

Original Article

Gender Differences in Medical Students' Perception of Lecturing Skills

Ahmed Al Kuwaiti¹, Arun Vijay Subbarayalu², Ola Ibrahim Ramzi³

1. Associate Professor & General Supervisor, Department of Dental Education, College of Dentistry & Deanship of Quality and Academic Accreditation, Imam Abdulrahman Bin Faisal University

2. Assistant Professor, Quality Measurement and Evaluation Department, Deanship of Quality and Academic Accreditation. Imam Abdulrahman Bin Faisal University, Dammam 31441. Saudi Arabia

3. Assistant Professor, College of Public Health & Academic Accreditation Department, Deanship of Quality and Academic Accreditation, Imam Abdulrahman Bin Faisal University, Dammam 31441, Saudi Arabia

Received on 20.10.2019, accepted for publication on 25.12.2019 , (Doi : dx.doi.org/10.5455/mjhs.2020.02.007)

Corresponding author : Ahmed Al Kuwaiti. Associate Professor & General Supervisor, Department of Dental Education, College of Dentistry & Deanship of Quality and Academic Accreditation, Imam Abdulrahman Bin Faisal University. P.O. box 40065. Al-Khobar 31952, Saudi Arabia. Tel: +966 13 3332500.

Fax: +966 13 3330380. Mobile: +966 505843183. Email: akuwaiti@iau.edu.sa

Abstract

Background:

Students' evaluations of instructors' lecturing skills have proved to be an essential component of quality management in higher education institutions (HEIs). Hence, this study intended to reveal the gender differences in medical students' perception of lecturing skills.

Methods:

The exploratory study design was adopted to explore the gender differences in medical students' perception of lecturing skills at Imam Abdulrahman Bin Faisal University (IAU) in Saudi Arabia. This study covers the entire population of students (n=570) studying an undergraduate medical program at IAU during the academic year 2015-16. "Students Survey of Lecturing Skills (SSLS)" questionnaire was administered to these students using "UDQuest". The data analysis was carried out using SPSS version-20. The SEM analysis was done using Analysis of Moment Structures (AMOS) software version 5.0.

Results:

The SEM analysis reveals that the variables used in SSLS are positively related to the students' overall perception of lecturing skills ($p<0.05$). The perception of female students towards lecturing skills is significantly better than the male students.

Conclusion:

Variables used in the SSLS questionnaire are adequately fit to assess the students' perception of lecturing skills. Policy-makers can use these variables to evaluate and monitor the quality of teaching at HEIs. There is a significant difference

المخلص

الخلفية :

لقد أثبتت تقييمات الطلاب لمهارات الأداء التدريسي للمحاضرين أهمية هذه التقييمات التي تعد عنصراً جوهرياً في إدارة الجودة في مؤسسات التعليم العالي. تحلل هذه الدراسة كيفية تطبيق النمذجة لتقييم مدى كفاية المتغيرات المدرجة في استبانة استطلاع آراء طلاب الطب حول مهارات الأداء التدريسي ودراسة الفروق بين الجنسين في معرفة مهارات الأداء التدريسي.

طريقة البحث:

تم تبني تصميم دراسة استكشافية ومن ثم تحليل البيانات التي تم جمعها من طلاب الطبي بجامعة الامام عبد الرحمن بن فيصل بالمملكة العربية السعودية. تم جمع البيانات من جميع الطلاب في مرحلة البكالوريوس (570) خلال العام 2015-2016. تم جمع البيانات عن طريق الاستبيان. تم التحليل عن طريق SPSS.

النتائج :

يكشف التحليل أن المتغيرات المستخدمة في استبانة استطلاع آراء الطلاب حول مهارات الأداء التدريسي مرتبطة بشكل إيجابي بفهم الطلاب الإجمالي لمهارات الأداء التدريسي، حيث يلاحظ أن فهم الطالبات (الإناث) لمهارات الأداء التدريسي أفضل بكثير من فهم الطلاب (الذكور).

الخلاصة :

المتغيرات المستخدمة في استبانة استطلاع آراء الطلاب حول

observed between the gender concerning the perception of lecturing skills. Although this study was conducted in a single Saudi university, given the standard regulations governing higher educational programs at institutions in the country, the findings have broader implications.

Key words:

Lecturing skills, Saudi Arabia, Structural equation modeling, Students perception

مهارات الأداء التدريسي ملائمة تماماً لتقييم فهم الطلاب لمهارات الأداء التدريسي، ويمكن لواقعي السياسات استخدام هذه المتغيرات لتقييم ومراقبة جودة التدريس في مؤسسات التعليم العالي. ومن خلال هذه الدراسة يلاحظ أن هناك تبيناً واضحاً بين الجنسين (الذكور والإناث) فيما يتعلق بفهم مهارات الأداء التدريسي. وعلى الرغم من أن هذه الدراسة أجريت في جامعة سعودية واحدة - نظراً للوائح العامة التي تحكم برامج التعليم العالي بمؤسسات الدولة - إلا أن نتائجها كبيرة الأثر.

الكلمات المفتاحية :

مهارات الأداء التدريسي، المملكة العربية السعودية، نمذجة المعادلات البنائية، فهم الطلاب.

Introduction

In the past few years, the quality of teaching and learning in higher education gained more attention in various countries around the globe [1,2]. The assessment of teaching quality is an extremely complex process, multidimensional, and often subjective. To carry out this task, several higher education institutions (HEIs) are taking continuous efforts to enhance the quality of teaching and learning processes through quality management systems.

One crucial component of such efforts is getting the students' feedback on teaching. The survey on 'Student Evaluation of Teaching (SET)' has been broadly studied by various researchers [3-8]. SET delivers the information to three main groups: (a) students utilize the information while selecting modules and courses; (b) teachers can make use of such information to enhance their quality of teaching; (c) managers can exploit the information to make decisions on teachers' job advancement and tenure issues and also for accountability. Therefore, HEIs have felt the need for an instrument that allows for the collection of feedback and will enable them to address the needs of all these audiences [9].

Students' feedback is an essential contributor to reflective teaching, letting lecturers improve their practice and develop their professional

skills. In order to obtain feedback, many methods can be used. Previous studies have suggested that satisfaction surveys are commonly used [10,11], and further, that the student evaluations are considered as an important tool to assess the teaching effectiveness [12-16].

For HEIs, the results of student evaluations are beneficial to administrators in helping lecturers to find exact areas for enhancing their performance [14,17] or arranging various professional development activities, which would improve their lecturing skills. Sometimes, the results of such evaluations are used to develop the key performance indices for lecturers and act as part of the staff assessment process for both job advancement and contract decisions [8,18-21]. Based on the results obtained, some policymakers may also make decisions related to pay, re-hiring, and termination of teachers. Students' evaluations of the teaching effectiveness of their lecturers, thus aid the entire institution [22].

Previous studies have evaluated students' perception of effective teaching using questionnaires or surveys [23-28]. Along similar lines, a questionnaire named Students' Survey on Lecturing Skills (SSLs) was developed by the Deanship of Quality and Academic Accreditation (DQAA) at Imam Abdulrahman Bin Faisal University (IAU) in Saudi Arabia, to capture students' perception of effective teaching.

Given the implications that poor medical education standards can have an impact on patients, the authors chose to elicit data on the perception of lecturing quality from medical students. Medical programs differ from other study programs since they offer a generally stable set of courses and use unique teaching formats such as problem-based learning and bedside teaching apart from traditional, generic teaching (lecture) formats^[29]. Feedback from medical students in the past has been considered a useful tool in the evaluation of teachers' effectiveness and has been seen to enhance the quality of teaching and faculty development^[30].

Student gender is one of the variables that may have a biasing effect on SET ratings^[31,32]. Therefore, gender differences in students' perception of lecturing skills should also be measured using SSLS. In addition to the evaluation of gender differences, it is essential to make clear how well the variables of the SSLS questionnaire are related to overall students' perception of lecturing skills (i.e., overall satisfaction) and whether those variables are appropriate measures of the students' perception of lecturing skills. To achieve this, the present researchers adopted Structural Equation Modeling (SEM) for analysis, which is a statistical method to test hypotheses about relationships among observed and latent variables^[33-35].

A few previous studies have utilized SEM to test the relationships of different variables with one another^[35-41].

While exploring the literature, several other studies have been conducted to ascertain the influence of students' gender on the evaluation of teaching quality^[42-47]. Two studies conducted by Dukes and Victoria and Freeman stated that there were no gender differences among students' ratings of faculty. However, the reason for this observed difference in these studies was not explained due to the nature of the research design^[48,49]. In the present context, even though male and female students' study

in gender-distinct facilities at IAU, the infrastructure, facilities, and methods of teaching and learning provided to them are identical as stipulated by the Ministry of Higher Education, Saudi Arabia. Nevertheless, the perception of teaching skills in the medical program shows variation between male and female students^[50,51]. This difference, therefore, necessitates a study that investigates its magnitude. Further, it may be noted that medical programs at Saudi universities are governed by common regulations and requirements set up by the Ministry of Education. Hence, a study involving the medical program at any one university may be taken to be fairly representative of the situation prevailing in such programs throughout the country.

Methods

The exploratory study design was adopted to study the gender differences in medical students' perception of lecturing skills at IAU in Saudi Arabia. This study covers the entire population of students (N=570) studying an undergraduate medical program at IAU during the academic year 2015-2016. SSLS questionnaire was administered using an online application named "UDQuest" at the end of the semester (fall or spring) of the academic year 2015-2016. Ethical approval was obtained from the Deanship of Quality, IAU, Dammam, Saudi Arabia.

Consequently, informed consent was also acquired, and confidentiality and anonymity were assured before collecting data from the participants. Five hundred thirty-seven completed questionnaires were received, demonstrating a 94 % response rate (out of 570). Out of 537 students, 252 were male, and 285 were female.

Besides, the SSLS questionnaire consisted of five variables, with a total of 13 items and one global rating item (overall satisfaction). The level of agreement of students to those

questions in each variable was expressed in a 5-point Likert scale (1-strongly disagree, 2-disagree, 3-neutral, 4-agree, 5-strongly agree). The five variables of SSLS are: (i) Organization and Structure of the lectures (OS), (ii) Lectures Effectiveness on Learning and Understanding (LEL), (iii) Interest and Motivation (IM), (iv) Professional Interaction (PI), and (v) Presentation and Classroom Atmosphere (PC).

A previous study has already investigated the psychometric properties of SSLS [52]. In the present study, SEM was applied to propose a model based on the five variables of the SSLS questionnaire and to study how those variables of SSLS related to the overall students' perception of lecturing skills.

Data analysis was carried out using SPSS version 20. Descriptive statistics were used to find out the mean and standard deviation of the responses towards SSLS with respect to gender. The Cronbach's alpha reliability test was used to measure the internal consistency of the questionnaire. The Shapiro-Wilk test was applied to confirm the normality of collected data and it is observed that the collected data

were normally distributed ($p > 0.05$). The SEM analysis was done using the software AMOS (Analysis of Moment Structures) version 5.0 [53,54]. Further, an independent t-test was used to compare the perceptions of male and female medical students on lecturing skills. All statistical tests were done at the level of significance of 0.05.

Results

Instrument reliability

While examining the reliability of the SSLS questionnaire, the Cronbach's alpha value for Organization and Structure of the lectures (OS), Lectures Effectiveness on Learning and Understanding (LEL), Interest and Motivation (IM), Professional Interaction (PI) and Presentation and Classroom Atmosphere (PC) were 0.95, 0.94, 0.95, 0.94, and 0.94 respectively. Moreover, the overall item showed a Cronbach's alpha value of 0.96. As the Cronbach's alpha value of all the dimensions was observed as > 0.90 , the adapted questionnaire can be rated as 'excellent' [55,56]. Therefore, it is inferred that the questionnaire is a reliable one (Table 1).

Table 1. Cronbach's alpha for the variables of Students survey on lecturing skills (SSLS)

| Variables | Cronbach's Alpha | No. of items |
|--|------------------|--------------|
| Organization and Structure of the Lectures (OS) | 0.95 | 02 |
| Lectures Effectiveness on Learning and Understanding (LEL) | 0.94 | 03 |
| Interest and Motivation (IM) | 0.95 | 02 |
| Professional Interaction (PI) | 0.94 | 03 |
| Presentation and Classroom Atmosphere (PC) | 0.94 | 03 |
| Overall satisfaction | 0.96 | 01 |

Structural Equation Modeling for SSLS

SEM analysis resulted in the model depicted in Figure 1, and the following characteristics i.e., n=537, df=2 (df=degrees of freedom), Chi square=2.067, p=0.356 (p>0.05) were reported

The results showed that the value of 2.067 is found to be non-significant (p>0.05), since

it is more than the recommended value of ≤ 3.00 [37,57]. Therefore, it is concluded that the proposed model used in this study adequately fits the sample data. A significant positive relationship was observed between each variable with the overall item, ranging from 1.0 to 1.319 (p<0.05) (Table 2).

Figure 1. Structural equation modeling (SEM) of SSLS

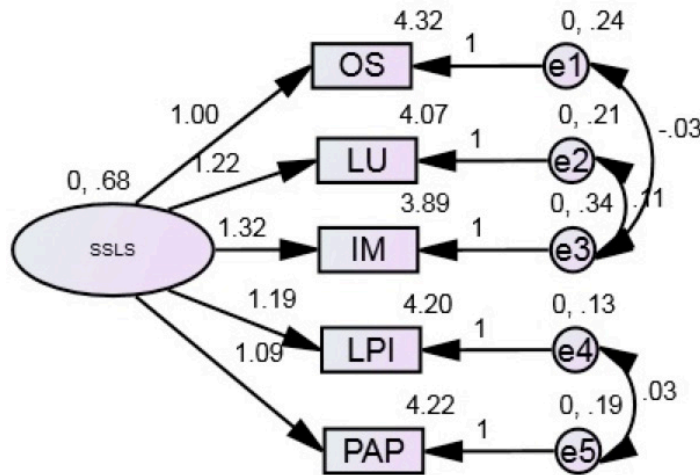


Table 2. Regression Weights

| Variables | Path | Construct | Estimate | Standard Error | Critical Ratio | p value |
|--|------|--------------|----------|----------------|----------------|---------|
| Organization and Structure of the Lectures (OS) | <--- | Overall SSLS | 1.000 | | | |
| Lectures Effectiveness on Learning and Understanding (LEL) | <--- | Overall SSLS | 1.222 | 0.041 | 29.622 | p<0.05* |
| Interest and Motivation (IM) | <--- | Overall SSLS | 1.319 | 0.050 | 26.155 | |
| Professional Interaction (PI) | <--- | Overall SSLS | 1.187 | .039 | 30.235 | |
| Presentation and Classroom Atmosphere (PC) | <--- | Overall SSLS | 1.092 | .039 | 27.827 | |

*Significant at 0.05 level

It is inferred that all dimensions of SSLS are positively related to the overall medical students' perception of lecturing skills. Concerning model fit indices, the recommended value for comparative fit index (CFI) is ≥ 0.90 , normed fit index (NFI) is from 0 to 1, relative fit index (RFI) or RHO1 is close to 1, incremental fit index (IFI) is ≥ 0.90 , Tucker-Lew-

is index (TLI) is ≥ 0.95 . These recommended values of model fit indices denote that the proposed model has a good fit with the data [37,57,58]. In this study, the values of model fit indices are observed as CFI=1 ($p>0.05$), NFI=0.999, RFI=0.997, IFI=1.000, and TLI=1.000 (Table 3), and these values meet the recommended level, indicating the proposed model is a good fit.

Table 3. Model fit indices of the proposed SSLS model

| Model | NFI* Delta1 | RFI** rho1 | IFI*** Delta2 | TLI**** | CFI***** |
|--------------------|----------------|---------------|------------------|---------|----------|
| Default model | 0.999 | 0.997 | 1.000 | 1.000 | 1.000 |
| Saturated model | 1.000 | | 1.000 | | 1.000 |
| Independence model | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

*Normed fit index (NFI), *****Comparative fit index (CFI), **Relative fit index (RFI),
Incremental fit index (IFI), *Tucker-Lewis index (TLI)

Also, Root Mean Square Error of Approximation (RMSEA) for the proposed model is equal to 0.008 ($p<0.05$), which is less than the

recommended value, i.e., ≤ 0.08 [57,58]. This indicates that the proposed model is a good fit (Table 4).

Table 4. Root Mean Square Error of Approximation

| Model | RMSEA* | LO 90 | HI 90 | PCLOSE |
|--------------------|--------|-------|-------|--------|
| Default model | 0.008 | 0.000 | 0.086 | 0.712 |
| Independence model | 0.751 | 0.729 | 0.774 | 0.000 |

*Root Mean Square Error of Approximation (RMSEA)

Gender differences in SSLS Scores

Table 5 showed that the mean and standard deviation of variables of SSLS for gender. In addition, the results of an independent t-test were described to uncover gender differences in medical students' perception of lecturing skills. It is observed that there was a significant difference between the perceptions of male and female students on lecturing skills with respect to the variables such as 'Lectures Effectiveness on Learning and Understanding (LEL)', 'Professional Interaction (PI)', and 'Presentation and Classroom Atmosphere (PC)' ($p<0.05$). This indicates that female stu-

dents have positively perceived the instructors' lecturing skills with a high mean score in terms of these dimensions when compared to male students. But in the case of variables such as Organization and Structure of the lectures (OS) and Interest and Motivation (IM), there was no significant difference between male and female students ($p>0.05$). Further, a significant gender difference was observed in terms of overall satisfaction with the lecturing skills of their instructors ($p<0.05$). Overall, it is inferred that female students are highly satisfied with the instructors' lecturing skills than male students.

Table 5. Comparison of variables of SSLS between gender using Independent 't' test

| Variables | Males | | Females | | t value | p value |
|--|-------|--------------------|---------|--------------------|---------|---------|
| | Mean | Standard deviation | Mean | Standard deviation | | |
| Organization and Structure of the Lectures (OS) | 4.28 | 0.98 | 4.35 | 0.95 | 0.830 | 0.438 |
| Lectures Effectiveness on Learning and Understanding (LEL) | 4.00 | 1.18 | 4.13 | 1.04 | 1.402 | 0.019* |
| Interest and Motivation (IM) | 3.83 | 1.29 | 3.94 | 1.19 | 1.017 | 0.203 |
| Professional Interaction (PI) | 4.11 | 1.13 | 4.28 | 0.97 | 1.867 | 0.007* |
| Presentation and Classroom Atmosphere (PC) | 4.12 | 1.07 | 4.31 | 0.94 | 2.163 | 0.011* |
| Overall satisfaction | 3.98 | 1.257 | 4.16 | 1.103 | 1.814 | 0.041* |

*Significant at 0.05 level ($p < 0.05$)

Discussion

This study aimed to identify gender differences in medical students' perception of lecturing skills in an undergraduate medical program at a Saudi higher education institution. A structured questionnaire was developed and administered within the study setting for assessing SSLS. It is a reliable instrument, as demonstrated through Cronbach's alpha reliability test. The SEM analysis proposed a model based on the five variables of the SSLS questionnaire and studied how those variables of SSLS related to the overall students' perception of lecturing skills. The results showed that the proposed model is a good fit to measure the perception of students on lecturing skills. It is also observed that there was a positive relationship between each variable and the overall item of SSLS, suggesting that all five variables are potential outcomes of SSLS. Along similar lines, Zaboli et al. analyzed the relationship between the factors affecting the teaching quality using SEM analysis and observed a good fit among the components of teaching quality [59]. In this study, the variables used in SSLS were: Organization and

Structure of the lectures (OS), Lectures Effectiveness on Learning and Understanding (LEL), Interest and Motivation (IM), Professional Interaction (PI) and Presentation and Classroom Atmosphere (PC).

Organization and Structure of the lectures (OS)

This study found that the organization and structure of the lectures is one of the significant variables that assess the students' perception of lecturing skills. This is in line with the finding of previous studies that observed the instructors' organization and preparation as an influential factor of SET overall rating by students [60,61]. A study by Parmar indicated that lecturers should always keep the audience in mind while preparing and presenting the lectures. The materials should be appropriate to meet the requirements of the students [62]. Similarly, while preparing and organizing lectures, a framework planning should cover regular lectures, teaching and learning objectives, provision of relevant materials, time for interactive sessions, and also for comments on the students' achievement [63].

Lectures Effectiveness on Learning and Understanding (LEL)

The use of appropriate teaching methods by instructors aids the students to learn effectively [64,65]. Further, the learning environment should be engaging and aided by the use of audio-visual material to ensure that students are highly alert in the classrooms and actively participate in learning activities. This would lead to enhancing the level of retention, understanding, and comprehension. Therefore, proper uses of audio-visual aids not only develops teachers but also augments the students' level of motivation and interest in classroom teaching and other learning activities, and promotes the achievement of desired learning outcomes [66]. Moreover, this study revealed that the instructors' lectures having a demonstration with examples and audiovisual aids for drawing attention, better learning, and understanding of students are related to the students' perception of lecturing skills.

Interest and Motivation (IM)

Motivation is considered as vital in students' learning, and such motivated students, in turn, possess high achievement [67]. Hence, teachers should consistently teach students to become self-motivated rather than giving rewards. Moreover, this study observed that the interest and motivation of students is an essential element for assessing the students' perception of lecturing skills. A study by Lalla et al. has also included an item dealing with motivation and interest aroused by the instructor in their SET questionnaire [68]. Feistauer and Richter stated that stimulating the students' interest in the subject area is one of the facets of teaching effectiveness in the higher education environment [27]. Further, motivation is considered as one of the key components of effective teaching, and it might influence the students' ratings of their instructors [69,70].

Professional Interaction (PI)

Student-lecturer interaction is associated with overall student academic and social develop-

ment, irrespective of where the interaction occurs in the university [71]. Students' satisfactory educational experiences can be improved with constructive and close interactions between lecturers and students and result in enhanced academic and personal development [72]. Feistauer and Richter revealed that the student-lecturer interaction showed a significant influence on SET scores [27]. Previous studies have found that SET overall rating is related to the dimensions such as class interactions, enthusiasm, and relationship with students [60,61,73-75]. This study also observed that the lecturer's professional interaction and support towards students are related to the students' perception of lecturing skills.

Presentation and Classroom Atmosphere (PC)

Classrooms that strengthen emotional well-being make a conducive environment for both learning and emotional development. Educational research indicates that an environment of mutual respect needs to be promoted, where students feel comfortable to share their ideas and raise questions [76]. Moreover, Classroom environment and presentation are considered as one of the key features of good teaching [69]. Otani et al. recognized that the clarity of the lecturer's explanation and positive learning environment are the most influential areas in the overall perception of university students of effective teaching. In this study, presentation and classroom atmosphere are found to be related to the students' perception of lecturing skills [6].

In the present study, the perceptions of male and female students on lecturing skills were compared using an independent t-test, and the results revealed a significant difference between gender with respect to overall satisfaction and the variables such as LEL, PI, and PC ($p < 0.05$). It is inferred that the female students showed a more positive perception of LEL, PI, and PC when compared to male students. This finding is consistent with a study by Lavin et

al. which revealed that there were differences between female and male student ratings of teaching effectiveness. It was noted that females rated statistically higher than males towards the instructor's characteristics, such as professionalism, clear presentations, concise explanations, enthusiastic, responsiveness, and encouragement given [77]. Overall, this study observed that female students are highly satisfied than male students with respect to their instructors' lecturing skills. This is in accord with the finding of Korte et al. who found that female students provided high overall ratings than male students to their instructors regarding teaching effectiveness [44]. Previous studies also found that female students generally gave higher ratings when compared with male students in terms of teaching effectiveness [42,44,78]. In contrast, few studies found no gender difference in students' ratings of teaching effectiveness [48,49]. Notably, Suarman observed that there was no gender difference between the perception of Riau University in terms of the relationship between lecturer and students and students' satisfaction on teaching quality [79].

The present study showed no significant difference between gender concerning the variables such as OS and IM. In contrast, Lavin found that female students paid more attention to organization and preparedness of lectures and engaging when compared to male students [77]. Kumar reported that female dental and medical students were found more attentive for over 70% of the time of lectures than male students [80].

It is noteworthy to mention that there is a uniform teaching plan that exists at IAU and it is implemented across both male and female sections. All faculty members at IAU, either male or female, have to follow a unique course specification while delivering the lecture. The course specification clearly stipulates the methods of teaching to be adopted in each course and the utility of audiovisuals

while giving lectures. Students belonging to both male and female sections are taught using the same lesson plan, which is approved and monitored by a common academic coordinator. The adherence of the course instructors to this course specification is regularly monitored in the form of course report prepared at the end of each course

Besides these uniform practices exist at the study setting, this study attempted to reach certain generalization by adopting the theory of stereotyping where students might have specific characteristics either to male or female faculty, who are the stereotypical university faculty members. As such, this study captured the perception of male and female medical students towards the lecturing skills of faculty members, irrespective of their gender.

Our results indicated that female students have a more positive attitude towards lecturing skills of teaching staff than male students. Stereotyping may have its influence on observed results, where it denotes a generalization made with similar characteristics assumed virtually over a group of members irrespective of actual difference observed among them [81]. Besides these stereotyping gender-specific characteristics of lecturers, lecturing skills of faculty members might differ, and it is influenced by other factors such as their knowledge, professional interaction, and presentation skills & classroom atmosphere. Conformance with our argument, a more recent study also concluded that the gender of the lecturer truly does not matter, whereas the personality and lecturing skills of lecturers were considered as more important [82]. Understanding the influence of these individual factors on the lecturing skills of teaching staff is beyond the scope of this study as restricted by the study design. Hence, further research is warranted to address this issue by comparing student's perceptions towards the lecturing skills of the same faculty members at both male and female sections.

Conclusion

Gender-wise comparisons indicated that the female students in the medical program at IAU have a more positive attitude towards lecturing skills than male students. In addition, the SEM analysis revealed that the proposed model with five variables and 14 items used in SSLS are adequate to assess the perceptions of students on lecturing skills of faculty members in the undergraduate medical program offered at IAU. This study adds value to the literature by providing a questionnaire for assessing faculty members' lecturing skills and gender differences among medical students' ratings of lecturing skills.

Limitations and Recommendations

This study is limited to the students of a single program in a higher educational institution. Nevertheless, the method employed, and the instrument developed suggests that the study can be extended to various other courses and programs in similar settings in the future. In the present study, since the survey was conducted at the end of the semester of an academic year and it might lead to the recall bias, where the students' responses can be biased with the most recent lectures delivered by faculty. Future research can be conducted by distributing a similar survey among students at the end of each module to ascertain student's perception of lecturing skills.

This study demonstrated a 100% response rate, particularly through an online system, which is less likely to happen in reality. Several reasons attributed to this high response rate viz. (i) Policy adopted at IAU where the survey completion by students deemed mandatory and all the students are strictly adhering to such practice; (ii) extensive campaigning carried out across all the colleges at IAU where all the students highly motivated to register their response and (iii) mode of administration of online sur-

vey where students can record their response through mobile phones, and it can be assessed through university E-service platform via My-IAU application. Despite these practices, it is noteworthy to mention such a high response rate might result in response bias in the form of higher ratings by students towards lecturing skills of faculty members, and it is considered as one of the limitations of this study.

Further, the instructor's gender-bias on students' ratings of teaching effectiveness can be measured in future research. In the Saudi Arabian context, the gender difference in student ratings of lecturing skills can also be evaluated with respect to other faculty characteristics, including ethnic differences since the teaching staff comprises both Saudi and non-Saudi faculty. In a similar line, additional research is warranted to study gender differences concerning other student characteristics such as cultural background, personality type, psychosocial dynamics, and domain-specific vocational interests.

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