025; Alshehry, 2025) that may be operated on the assumption that teachers and educational leaders are best positioned to evaluate the state of the education system and diagnose the causes of low student performance, given their field experience and broader institutional perspective. At the same time, studying students' attitudes is often seen as more challenging, particularly when working with younger students who might find it hard to articulate their thoughts, feelings, and experiences. This lack of attention may also be tied to a weak tradition of student participation in evaluating educational policies, where students are still largely seen as passive recipients rather than active contributors to the system.

Finally, the emphasis on quantitative methods in much of the existing research- such as the studies by Al Muhaidly et al. (2024); Al-Zahrani and Al-Saeedi (2025) and Al-Jedran (2025) has contributed to the overlooking of

the "student voice," which is better understood through in-depth, qualitative approaches that can truly capture students' lived experiences and perspectives.

Based on the preceding points, this study aims to fill this gap and explore students' attitudes toward the effectiveness of the national assessment NAFS in evaluating learning through a mixed-methods approach, combining both quantitative and qualitative methods, to better understand how these attitudes may help explain low performance and to identify ways to support students both psychologically and academically in order to improve learning outcomes and enhance the impact of national assessments. The quantitative aspect involves a questionnaire distributed to first-year secondary students who took the NAFS test while in the third year of middle school. Meanwhile, the qualitative aspect includes individual interviews with some of these students to understand their attitudes and opinions regarding these examinations.

This mixed approach helps in gaining a deeper and richer understanding of students' attitudes, which can guide efforts to improve national assessments in a way that aligns with learners' actual needs and their learning environments.

1.2. Research Questions

1. What are students' attitudes toward the effectiveness of the national assessment "NAFS" in evaluating learning across the cognitive, affective, and behavioral dimensions?
2. Are there statistically significant differences in students' attitudes toward the effectiveness of the national assessment "NAFS" in evaluating learning based on gender (male/female) and type of school (public/private)?
3. What challenges did students experience while taking the "NAFS" test?
4. What suggestions do students offer for improving the "NAFS" test?

2. RESEARCH METHODOLOGY

2.1. Research Design

To achieve the study's objectives, a mixed-methods approach was used, following an explanatory sequential design as described by Creswell and Clark (2018). This design integrates quantitative and qualitative data within a single framework. The quantitative phase involved administering a questionnaire to identify students' attitudes toward the effectiveness of the national NAFS tests in evaluating learning outcomes.

In the qualitative phase, semi-structured interviews were used. The aim of the interviews was to explore students' perceptions of challenges they faced during their experience with the NAFS test and to gather their suggestions for improvement.

This integration of both data types can provide a comprehensive understanding of the research problem from multiple perspectives.

2.2. Research Participants

The participants of the quantitative phase included 533 first-year secondary students at the beginning of the 2025 academic year. All of these students had previously taken the national NAFS test in their third year of intermediate school. The sample consisted of 217 male students (40.7%) and 316 female students (59.3%), with 308 from public schools (57.8%) and 225 from private schools (42.2%).

After obtaining the necessary official approvals, the questionnaire was shared electronically with first-year secondary students in public and private schools in Bisha, located in the Asir region of Saudi Arabia. The data was collected from students who chose to participate voluntarily and provided their consent prior to participation.

In the qualitative phase, semi-structured interviews were used with a sample of 15 students, who expressed interest in participating by writing their contact information when responding to the questionnaire. This sample includes 7 males (46.7%) and 8 females (53.3%), with 8 from public schools and 7 from private schools. These

participants agreed to participate in individual interviews to discuss their experiences with the NAFS test, the challenges they faced, and their suggestions for improvement.

2.3. Research Instruments

The study employed two instruments for data collection: a questionnaire and semi-structured interviews.

2.3.1. Questionnaire

A questionnaire was designed for students to assess their attitudes toward the NAFS test, and it was developed based on the Expectancy-Value Theory Wigfield, 1994). The theory emphasizes the important role of motivational factors in influencing performance, including students' beliefs in their own competence, the perceived importance of the task, and the practical benefits they expect to gain (Wakhata et al., 2024). The development of the scale was also guided by the ABC Attitude Model, which is also called the Tripartite Model. The ABC Model of Attitude is based on a hierarchical model described in Ajzen and Fishbein (2000), who hypothesized that an attitude reflects a combination of three separate measurable components: affect (A), behavior (B), and cognition (C). Affect is the emotional component consisting of feelings and emotions that are associated with an attitude object (in our study, the national evaluations, NAFS test). The behavior is the action component consisting of tendencies to act in a particular way towards the attitude object. Cognition is a mental component that consists of beliefs and perceptions individuals hold about the attitude object. In addition, the formulation of the questionnaire was informed by prior studies that focused on national examinations, particularly the NAFS test, including those by Nimasari, Mufanti, and Gestanti (2020); Al Muhaidly et al. (2024), Alshehry (2025), and others.

The initial version included 38 items across three main dimensions: cognitive, affective, and behavioral. The cognitive dimension comprised three sub-dimensions: (1) attitude toward question nature, (2) attitude toward test procedures, and (3) attitude toward test usefulness. Responses were recorded using a five-point Likert scale from (1) "Strongly Disagree" to (5) "Strongly Agree."

To verify content validity, the initial version of the scale was reviewed by ten experts in psychology, curriculum, and teaching methods to evaluate the appropriateness of each item in terms of content and language. Based on their feedback and suggestions, several items were rephrased, and two items were removed. Accordingly, the revised version of the scale consisted of 36 items.

Internal consistency was assessed with a pilot sample (n = 108), showing significant positive correlations among items. For the cognitive dimension, correlations ranged from 0.418 to 0.825, with overall cognitive dimension correlations at 0.727, 0.674, and 0.779. The affective dimension showed item-total correlations from 0.414 to 0.756, while the behavioral dimension ranged from 0.570 to 0.756. Correlations between each dimension and the overall scale were 0.903 (cognitive), 0.757 (affective), and 0.520 (behavioral), indicating strong internal consistency.

Reliability was further confirmed through Cronbach's alpha coefficients. The cognitive sub-dimensions recorded alpha values of 0.746, 0.766, and 0.829, with the total cognitive dimension reaching 0.833. The alpha values for the affective and behavioral dimensions were 0.758 and 0.822, respectively, while the overall scale demonstrated high reliability with a Cronbach's alpha of 0.875.

The final version of the scale comprised 36 items distributed as follows: cognitive dimension (22 items), affective dimension (7 items), and behavioral dimension (7 items). Total scores ranged from 36 to 180, with higher scores reflecting more positive attitudes toward the NAFS test's effectiveness in evaluating learning outcomes.

2.3.2. Interviews

In the qualitative phase, semi-structured individual interviews were conducted with 15 students who participated in the national NAFS assessment. The aim was to explore their perspectives on their test-taking experience, perceived difficulties, and suggestions for improving the NAFS test.

The interview consisted of open-ended questions to encourage students to express their thoughts freely and in detail. The interview questions were as follows:

- Can you tell me about your experience with the NAFS test when you took it in middle school?
- How did you find the types of questions in the test?
- How did your school support you in getting ready for the test?
- What difficulties or challenges did you face while taking the NAFS test?
- Which part of the test did you find most difficult - reading, math, or science? And why?
- How did you feel when the NAFS test date was announced? (Anxious, motivated, challenged, etc.)
- Were you interested in seeing your NAFS test results? Why or why not?
- Do you think the NAFS test is important? What makes you think so?
- After your experience with the NAFS test, have your study strategies changed in any way? If yes, how?
- If you had the authority to improve the NAFS test, what's the first thing you would change? And why?

To ensure trustworthiness and accuracy, the following procedures were followed:

Ethical considerations: Students were informed about the nature and objectives of the study, and their consent was obtained to conduct this research. It was also clarified that this study was carried out while maintaining the identity and confidentiality of the students' names.

Credibility: Interview briefing cards clarified the purpose, structure, and duration of interviews. Each interview lasted 20–30 minutes and was audio-recorded with permission. Recordings were transcribed verbatim and shared with participants for verification (member-checking).

Transferability: The sample was purposefully selected for variation in gender and school type, including 7 male and 8 female students from public (8) and private (7) schools. This diversity captured a wide range of experiences. Emerging themes were reviewed by non-participating students to confirm applicability.

Dependability: The interview process was documented, including the rationale for question design and participant selection. Interview questions were reviewed by experts in educational psychology for clarity and validity. A pilot study was conducted with students outside the main sample to ensure relevance. Qualitative findings were triangulated with quantitative data and discussed in light of previous literature.

3. RESULTS

3.1. Students' Attitudes Toward the Effectiveness of the National Assessment NAFS in Evaluating Learning

To answer the first question, means, percentages and standard deviations were calculated based on the frequency of the research sample's responses to the items of each dimension of the scale (cognitive, affective, and behavioral). Accordingly, the overall attitude was determined based on the following criteria. Table 1 presents the Interpretation criteria for students' attitudes using the Likert scale.

Table 1. Criteria for interpreting students' attitudes based on Likert scale scores.

Responses	Strongly disagree	Disagree	Sometimes	Agree	Strongly agree
Score range	1.00 – 1.80	1.81 – 2.60	2.61 – 3.40	3.41 – 4.20	4.21 – 5.00
Attitude level	Very Low	Low	Moderate	High	Very High

The following table presents the results related to that:

Table 2. shows the descriptive statistics for the total score and main dimensions of the students' attitudes toward the effectiveness of the NAFS test in evaluating learning.

Scale dimensions	M	SD	%	Attitude level
Attitude toward the nature of the questions	2.532	1.117	50.64%	Low
Attitude toward test procedures	2.816	1.183	56.32%	Moderate
Attitude toward the usefulness of the test	2.161	1.168	43.22%	Low
Cognitive dimension (Overall)	2.503	1.154	50.06%	Low
Affective dimension	2.666	1.107	53.32%	Moderate
Behavioral dimension	2.641	1.132	52.82%	Moderate
Overall attitude toward the NAFIS assessment	2.581	1.141	51.60%	Low

The data presented in Table 2 indicate that the overall attitude toward the effectiveness of the NAFS test in evaluating learning among the study sample is low, with a total mean score of 2.581 for the participants' responses to all scale items. This value falls within the low range (1.81–2.60), with a percentage of 51.60% and a standard deviation of 1.141.

As for the main dimensions of the scale, the results were as follows:

- Cognitive Dimension: The mean score for participants' responses on the overall cognitive dimension was 2.503, which falls within the *low range* (1.81–2.60), with a percentage of 50.06% and a standard deviation of 1.154. This indicates a *low level of attitude* toward the cognitive aspect of the NAFIS assessment's effectiveness.
- Affective Dimension: The mean score for the affective dimension was 2.67, which falls within the *moderate range* (2.61–3.40), with a percentage of 53.32% and a standard deviation of 1.107. This reflects a *moderate attitude* toward the affective aspect.
- Behavioral Dimension: The mean score for the behavioral dimension was 2.64, also falling within the *moderate range*, with a percentage of 52.82% and a standard deviation of 1.132. This suggests a *moderate attitude* toward the behavioral aspect of the NAFIS assessment's effectiveness.

The detailed results regarding students' attitudes toward the individual items of each dimension are: Table 3 presents the descriptive statistics for the items of the cognitive dimension of the students' attitudes toward the effectiveness of the NAFS test in evaluating learning.

Table 3. Descriptive statistics for the items of the cognitive dimension of the students' attitudes toward the effectiveness of the NAFS test in evaluating learning.

Scale items Cognitive dimension	M	SD	%	Attitude level
A. Attitude toward the nature of the questions				
1. NAFS test questions are clearly worded.	2.55	0.580	51.00%	Low
2. NAFS test questions are better than school test questions.	2.56	1.190	51.20%	Low
3. NAFS test questions reflect what I have studied in school.	2.25	1.152	45.00%	Low
4. NAFS test questions are clear and easy to understand.	2.58	1.229	51.60%	Low
5. NAFS test questions help me think in new and unconventional ways.	2.94	1.173	58.80%	Moderate
6. Science questions in the NAFS test are easy and familiar to me.	2.21	1.249	44.20%	Low
7. I find it easy and quick to solve math questions in the NAFS test.	2.18	1.181	43.60%	Low
8. Reading questions in the NAFS test are easy for me.	3.67	1.181	73.40%	High
B. Attitude toward Test Procedures				
9. The school provided me with sufficient support to prepare for the NAFS test.	2.83	1.109	56.60%	Moderate
10. The time allocated for answering the test is appropriate for the number of questions.	2.15	1.158	43.00%	Low
11. The instructions provided in the NAFS test helped me understand what to do.	3.81	1.198	76.20%	High
12. The NAFS test rooms were organized and suitably equipped.	2.99	1.103	59.80%	Moderate
13. The school administration dealt well with any problems we faced during the NAFS test.	2.86	1.284	57.20%	Moderate

Scale items Cognitive dimension	M	SD	%	Attitude level
14. The timing of the NAFS test at the end of the academic year is appropriate.	2.23	1.234	44.60%	Low
15. I received sufficient information about how to take the NAFS test before its date.	2.84	1.192	56.80%	Moderate
C. Attitude toward the Usefulness of the Test				
16. The NAFS test helps me identify my strengths and weaknesses in my studies.	2.18	1.182	43.60%	Low
17. The results of the NAFS test will be useful in improving my academic performance.	2.14	1.123	42.80%	Low
18. The NAFS test helps me know my level compared to other students.	2.15	1.180	43.00%	Low
19. The results of the NAFS test contribute to improving students' performance.	2.20	1.142	44.00%	Low
20. The results of the NAFS test reflect my actual academic performance.	2.08	1.172	41.60%	Low
21. The NAFS test helped me apply what I learned in practice.	2.19	1.191	43.80%	Low
22. The NAFS test helped me develop higher cognitive abilities such as reasoning and analysis.	2.19	1.187	43.80%	Low

Regarding the cognitive dimension subscales, students exhibited low attitudes toward "the Nature of the Questions" (M = 2.532, 50.64%, SD = 1.154). Individual item means ranged from 2.18 to 3.67, indicating varied attitudes from low to high. The highest attitude was for "Reading questions in the NAFS test are easy for me" (M = 3.67), while the lowest was for "I find it easy and quick to solve math questions in the NAFS test" (M = 2.18).

For the subscale "Attitude toward Test Procedures," students showed a moderate attitude (M = 2.816, 56.32%, SD = 1.154). Item means ranged from 2.15 to 3.81, with the highest for "The instructions provided in the NAFS test helped me understand what to do" (M = 3.81) and the lowest for "The time allocated to answer the test is appropriate" (M = 2.15).

Regarding "Attitude toward the Usefulness of the Test," students exhibited the lowest attitude among cognitive subscales (M = 2.161, 43.22%, SD = 1.168). Item means ranged from 2.08 to 2.20, showing consistently low attitudes toward all items.

Table 4. Explains the descriptive statistics for the items of the affective dimension of the students' attitudes toward the effectiveness of the NAFS test in evaluating learning.

Scale items Affective dimension	M	SD	%	Attitude level
23. I feel confident when taking the NAFS test.	2.73	0.996	54.60%	Moderate
24. I enjoy answering NAFS test questions because they represent a good challenge to my abilities.	2.62	0.994	52.40%	Moderate
25. I feel comfortable because my performance in the NAFS test will not affect my school grades.	3.66	1.120	73.20%	High
26. I feel enthusiastic when facing NAFS test questions because they are familiar and predictable.	2.30	1.183	46.00%	Low
27. I feel excited when answering math questions in the NAFS test.	2.23	1.185	44.60%	Low
28. I enjoy answering science questions in the NAFS test.	2.23	1.189	44.60%	Low
29. I enjoy answering reading questions in the NAFS test.	2.89	1.085	57.80%	Moderate

As shown in the previous Table 4, students' responses to the affective dimension items revealed mean scores ranging from 2.23 to 3.66, with corresponding percentage scores between 44.6% and 73.20%. This indicates that attitudes toward these items varied from low to high. The highest positive attitude was recorded for the item "I feel comfortable because my performance in the NAFS test will not affect my school grades," with a mean score of 3.66, reflecting a high level of agreement. In contrast, the lowest attitudes were observed for the items "I feel excited when answering math questions in the NAFS test" and "I enjoy answering science questions in the NAFS test," both with

a mean score of 2.23, indicating low levels of agreement with these statements. Table 5 illustrates the descriptive statistics for the items of the behavioral dimension of the students' attitudes toward the effectiveness of the NAFS test in evaluating learning.

Table 5. Descriptive statistics for the items of the behavioral dimension of the students' attitudes toward the effectiveness of the NAFS test in evaluating learning.

Scale items Behavioral dimension	M	SD	%	Attitude level
30. I make sure to attend the NAFS test on time and not be late.	3.71	1.150	74.20%	High
31. I work on developing my study skills to meet the requirements of the NAFS test.	2.20	1.133	44.00%	Low
32. I am interested in participating in the NAFS test even if it does not affect my evaluation.	2.35	1.179	47.00%	Low
33. I allocate time to practice solving questions similar to those in the NAFS test before taking it.	2.96	1.062	59.20%	Moderate
34. I actively participate in educational activities that help me prepare for the NAFS test.	2.88	1.085	57.60%	Moderate
35. I regularly discuss NAFS test questions with my classmates.	2.22	1.131	44.40%	Low
36. I changed my study strategies after my performance in the NAFS test	2.17	1.184	43.40%	Low

Based on the results, the overall mean score of students' responses in the behavioral dimension was 2.64, indicating a moderate attitude (52.82%) with a standard deviation (SD) of 1.132. The individual item means ranged from 2.17 to 3.71, with percentage scores between 43.4% and 74.20%. The highest attitude was for the item "I make sure to attend the NAFS test on time and not be late" (M = 3.71). The lowest attitude was for "I changed my study strategies after my performance in the NAFS test" (M = 2.17), followed by "I regularly discuss NAFS test questions with my classmates" (M = 2.22), both reflecting low levels of agreement.

The quantitative results of this study reveal that students have a negative attitude or unfavorable perception regarding the NAFS test as a national tool for evaluating learning outcomes. The average score of 2.581, which falls in the low range, indicates an inconsistency between the intended purpose of the test and how students perceive its impact on their academic achievement and learning.

When examining students' attitudes across the three main dimensions, cognitive, affective, and behavioral, a clearer picture begins to emerge. Notably, the cognitive dimension scored the lowest, which shows that students aren't convinced the test truly measures what they've learned. For example, although students found the reading section relatively easy or manageable, they reported significant difficulty with the math and science sections. The results also refer to low or negative students' attitudes toward the usefulness of the test. The students tend to view the test as lacking practical value, and they perceive a low connection between their test performance and any educational feedback or benefits.

On the other hand, results show moderate ratings for the emotional and behavioral aspects of students' attitudes. Interestingly, one of the highest-rated statements was, "I feel comfortable because my performance in the NAFS test won't affect my school grades." This suggests that students might see the test as having little real impact on their learning process, which could explain why their motivation and engagement were generally low. Although students reported that they arrived on time and prepared somewhat for the test, this didn't necessarily reflect a strong belief in the test's value. This becomes clear, as students gave low ratings to the statements, indicating that the test led them to change their study habits or generated meaningful conversations with classmates about its content.

The results also reveal low students' ratings regarding the scheduling and time allocated for the NAFS test, which reflect students' concerns about its administration. Students expressed doubts about whether the test was given at the right time of the academic year and if they had enough time to answer all the questions. The overlooking of these factors can have a major influence on how students perceive and engage with the test.

These findings support and give more interpretations to the findings of previous studies, Al Muhaidly et al. (2024); Al-Zahrani and Al-Saeedi (2025) and Alshehry (2025), which highlight teachers' reports of students' lack of seriousness, limited awareness, and insufficient preparation for the NAFS test. This could be attributed to the fact that students fail to see the national assessments as relevant to their educational improvement. When the purpose of a test is unclear, and/or its results don't lead to meaningful feedback or change, it is likely to be perceived as just an academic task, rather than a valuable learning opportunity.

4. GENDER AND SCHOOL TYPE DIFFERENCES IN STUDENTS' ATTITUDES TOWARD THE EFFECTIVENESS OF THE NATIONAL ASSESSMENT (NAFS) IN EVALUATING LEARNING

4.1. Gender Differences

To examine whether there were statistically significant differences between male and female students in their attitudes toward the effectiveness of the NAFS test in evaluating learning, regarding both the overall score and the main attitude dimensions (cognitive, affective, and behavioral), an independent samples t-test was conducted. The results are presented in the following table:

Table 6. explains the results of the independent samples t-test for gender differences in students' attitudes toward the NAFS.

Gender	Variables	M	S.D	N	DF	t.value	p-value
Male	Cognitive	55.77	7.55	217	531	0.5197	0.604
Female		56.12	7.70	316			
Male	Affective	19.51	3.30	217	531	1.182	0.238
Female		19.16	3.40	316			
Male	Behavioral	18.14	3.20	217	531	1.945	0.052
Female		18.70	3.30	316			
Male	Total	93.42	10.90	217	531	0515	0.607
Female		93.92	11.10	316			

The results presented in Table 6 indicate that there are no statistically significant differences between the mean scores of male and female students in the research sample regarding their attitudes toward the effectiveness of the NAFS test in evaluating learning, whether in the overall score or in the main attitude dimensions (cognitive, affective, and behavioral). The t-values were not statistically significant at the significance level of ($\alpha \leq 0.05$).

These results indicate that gender did not play a noticeable role in shaping students' attitudes toward the test. In other words, both male and female students seem to have similar perceptions, concerns, and levels of engagement with the NAFS test.

This may be due to the fact that both male and female students share a similar view regarding the importance of the test and its value in supporting their learning improvement.

4.2. School Type Differences

To examine whether there were statistically significant differences in the attitudes of the research sample toward the effectiveness of the NAFS test in evaluating learning, based on the type of school (public vs. private), and considering both the overall score and the main attitude dimensions (cognitive, affective, and behavioral), an independent samples t-test was conducted.

The results are presented in the following table:

Table 7. shows the results of an independent samples t-test for differences in students' attitudes toward the effectiveness of the NAFS test based on school type.

School	Variables	M	S. D	N	DF	t.value	p-value
Private	Cognitive	58.07	9.15	225	531	5.551	0.000
Public		54.40	6.07	308			
Private	Affective	19.80	3.40	225	531	2.931	0.004
Public		18.91	3.48	308			
Private	Behavioral	18.86	3.55	225	531	2.175	0.030
Public		18.21	3.31	308			
Private	Total	96.72	13.19	225	531	5.230	0.000
Public		91.52	9.77	308			

The results presented in Table 7 indicate that there are statistically significant differences between the mean scores of public and private school students in the research sample regarding their attitudes toward the effectiveness of the NAFS test in evaluating learning, in terms of the overall score as well as the main attitude dimensions (cognitive, affective, and behavioral). The t-values were statistically significant at the ($\alpha \leq 0.05$) level, and the differences were in favor of private school students, as their mean scores were higher than those of public school students.

This suggests that private school students may perceive the test as more valuable or relevant to their learning evaluations and improvement. Several factors could explain this difference, such as variations in school environments, teaching practices, student preparation, or the importance given to national assessments. This is especially true for private schools, which tend to place greater importance on demonstrating the school's effectiveness in achieving learning outcomes, which is one of the key stated objectives of the NAFS assessment.

5. DIFFICULTIES FACED BY STUDENTS DURING THE NAFS TEST

The interviews conducted with 15 students reveal certain aspects related to the NAFS test, which have been categorized into four sections: the nature of the test questions, school practices for preparation and support, students' perceptions of the importance of the test, and emotional responses and reactions related to the test. This can be explained as follows:

5.1. Students' Opinions on the Nature of NAFS Test Questions

Most participating students agreed that the test questions were difficult and not adequately clear. Student 1 mentioned that the questions were unclear, while Student 5 confirmed that they were difficult and not what they were accustomed to. Many students also indicated that the questions focused on memorization rather than higher-order thinking skills, especially in mathematics and science. Student 2 pointed out that the math questions were the hardest, while Student 13 noted that the difficult questions were in science. Additionally, students emphasized that some questions relied on prior knowledge that was hard to recall during the test. They also highlighted that the limited time for the test negatively impacted their answers, with Student 2 stating that the test duration was too short and Student 7 mentioning that the questions were lengthy, particularly the math questions.

5.2. School Practices for Awareness, Support, and Preparation for the Test

The results of the interviews conducted with students revealed a disparity in schools' preparedness for implementing the NAFS test. Some schools demonstrated commitment by offering training programs for students, preparatory workshops, and mock tests that simulate the KAFES exam. For instance, student 14 mentioned that their school encouraged attendance at training programs and conducted practice tests. In contrast, some students noted that their schools did not prioritize these tests, merely informing them of the exam date. Additionally, some schools mandated students to attend the test, linking attendance to their grades; if a student did not attend, their grades would be deducted.

Regarding school preparedness, student 1 stated that their school only offered a paper-based test due to a lack of internet access, while student 5 confirmed that their school conducted the test electronically as required. However, they faced significant issues with a weak internet connection that affected their performance. Furthermore, some students reported confusion during the exam; the school initially stated that calculators were not allowed, but later permitted their use during the test, leading to inconsistencies in instructions.

5.3. Students' Opinions on the Importance of the NAFS Test

Most students, about 80%, agreed that the test was not important to them. Student 3 mentioned that the test did not add any value; instead, it made him feel anxious. Student 4 added that the test was unimportant for him because the teacher assured them that the test results would not affect their grades, so he did not pay much attention to it. Most students confirmed that they participated in the test due to pressure from the school to attend, but showed no interest in it. Student 12 expressed, "I am not interested in attending the test because it is not useful for me." In contrast, a few students acknowledged that the test has significance and serves as a measure of their academic level.

5.4. Affective Reactions Associated with the NAFS Test Experience

Students' emotional responses to the NAFS test were varied. The majority had negative feelings toward the test, experiencing stress and psychological anxiety. Student 3 described it as a burden, noting that its timing coincided with school exams. Meanwhile, Student 4 indicated that the test imposed psychological pressure on them, confirming that he took the test without enthusiasm or desire, especially since it was scheduled during mid-term exams.

6. STUDENTS' SUGGESTIONS FOR IMPROVING THE NAFS TEST

The interview results provided a set of suggestions that could contribute to improving various aspects of the NAFS test. For example, the importance of enhancing the clarity and variety of questions was highlighted by Student 1, who stated that the questions should be clear and appropriate for students' levels. Student 2 emphasized the need for the test to align with the time allotted for completion, while Student 10 pointed out the necessity of gradually training students on such questions so they can become accustomed to them, a sentiment echoed by the majority of students. Among the suggestions for effective test implementation, Student 11 mentioned the importance of linking test results to student performance so that they feel the significance of the test. Student 15 proposed integrating NAFS skills into the curriculum and applying them in classroom sessions, stating, "If I were responsible, I would add the required skills for the NAFS test in textbooks and train students on them."

On another note, Student 9 emphasized the importance of providing psychological support to students and reducing their stress levels. In addition, Student 12 suggested offering financial rewards and incentives to motivate students for such tests. Meanwhile, Student 13 highlighted the significance of scheduling the test to avoid conflicts with school exams. Student 14 focused on the importance of raising awareness among parents and students about the value of such tests.

These suggestions contribute to improving the quality of such assessments with the aim of achieving the desired objectives.

7. DISCUSSION

The mixed-methods study provided a comprehensive view of students' cognitive, emotional, and behavioral responses to the NAFS test, allowing for a deeper understanding of how these attitudes affect their engagement and performance in these assessments. The results highlighted negative student attitudes toward the NAFS national tests, revealing a clear gap between student perceptions of the NAFS test and its intended role in assessing academic achievement and guiding educational policies.

These results can be interpreted in light of the principles of the Expectancy-Value Theory Wigfield, 1994), which emphasizes that students' motivation to perform a task depends on both their belief in their ability to succeed in that task and the value they place on it. The weak sense of self-relevance that students felt regarding these tests negatively impacted their performance and their attitudes toward the effectiveness of these assessments in developing learning outcomes.

Furthermore, the ABC Model of Ajzen and Fishbein (2000) highlights that attitudes consist of affective, behavioral, and cognitive components, all of which influence intentions and subsequent behaviors..

Student attitudes consist of three components: cognitive, affective, and behavioral. The cognitive component, represented by students' beliefs about the importance of the task here, the NAFS national tests, affects the affective component, which involves their emotions and feelings toward the test. This, in turn, impacts their behavior regarding the test, as well as their engagement and participation in it. This is evident from the low average scores of students' attitudes in the cognitive dimension (M = 2.503) in the quantitative results of the study, which reflected in the affective aspect of students' attitudes toward the NAFS tests, with quantitative results at a medium level (M = 2.67). Students' test performance was associated with feelings of indifference, lack of interest, or low motivation, which affected the behavioral aspect of their attitudes, manifested in their performance on these tests and their readiness for them, which did not reach a level consistent with the importance of the test and its purpose. Behaviorally, the average score was also at a medium level (M = 2.67), with particularly low scores regarding long-term behavioral change, which recorded a low average (M = 2.17). Students expressed this during interviews, highlighting their low engagement and lack of interest in preparing for and participating in the test, often missing training sessions, as they justified this by stating that they saw it as irrelevant to their academic success.

This theoretical interpretation aligns with previous studies that indicated a relationship between student attitudes, academic performance, motivation, and engagement in academic tasks, such as the work of Baker (2018); Johnson et al. (2022), Rahman (2019) and Mazana et al. (2019). Furthermore, it explains the findings of Hudovernik and Volk (2025), which revealed that teachers in Slovenia were reluctant to have their schools participate in national tests and withdrew from them, viewing them as unimportant and unhelpful, thereby increasing student anxiety and representing an additional burden. This feeling of psychological pressure reinforces negative attitudes toward national assessments.

These findings raise doubts about the accuracy of the NAFS national test results and the educational decisions made based on those results. It may also explain that the low performance levels of students in these tests, as indicated by the results published by the Evaluation and Training Authority, may not actually stem from a decline in students' academic achievement but rather from low motivation resulting from their negative attitudes toward the test. This has been reflected in their lack of preparedness, participation, and academic performance. Furthermore, it may indicate a low awareness among students of the importance of these national assessments and their role in improving learning outcomes, which has indeed been pointed out by the findings of studies conducted by Alshehry (2025) and Al Muhaidly et al. (2024). This highlights the need for policymakers, educational leaders, and teachers to raise students' awareness and enhance the perceived value of national tests and their significance.

The students' failure to recognize the personal benefit of the test is linked to the general feedback nature of the test results, which was reflected in the low scores in quantitative data related to feedback, as well as in the interviews, where students criticized the general nature of the test results. They expressed a preference for individual performance reports that provide actionable insights. This aligns with the findings of Brown and Taylor (2023) who found that personalized feedback enhances positive self-perceptions in academics. Williams and Davis (2021) also noted that effective feedback promotes self-regulation strategies, which increase student engagement during academic tasks and help achieve better academic outcomes.

One of the recurring themes in the interviews was the lack of motivation related to the NAFS test. Many students expressed disengagement due to the separation of the test from grades and tangible rewards, noting that the absence

of material or symbolic incentives reduced their desire to perform well. This aligns with theories that emphasize the importance of recognition and appreciation as fundamental elements in enhancing engagement, especially in non-high-stakes assessments. Magati, Waititu, and Ondigi (2024) and Tak, Zulnaidi, and Eu (2025) highlighted the relationship between student motivation and academic engagement, reinforcing the idea that both material and moral incentives can encourage greater effort. Alshehry (2025) also emphasized the role of incentives in enhancing motivation among both students and teachers.

The results of the study, both quantitative and qualitative, indicated issues related to the difficulty, lack of clarity, and complexity of the questions, particularly in mathematics and science subjects. Students pointed out during the interviews that the questions did not align well with the school curricula. Many felt that the test relied heavily on memorization without adequately assessing true understanding and higher-order thinking skills. This is consistent with what teachers noted in the study by Al Muhaidly et al. (2024) and school leaders in Alshehry (2025). The increased difficulty and complexity of the questions led to heightened anxiety among students during the test, negatively impacting their performance and increasing negative attitudes toward the assessment. (AlAli & Al-Barakat, 2024; Bakker & Telli, 2023; Zanabazar, Deleg, Ravdan, & Tsogt-Erdene, 2023). In light of this, students suggested improvements such as clearer question formulations and a broader representation of curricula. These recommendations underscore the need for designing a more credible and comprehensive assessment that accurately reflects students' academic experiences.

The quantitative and qualitative data results revealed organizational challenges, particularly regarding the inadequacy of time allocated for answering test questions, as well as the timing of the test, which falls at the end of the school year, during or immediately after the mid-term exams. The interviews highlighted technical issues such as poor internet connectivity, inconsistent procedures, and unclear instructions, all of which negatively impacted students' confidence and their perception of the fairness of the testing process. These findings align with Lee, Kim, and Park (2021), who noted that the clarity of test organization significantly affects students' attitudes toward national assessments. Educational leaders in Alshehry (2025) echoed these concerns, recommending the rescheduling of the test to avoid academic overload, reduce excessive pressure, and provide adequate preparation time.

Similarly, students called for standardized testing procedures, improvements in infrastructure (such as providing reliable internet), and clear instructions regarding the use of calculators. They emphasized that clarity of procedures and fairness are essential for creating a positive testing environment that effectively enhances student engagement.

A notable theme emerged regarding students' anxiety about the purpose of the NAFS national tests, as many viewed it primarily as a tool for ranking schools rather than supporting individual academic growth, which weakened their motivation. Consequently, students suggested redefining the purpose of the test to serve as a diagnostic tool aimed at identifying each student's strengths and areas for improvement. They also advocated for using test results to guide teaching and support learning development, rather than treating them as a comparative measure. In other words, they proposed transforming the test from a tool for assessing learning to a tool for assessing learning, relying on regular feedback provided to students and teachers to improve educational performance. This feedback helps to modify teaching methods and direct learning activities based on the individual needs of students (Hansen, 2024; Mangal & Mangal, 2019).

Finally, the quantitative results showed no statistically significant differences between males and females in the cognitive, affective, and behavioral dimensions of their attitudes, indicating similar experiences among both genders. Qualitative data supported this trend, as both males and females expressed concerns regarding unclear questions, limited time, and the test's limited relevance to their academic performance. Despite findings from several previous studies suggesting that males and females may react differently to national or international standardized tests, reflecting differences in emotions, perceptions, and motivations. (Beyer, 2008; Oberleiter, Fries, Schock, Steininger, & Pietschnig, 2023; Owan, Bassey, & Ekpe, 2020; Pomerantz, Altermatt, & Saxon, 2002; Ramos-Galarza, Cifuentes, & Salazar, 2018) the similarity in both genders' beliefs about the lack of personal benefit from the test and the weak

practical value led to no differences between them in terms of emotions related to test performance and academic behavioral engagement during the test.

In contrast, significant differences were found between students from public and private schools regarding their attitudes toward the effectiveness of the NAFS test. Private school students exhibited more positive attitudes toward the test in cognitive, affective, and behavioral aspects. That can be largely due to better preparation practices. In contrast, public school students reported a lack of support and unclear expectations, contributing to increased anxiety and a decreased perception of the test's importance. In addition, numerous studies indicate that differences in the educational environment, academic support, and infrastructure can directly impact students' perceptions of national assessments (Lin, 2025). Private schools, often equipped with modern resources, smaller class sizes, and tailored training programs, may create a more supportive environment that enhances student confidence and leads to more positive attitudes toward assessments.

However, the current study's findings may differ from those of Maison, Smith, and Lee (2021), who used a mixed-methods approach and concluded that the public school environment might stimulate higher student engagement in academic assessments.

8. CONCLUSIONS

The current study examined students' attitudes toward the NAFS test and explored its various aspects through a mixed-methods approach that combined both quantitative and qualitative research conducted among male and female students in public and private schools. The results revealed that students had negative attitudes toward the test, with a majority agreeing on the difficulty of the questions and their misalignment with the school curricula. Additionally, there were insufficient organizational procedures and preparation for such assessments, along with a lack of clarity regarding the test's objectives and purpose, as well as the absence of personalized feedback for each student. This negatively affected students' perceptions of the test's importance and weakened their active participation in it. Consequently, the results of the NAFS test may not accurately reflect the actual academic achievement levels of students but rather mirror their negative attitudes toward these assessments. The findings confirmed that there were no gender differences in students' attitudes toward the NAFS test, while significant disparities existed in attitudes based on the type of school.

The findings of this study suggest several practical implications for enhancing the effectiveness of the NAFS test and increasing its impact on supporting learning. These implications can be used to guide policy, curriculum design, instructional practices, and student support strategies. At the forefront of these recommendations is the importance of raising community awareness of the objectives of the national assessment through awareness campaigns directed at students and parents that highlight the diagnostic dimension of the test and present it as a diagnostic tool for self-evaluation and academic growth, rather than as a tool for external judgment or comparison and competition between schools. It is recommended to make the test a tool for evaluating learning for learning, instead of evaluating learning. It is also advised to avoid using punitive methods, such as deducting grades in the event of non-participation, and to promote voluntary and self-motivated participation. Emphasizing the importance of providing detailed individual reports that offer clear self-feedback to both students and teachers, helping students identify their strengths and weaknesses and enabling teachers to adjust their teaching strategies. Achieving precise alignment between the NAFS test and the actual curriculum is crucial, and questions from content or years of study that have not been adequately reviewed should be avoided. Additionally, it is recommended to improve question formulation to be clearer and free of ambiguity, while diversifying questions to include higher-order thinking skills such as analysis, critical thinking, and problem solving. The study results also emphasize the need to integrate test readiness into regular classroom activities throughout the year, rather than relying on late reviews. It is suggested to reconsider the timing of the test so that it does not coincide with semester exam periods, to reduce psychological pressure and enable students to perform at their best. Moreover, the study highlights the importance of providing psychological and guidance support

to students, along with material and moral incentives to enhance students' motivation and foster positive attitudes towards national tests.

8.1. Limitations and Future Research

This study aims to understand students' perceptions and opinions regarding the NAFS test while providing suggestions from the students themselves to enhance the test. However, there are some limitations to consider. Firstly, the research was conducted with a limited sample of students from selected schools, which may not adequately reflect the diverse experiences of students across different regions and school types. Furthermore, the reliance on self-reported quantitative and qualitative data introduces potential biases, which could compromise the validity of the reported attitudes and experiences. Additionally, contextual variability across schools adds complexity, making it difficult to directly attribute findings to the NAFS test. Temporal constraints during data collection restricted the depth of qualitative responses, and the examination of a single test cycle may not capture longitudinal changes or cohort differences. The study also overlooked broader sociocultural and economic factors that could influence student attitudes, indicating a critical area for future research.

To address these limitations, future studies should aim to include a more diverse sample of students from various regions, school types, and socioeconomic backgrounds to enhance the generalizability of findings. Conduct a study aimed at exploring the factors influencing students' attitudes toward the NAFS national assessments, including teaching methods, academic support from parents, and students' attitudes toward specific school subjects, particularly science and mathematics. These subjects were frequently identified by students as having especially difficult questions, which may be linked to their existing attitudes toward those subjects. Longitudinal research assessing changes in student attitudes and performance over time, alongside evaluations of specific interventions, will deepen our understanding of the NAFS test's impact. Empirical studies are essential to evaluate the impact of recommended interventions, such as improved question design, curriculum alignment, implementing counseling programs, raising awareness of national tests' goals as learning improvement tools, psychological support, incentive programs, and conducting enhanced feedback that focuses on strengths and weaknesses for each student, and their impact on students' motivation and educational outcomes. Furthermore, exploring alternative assessment models that emphasize formative feedback and personalized learning may lead to more effective and engaging national evaluation approaches.

Funding: This study received no specific financial support.
Institutional Review Board Statement: The Ethical Committee of Bisha University, Saudi Arabia has granted approval for this study on 6 January 2025 (Ref. No. 4600674361).
Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.
Competing Interests: The authors declare that they have no competing interests.
Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

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