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UNIVERSITY FACULTY MEMBERS' ATTITUDES TO STUDENT ASSESSMENT METHODS IN SAUDI ARABIA

Mansour Alsuwailimi[i]
Ministry of Education,
Riyadh, Saudi Arabia

Abstract:
Assessment plays a crucial role in the educational process, being linked to educational decisions made about learners based on evidence of the extent to which educational objectives have been met. Thus, it is a notable topic in academic literature addressing higher education. Recently, assessment has acquired a prominent position in Saudi Arabia due to increasing pressure to ensure quality in higher education. It has been incorporated into academic accreditation standards focused on the quality of student assessment, which emphasise the importance of faculty members using diverse assessment methods and a variety of instruments to assess their students. Faculty members play an important role in the process of assessing students in universities and thus this study sought to explore their attitudes towards student assessment methods in Saudi Arabia. The study adopted a quantitative research approach, employing an online survey administered via Google Forms to conduct data collection. A convenience sample comprising 146 Saudi faculty members took part. Three hypotheses were formulated and tested at the 0.05 level of significance to guide the study and answer the research question. The findings indicated that gender, academic rank, and assessment period were significant variables affecting faculty members' attitudes toward assessment methods. The study concluded that the participants held positive attitudes toward the use of various methods to assess their students.

Keywords: assessment, attitude, assessment method

1. Introduction

Assessment plays a crucial role in the educational process as it is necessary to make informed educational decisions about learners' attainment, offering valuable insights into the extent to which educational objectives have been met. The process of assessment is regarded as the fundamental basis for constructing evidence-based conclusions and decisions (Medland, 2016). Due to its strong correlation with learning, the assessment of students has become a prominent topic in the academic literature addressing higher

[i] Correspondence: email drmansouralsuwailimi@gmail.com

education (Kuh et al., 2014; Tractenberg, 2020; Tremblay et al., 2012). As Doody and Condon (2012) point out, "*the quality of learning outcomes depends on the quality of assessment*" (p. 232). Extensive research highlights the critical role of assessment in all educational contexts (Gerritsen-van Leeuwenkamp et al., 2019; Taras, 2008; Tosuncuoglu, 2018). Indeed, according to Boud (2012b), "*assessment methods and requirements probably have a greater influence on how and what students learn than any other single factor*" (p.35).

McMillan (1997) defines assessment as a structured process that includes "*the collection, interpretation, and use of information to help teachers make better decisions*" (p. 8). Assessment is "a generic term for a set of processes that measure the outcome of students' learning" (Garba, 2019, p. 14), within which assessment methods are "*the strategies used by teachers to collect information on students' achievement*" (Onyefulu, 2018, p. 255). The literature suggests that the assessment process in higher education has a significant impact on students' learning (Black & Wiliam, 1998; Dochy & McDowell 1997; Gibbs, 1999; Webber, 2012) and emphasises the close relationship between learning and assessment (Calkins et al., 2009; Scouller, 1998). Assessment approaches and procedures affect the quality of learning (Atkins, 2012; Fernandes et al., 2012), as well as how students view the learning process (Brown & Knight, 2012; Drew, 2001). Reflecting on the considerable impact of assessment practices on students' learning and performance, Rowntree (2015) argues that "*if we wish to discover the truth about an educational system, we must first look to its assessment procedures*" (p. 1).

The impact of assessment on learning can be positive or negative (Biggs & Tang, 2003; Boud & Falchikov, 2007b; Brown et al., 2013; Van der Watering et al., 2008). In general, students try to meet the demands of the method of assessment to demonstrate their educational performance. For example, if the method of assessment requires the memorisation of information rather than understanding, which in many cases does not reflect actual learning, it can lead to a superficial approach to learning (Marton & Booth, 2013). In contrast, if the assessment method requires critical thinking, understanding, and the application of problem-solving strategies, it is likely to lead to a more in-depth approach to learning aimed at acquiring knowledge and learning skills (Marton & Booth, 2013).

Traditionally, written examinations have been the predominant method of assessment used by faculty members in higher education to assess student learning as they are easy to prepare and administer and are cost-effective (Carless, 2015; Duncan & Buskirk-Cohen, 2011; Gilles et al., 2011; Halinen et al., 2014; Pereira et al., 2016; Postareff et al., 2012). However, these methods have received significant criticism for their failure to address the process of learning as they primarily focus on memorisation and the recall of material rather than the development of true comprehension. This promotes superficial rather than deeper learning and reinforces a hierarchical grading system (Perrenoud, 1999; Struyven et al., 2005) and the assessment of low levels of cognitive processing (Scouller, 1998).

Berry (2010) contends that examinations evoke negative emotional effects among pupils, including fear of failing and heightened levels of anxiety. In addition, conventional exams tend to prioritize the completion of tasks within a limited time frame

(Race, 1999). This approach may only capture a momentary picture of students' performance on that specific day, which could be influenced by several external factors, such as their psychological and physical well-being (Brown, 2005). This could potentially provide a distorted perception of students' true level of learning, which in turn raises concerns about the reliability of the assessment and the accuracy of decisions based on it. Segers et al. (2001) highlight the shortcomings of tests, noting that there is no *"emphasis on the assessment of higher-order cognitive skills such as problem-solving, critical thinking and reasoning*" (p. 570). This is consistent with Boud's (1990c) argument that "*in many cases, assessment tasks are set which encourage a narrow, instrumental approach to learning that emphasises the reproduction of what is presented, at the expense of critical thinking, deep understanding, and independent activity*" (p. 104).

As a result of such criticisms, the need emerged for new, unconventional methods to assess students' performance that would achieve the desired educational goals. To reduce excessive reliance on tests in the assessment process, various new tools have been developed. These include assessing students through productive tasks, such as projects, individual and group research assignments, objective tests, essay assignments, and report writing, all of which aim to generate useful and appropriate information and foster in-depth learning (Brown et al., 2013). Educational experts stress the importance of gathering evidence from a variety of sources before reaching decisions about academic achievement. Designing assessment practices consistent with a constructive and comprehensive approach to education has become an urgent requirement to keep pace with the rapid developments in higher education globally (Reimann & Sadler, 2017) and to ensure enhanced future learning after graduation (Boud & Falchikov, 2007b).

Researchers in higher education have noted that non-traditional assessment practices enhance students' active learning (Boud 2012d; Carless, 2012; Webber, 2012), preparing them for professional life by improving skills development and problem-solving in real-life circumstances (Dochy et al., 1999), which results in breadth and depth of learning (Struyven et al., 2005). This is vital as higher education emphasizes equipping students with the necessary technical and emotional skills to thrive in their prospective professional careers (Dochy et al., 1999). The development of practical skills is aided by non-traditional assessment methodologies (Segers & Dochy, 2001; Webber, 2012). This pertains to the significant function higher education establishments fulfil in building communities grounded in knowledge and equipping graduates with the necessary skills and knowledge to meet the demands of modern life and prospective employment (Qizi, 2020).

Over the past few decades, higher education institutions worldwide have made significant efforts to develop and modernise. This is primarily in response to scientific and technological advancements, economic changes, the expansion of education, new social demands on the institutions, and a growing desire for academic education. As a result, there have been serious attempts to assess and enhance performance through the academic accreditation system. This system serves as a critical reminder to prioritise quality systems, performance improvement, and quality assurance as means for institutional development and improvement (Nicholson, 2011). As Serrano-Velarde

(2008) notes, "*[q]uality assurance can be considered as one of the most prominent reform issues in higher education worldwide*" (p. 2). Sywelem and Witte (2009) further point out that "the importance of academic accreditation lies in it being an important means of proving the status and reputation of the educational institution, which motivates students wishing to join it" (p. 99).

This makes it critical for Saudi universities to improve their performance to achieve educational outcomes comparable to those of international higher education institutions by establishing standards and indicators that can be used to assess development and improve output. To this end, the National Centre for Academic Accreditation and Assessment (NCAAA) was established in 2004 as an administratively and financially independent body responsible for quality assurance and the academic accreditation of Saudi Arabia's higher education institutions (Education and Training Evaluation Commission, n.d.). Its objectives are to enhance and maintain the quality of higher education, determine whether institutional outcomes are globally competitive in relation to skills development, improve institutions' professional performance, and align them with global standards and professional requirements.

Quality standards and academic accreditation serve as the primary foundations for establishing an environment conducive to research and academic excellence, considered goals that Saudi universities should seek to achieve, as well as ensuring that the education provided by higher education institutions meets acceptable quality standards. Universities need to provide evidence of their quality assurance processes by meeting academic accreditation standards established by accrediting bodies to promote continuous improvement in learning and educational quality (Dill, 2007; Kuh & Ewell, 2010; Kumar et al., 2020). In this regard, the Quality of Teaching and Student Assessment Standard, which is part of academic accreditation in Saudi Arabia, highlights the importance of faculty members using diverse and effective assessment methods and a variety of instruments (Education and Training Evaluation Commission, n.d.). The application of suitable assessment methods is an essential element of assessment practice quality.

Faculty members play an important part in the process of assessing students in universities as one of the academic accreditation requirements. Despite extensive studies on the quality of higher education and academic accreditation in Saudi Arabia, little is known about faculty members' attitudes toward the methods used to assess their students. This potentially limits understanding of the reality of faculty assessment practices in Saudi universities. This study is significant as it investigates faculty members' opinions of student assessment methods in Saudi universities. Such research has the potential to be extremely valuable because it can aid in the development and improvement of assessment procedures. Furthermore, this study is consistent with the Saudi government's Vision 2030 strategy, a key part of which focuses on developing and reforming Saudi Arabia's education system. It emphasises the importance of assuring the quality of higher education institutions' outputs to raise standards to have at least five Saudi universities listed among the world's top 100 universities by 2030 (Vision 2030, 2016).

Therefore, the purpose of this study is to investigate faculty members' attitudes regarding student assessment methods at Saudi universities, addressing the primary research question "What are Saudi university faculty members' attitudes towards student assessment methods?"

The study developed and tested the following research hypotheses at the 0.05 level of significance:

1) There is a significant difference in the mean ratings of faculty members' attitudes towards student assessment methods in Saudi universities according to gender.
2) There is a significant difference in the mean ratings of faculty members' attitudes towards student assessment methods in Saudi universities according to academic position.
3) There is a significant difference in the mean ratings of faculty members' attitudes towards student assessment methods in Saudi universities according to assessment periods.

2. Material and Methods

To explore the faculty members' attitudes toward student assessment methods, the study adopted a quantitative research approach. Data were collected from a convenience sample of 164 Saudi faculty members through an online survey developed and administered in Google Forms. The questionnaire comprised 15 items, divided into several sections. The first section concerned demographic information, including the faculty members' gender, academic position and university assessment periods, comprising the independent variables (IVs) in the study. The second section was designed to elicit information on attitudes toward methods of assessing students. Items were scored on a five-point Likert-type scale (strongly agree, agree, neutral, disagree, strongly disagree). The survey was administered in the third quarter of 2022.

The survey instrument was reviewed by four experts in measurement and evaluation, confirming its face validity, and exploratory factor analysis was conducted to verify construct validity. Cronbach's alpha was used to determine the internal consistency of the questionnaire and the value of 0.84 indicated high reliability. Hence, the questionnaire was confirmed to be a valid and reliable measure for use in the study. Table 1 presents the demographic information for the sample of respondents comprising the IVs.

Table 1: Demographic characteristics of the sample (IVs)

Variable	Frequency	Percentage
Gender		
Male	85	58.2
Female	61	41.8
Total	146	100
Academic Position		
Lecturer	60	41.1
Assistant Professor	46	31.5
Associate Professor	22	15.1
Professor	18	12.3
Total	146	100
Assessment Period		
Weekly	75	51.4
Every two weeks	33	22.6
Monthly	26	17.8
Every two months	12	8.2
Total	146	100

3. Results and Discussion

This research aimed to explore faculty members' attitudes towards student assessment methods in Saudi Arabia. The data were analysed using multiple statistical methods in SPSS. The influence of gender on faculty members' attitudes was computed using *t*-tests and one-way analysis of variance (ANOVA) was used to determine whether there were statistically significant differences between the means of groups according to academic position and assessment period. Tukey's post-hoc test was used for comparisons. Three hypotheses were tested at the 0.05 level of significance, each of which is addressed in turn.

H_1: There is a significant difference in the mean ratings of faculty members' attitudes towards student assessment methods in Saudi universities according to gender.

Means, standard deviations, and *t*-tests were calculated to check for significant differences based on gender, as shown in Table 2.

Table 2: Means, standard deviations, and *t*-test for the impact of gender on Saudi faculty members' attitudes towards student assessment methods

Gender	*N*	*M*	*SD*	*t*	*df*	*p*-value	Effect Size Cohen's *d*
Male	85	46.3765	5.6145	-2.957	144	.064	5.915
Female	61	49.3115	6.3127				

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The results in Table 2 indicate that there are statistically significant differences in Saudi faculty members' attitudes towards student assessment methods due to gender, with female faculty holding more positive attitudes.

H_2: There is a significant difference in the mean ratings of faculty members' attitudes towards student assessment methods in Saudi universities according to an academic position.

To test the validity of the hypothesis, a one-way ANOVA was conducted, examining if there was any statistically significant difference between the mean values of Saudi faculty members' attitudes towards student assessment methods attributable to their academic position, as shown in Table 3.

Table 3: One-way ANOVA testing the impact of academic position on Saudi faculty members' attitudes towards student assessment methods

Source	Sum of Squares	*df*	Mean Square	*F*	Sig.
Between groups	565.556	3	188.519	5.601	0.001
Within groups	4779.403	142	33.658		
Total	5344.959	145			

The results in Table 3 indicate that there are statistically significant differences between the mean scores of Saudi faculty members' attitudes toward student assessment methods based on their academic position. To determine the source of the differences based on the faculty members' academic position, Tukey's post-hoc test was used for comparison (see Table 4).

Table 4: Results of Tukey's test for multiple comparisons determining the source of differences in attitudes towards student assessment methods based on academic position

Academic position	Academic position	Mean Difference	Std. Error	Sig.	95% CI Lower bound	95% CI Upper bound
Lecturer	Assistant Professor	3.74420*	1.13695	.007	.7885	6.6999
	Associate Professor	.66515	1.44598	.968	-3.0940	4.4243
	Professor	4.87222*	1.55911	.011	.8190	8.9255
Assistant Professor	Lecturer	-3.74420*	1.13695	.007	-6.6999	-.7885
	Associate Professor	-3.07905	1.50386	.176	-6.9887	.8306
	Professor	1.12802	1.61294	.897	-3.0652	5.3212
Associate Professor	Lecturer	-.66515	1.44598	.968	-4.4243	3.0940
	Assistant Professor	3.07905	1.50386	.176	-.8306	6.9887
	Professor	4.20707	1.84385	.107	-.5864	9.0005
Professor	Lecturer	-4.87222*	1.55911	.011	-8.9255	-.8190
	Assistant Professor	-1.12802	1.61294	.897	-5.3212	3.0652
	Associate Professor	-4.20707	1.84385	.107	-9.0005	.5864

Notes: * denotes significance at the 0.5 level; CI = confidence interval.

The results show the following:

1) There are statistically significant differences between the attitudes of those holding the position of lecturer and assistant professor, with more positive attitudes towards student assessment methods on the part of lecturers.

2) There are statistically significant differences between the attitudes of those holding the position of lecturer and professor, with more positive attitudes towards student assessment methods on the part of lecturers.

H_3: There is a significant difference in the mean ratings of faculty members' attitudes towards student assessment methods in Saudi universities according to the assessment periods.

To test the validity of the hypothesis, a one-way ANOVA was performed, examining if there was any statistically significant difference between the mean values of Saudi faculty members' attitudes towards student assessment methods attributable to different assessment periods (see Table 5).

Table 5: One-way ANOVA for the impact of the assessment period on Saudi faculty members' attitudes towards student assessment methods

Source	Sum of Squares	*df*	Mean Square	*F*	Sig.
Between groups	590.093	3	196.698	5.874	0.001
Within groups	4754.866	142	33.485		
Total	5344.959	145			

The results in Table 5 indicate that there are statistically significant differences between the mean scores of Saudi faculty members' attitudes toward student assessment methods according to different assessment periods. To determine the source of the differences, Tukey's post-hoc test was used for comparison (see Table 6).

Table 6: Results of Tukey's test for multiple comparisons determining the source of differences in towards student assessment methods based on assessment periods

Assessment period	Assessment periods	Mean Difference	Std. Error	Sig.	95% CI Lower bound	95% CI Upper bound
Weekly	Every two weeks	3.47273*	1.20879	.024	.3302	6.6152
	Monthly	4.41795*	1.31695	.006	.9943	7.8416
	Every two months	4.36667	1.79913	.077	-.3106	9.0439
Every two weeks	Weekly	-3.47273*	1.20879	.024	-6.6152	-.3302
	Monthly	.94522	1.51743	.925	-2.9997	4.8901
	Every two months	.89394	1.95067	.968	-4.1772	5.9651
Monthly	Weekly	-4.41795*	1.31695	.006	-7.8416	-.9943
	Every two weeks	-.94522	1.51743	.925	-4.8901	2.9997
	Every two months	-.05128	2.01948	1.000	-5.3014	5.1988
Every two months	Weekly	-4.36667	1.79913	.077	-9.0439	.3106
	Every two weeks	-.89394	1.95067	.968	-5.9651	4.1772
	Monthly	.05128	2.01948	1.000	-5.1988	5.3014

Notes: * denotes significance at the 0.5 level; CI = confidence interval.

The results in Table 6 show:

1) There are statistically significant differences in Saudi faculty members' attitudes towards student assessment methods between weekly assessment and assessment every two weeks favour of the weekly assessment.
2) There are statistically significant differences in Saudi faculty members' attitudes towards student assessment methods between weekly and monthly assessments in favour of the weekly assessment.

Overall, the findings show support for H_1, with female faculty members holding more positive attitudes toward student assessment methods in Saudi Arabia. Moreover, in relation to H_2, which proposed that faculty members' attitudes towards student assessment methods in Saudi Arabia differ significantly by academic position (lecturer, assistant professor, associate professor, professor), the findings showed statistically significant differences between lecturers and assistant professors in favour of lecturers, as well as between lecturer and professors in favour of lecturers, i.e. lecturers hold more positive attitudes. Finally, H_3 concerned differences in Saudi faculty members' attitudes towards student assessment methods attributable to the assessment period (weekly, every two weeks, monthly, every two months). The results show significant differences between weekly assessments and assessments every two weeks in favour of weekly assessments, as well as differences between weekly and monthly assessments in favour of weekly assessments. In sum, the study shows that the faculty members' attitudes towards various assessment methods in Saudi universities were generally positive, but these were influenced by gender, academic position, and assessment period.

4. Recommendations

Based on the study findings, the following recommendations are made:

1) Further studies are needed to identify obstacles to the effective use of different methods for assessing students and provide insights for faculty members into how such issues might be addressed.
2) Further qualitative research focusing on the perspectives of university students would provide a more comprehensive picture of their experiences of various assessment methods. This could be a valuable lens for understanding how the processes of assessment function and act as a call for the Saudi Ministry of Education to listen to students' voices in any future development of assessment procedures.
3) Training opportunities need to be at the forefront of developing knowledge of the use of different assessment methods as part of professional development for faculty members, helping them assess their students more effectively by employing diverse methods. In this regard, the authorities concerned should organise workshops and seminars for teachers to engage actively with a range of assessment types.

4) Policymakers, teachers, and other educational stakeholders should be encouraged to attend international conferences to benefit from global expertise regarding best assessment practices and promote assessment for learning.
5) Close follow-up of the quality of student assessment is needed by the deanship of universities, with reporting to stakeholders and concerned parties put in place to assist decision-makers in understanding the reality of assessment processes in Saudi universities from the perspective of faculty members.

5. Conclusion

This research aimed to explore Saudi faculty members' attitudes toward student assessment methods. The findings indicate that gender, academic position, and assessment period are significant variables related to faculty members' attitudes. However, the study also shows generally positive attitudes among the faculty members. This is consistent with the Quality of Teaching and Student Assessment Standard, which highlights the importance of faculty using diverse and effective assessment methods and employing a variety of instruments to improve the quality of assessment practice as a part of the academic accreditation of universities in Saudi Arabia.

Conflict of Interest Statement
The author declares no conflicts of interest.

About the Author
Mansour is a Doctor of Philosophy at the Ministry of Education, Saudi Arabia. He graduated in measurement and evaluation from the University of Glasgow in the UK. His research interests lie in measurement and evaluation.

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