

# EXAMINING THE IMPACT OF CLASSROOM ENVIRONMENT ON ENTREPRENEURSHIP EDUCATION: CASE OF A PRIVATE UNIVERSITY IN BAHRAIN

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## ABSTRACT

*Higher education industry in the GCC is growing whereby; countries like Bahrain are investing millions in this regard. In order to attract and retain students, it is important that the higher education institutes are able to satisfy them. Keeping the necessity of this element in view, the present study attempted to examine how the classroom environment can possibly make an impact on students' satisfaction. Therein, the present study examined classroom ambience, classroom layout and internet facilities on students' satisfaction amongst the students of a private university in Bahrain. A total of 325 questionnaires through using self-administered approach were distributed among the undergraduate students in a private university in Bahrain. Results from the structural equation modelling found significant relationship between classroom ambience and students satisfaction and between internet facility and students satisfaction. However, the study failed to find any significant relationship between classroom ambience and students satisfaction. The study forwards theoretical and practical implications followed by scope for further studies.*

**Keywords:** Students Satisfaction, Classroom Environment, Classroom Ambience, Classroom Layout, Internet Facility.

## INTRODUCTION

Resources and facilitation in the classroom and universities plays an important role towards teaching and learning. Particularly, when it comes to student positive outcomes and behaviours, classroom resources have a massive impact (Han et al., 2017). This is principally due to the fact that, healthy availability of resources and facilities in the classroom boosts individual's perceptions about the extent an institution cares about them and gives importance to their learning (Back and Parks, 2003). It also plays an important role defining the broader brand image of an institution which becomes very important when it comes to higher education sector due to the competitive nature of the sector (Chen and Chen, 2014). Moreover, it can also make a long-term impact on the values of students for an institution (Han and Hyun, 2012). In this regard, there have had been studies in the past examining variety of such prospects can influence students' behaviours and outcomes at the university level (Ahmed et al., 2017); but very few have managed to outline how it influences students in the higher education sector. Likewise, with the growing focus on intangible factors towards understanding student behaviours and outcomes (Klem & Connell, 2004) little attention is being paid towards the tangible components recently. More importantly, the impact and influence of the classroom physical environment and its

cognitive evaluation to see its impact on factors like student satisfaction has remained less empirically attended (Han et al., 2018). Keeping in view the significant importance and imparity of tangible elements such as classroom layout and ambience before-hand (Kaya & Burgess, 2007), there appears to be dearth of scholarly work in this area in GCC economies like Bahrain. Moreover, there is also little known as to how they can influence student satisfaction in particular. Henceforth, the present study aimed to examine how resource and facilitation prospects like ambient conditions, the capital layout and functionality of the classrooms and the internet service and connectivity can influence the student satisfaction.

## LITERATURE REVIEW

The idea of satisfaction holds an important place across every set up ranging from corporate to academics (Pahi et al., 2016); universities and other terciery education institutions struggle with the constact dimilema on how to recruit students that join their institutions and complete their programs successfully with complete satisfaction. The goal in mind is that later they join the workforce in the same or simular field the studies for. All the while keeping in mind that the students also have a positive experience in their place of learning. In addition to this the competion with other universities and other available education programs also adds pressure to this unique situation. The demand for high quality education, competitive programs and following the regulations of the governing academic bodies that oversee higher education institutions, make the decision making when pleasing students during their educational experience. Studies conducted by Elliot and Healy (2001) on student satisfaction Related to Recruitment and Retention show that student centered teaching, educational effectiveness, student friendly and academic rigor have a direct impact on the level of satisfaction students experience while conducting their studies. The increased competition is also forcing institutions to take a second look at the current student body and ensure their satisfaction, rather the concentration on attracting more students that later are unsatisfied. According to Cheng and Tam (1997), universities are recognizing that they are providing a service and thus the educational industry need to take a look at the service they are proving to their clients which in this case are the students. By examining the terminology, one is able to better understand the items studies in previous research. Student satisfaction is generally levelled as a short-term status that is dependent on the student's evaluation of their experience while attending their university studies. Hartman and Schmidt (1995) concluded that depends on the type of goals students have set for themselves while attending their studies.

Many institutions have come to the realization that in the long term it is better to allocate their resources on meeting the needs of students rather than investing on recruiting more students that will attend their institutions. Other studies completed by Patterson et al. (1996) indicated empirical data linking customer satisfaction and repurchase intentions of the educational services offered on the side of the students. Along the same philosophy, Bolton et al. (2000) conclude that continuations of studies at educational institutions is based on the evaluation of multiple services offered. Likewise, study by Astin (1993) student satisfaction has forwarded similar assertions in this regard. Satisfaction is the students understanding of the university experience and the value of the education received by them in the institution. Students invest a great deal on time, money and above all efforts to comply with the requirements to complete a certain degree. Therefore, students need to feel that the education they are receiving is of high value and quality thus, predicting student satisfaction (Astin, 1993).

The role of the instructor also has a great impact on student satisfaction. In previous studies the instructor is the main variable in predicting student satisfaction (Williams and Ceci, 1997). Accordingly, Sevier (1996) states that a university positive results are the sum of the student's academic, social, physical and even spiritual experiences while they are attending the institution. Kotler and Fox (1995) found that majority of the students were satisfied with their academic programs but are often disappointed with the lack of support services such as academic advising and career counselling.

According to Bitner (1992), the classroom environment is termed as a non-verbal phenomenon of communication between the product/service and its users. Therein, such physical environment and resource facilities can make an impact on the cognitive beliefs of the final recipients (Jani and Han, 2014). The study investigated on the hospitality sector found that physical environment and resources can make an impact on the individual perceptions of the customers. Likewise, very recently study conducted in the higher education sector found that also reported a significant impact of resources and facilitation upon individual student satisfaction (Han et al., 2018). The study found that students receiving positive facilities were able to boost their satisfaction levels. These evidences though limited yet still; highlight the potential role and contribution of resource and facilities provided by institutions to the students. This is parallel to the explanations of Oliver (1997) who outlined that providing positive cognitive experiences through facilitation can result in generating customer satisfaction. Hence, atmospheric conditions of the classroom can be of significant impact towards providing quality education with highest level of customer satisfaction. For this some of the important aspects underlined in the relevant literatures are layout of the class, temperature, space and arrangement, floors, study space and other furniture (Gaines and Curry, 2011; Zhu et al., 2017). Accordingly, studies can be traced outlining that student experience in the classroom can be enhanced through the overall layout and set up of the classroom (Yang et al., 2009; Osman et al., 2016; Spathopoulou and Papakonstantinidis, 2017; Vargas, 2017). This has also resulted in enhancing the general focus of educational institutions to modify their indoor atmosphere consistently to ensure they retain students (Turley and Milliman, 2000). Therein, the classroom layout, ambience and other necessary facilities such as internet usage can be related and hence define the acceptability of the students and enhancement of their satisfaction (Haseeb et al., 2014; Kurihara, 2016; Diyan and Adediwura, 2016; Abdulai, 2017; Dike, 2017; Obaki, 2017; Haseeb et al., 2017; Abidin and Haseeb, 2018; Han et al., 2018; Haseeb, 2018).

Keeping in view the middle-eastern culture and demographic elements, all these features can also be of equal prominence for enhancing positive behaviours like satisfaction with the studies and courses which is yet to be empirically explored. Henceforth, the present study attempted to test the following:

*H1: There will be a positive relationship between classroom ambience and students satisfaction.*

*H2: There will be a positive relationship between classroom layout and students satisfaction.*

*H3: There will be a positive relationship between internet facility and students satisfaction.*

## METHODOLOGY

### Population and Sampling

Undergraduate students from a private university in the Kingdom of Bahrain were sampled for the present study. The study was conducted keeping in view the strategic resource

improvement and infrastructure development of the institution whereby, it aimed to help guide the management about the importance of classroom ambient conditions, layout and internet facility on student's satisfaction. Keeping in view the different class timings and degree programmes schedules, convenience sampling technique was used to collect quantitative data through using survey methodology. A total of 325 questionnaires were distributed out of which, 311 were received back. The initial screening found 63 questionnaires to be inappropriate due to their incompleteness and were therefore, discarded. Henceforth, 248 questionnaires were taken further for hypotheses testing and data analysis. Out of the 248, 163 were female and 85 were male students and majority of the students were from mass communication, accounting & finance and HRM undergraduate programs.

## MEASUREMENT

Quantitative approach was deployed for the present study whereby, prominent scales were used to obtain data from the respondents. A 6-item scale by Bitner (1992) was adapted to examine ambient conditions of the classroom. The questions catered to statements asking respondents to highlight the air quality, temperature, humidity, lightning, noise and door of the classrooms. Similarly, 5-item scale concerning to class layout was from Bitner (1992) was also employed to assess the classroom furnishing, equipment, amenity and functionality of the class. For internet facility and satisfaction with the internet provision, students were asked to respond regarding the connectivity and signal strength, speed of the internet, access to websites, and download strength, video playing and document uploading and online submissions. Lastly, student satisfaction was measured through the 3-item scale by Oliver and Awan (1989) was used. 7-point Liker-type scales were used for the survey wherein 1 referred to strongly disagree and 7 referred to strongly agree.

### Analysis

Structural equation modelling technique using Smart PLS was used for the present study (Ringle et al., 2005). Based on recommendations from prominent scholars, the present study followed the two-stage approach in which the psychometric properties of the data were assessed followed by the examination of significance of the path coefficients (Hair et al., 2014).

### Assessment of Measurement Model

In the prospect of measurement model, individual items loadings, AVE scores and alpha values were assessed. All the items resulted with higher loadings, ranging between 0.7155 to 0.867 for classroom ambience; 0.781 to 0.853 for classroom layout; 0.705 to 0.791 for internet facility and 0.684 to 0.815 for student satisfaction. Accordingly, the alpha values resulted to be 0.892, 0.884, 0.836 and 0.659 respectively for the scales thus, confirming responsive individual item reliability, internal consistency reliability as per the recommendations of Chin (1998).

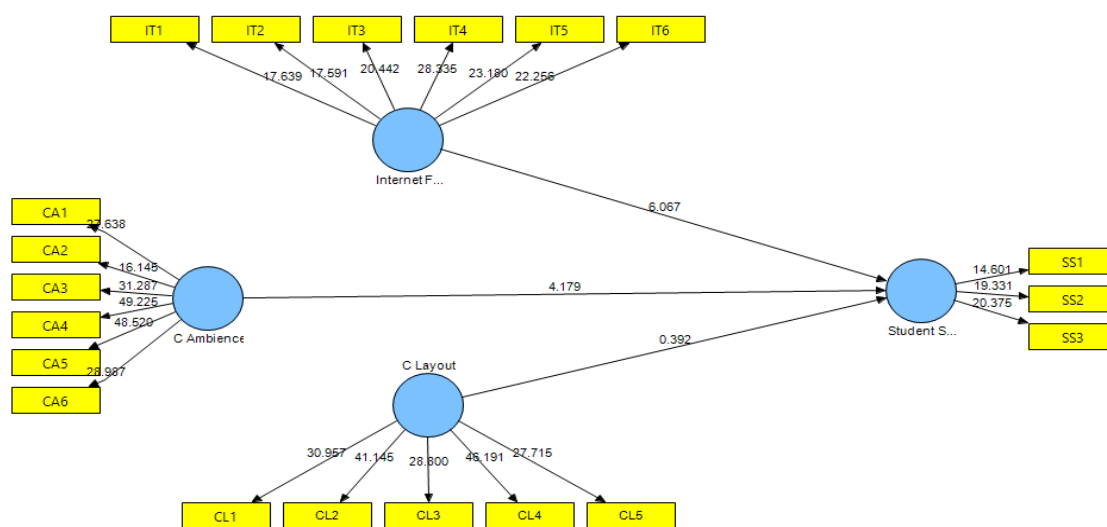
Accordingly, the study also examined discriminant validity for which Chin (1998) has suggested that the square root of AVE scores should be compared against the reflective loadings in a cross loadings table. The results reported all the square roots of the individual constructs to be higher than the reflected latent scores thus confirming adequate discriminant validity. Table 1 provides further details in this regard.

	<b>Class Ambience</b>	<b>Class Layout</b>	<b>Internet Facility</b>	<b>Students` Satisfaction</b>
<b>Class Ambience</b>	<b>0.807</b>			
<b>Class Layout</b>	0.779	<b>0.827</b>		
<b>Internet Facility</b>	0.518	0.563	<b>0.741</b>	
<b>Students` Satisfaction</b>	0.522	0.448	0.520	<b>0.771</b>

Note: Bold faced values are the square root values of AVE scores of all latent constructs.

### Assessment of Structural Model

The present study employed bootstrapping procedures to assess the relationship between classroom ambiances, classroom layout and internet facility with students' satisfaction. Therein, 5000 bootstrap samples were applied and resulted a significant positive relationship classroom ambience and students satisfaction ( $\beta=0.370$ ,  $t=4.179$ ). However, classroom layout failed to pose any significant relationship with students satisfaction ( $\beta=0.037$ ,  $t=0.391$ ). Notably, internet facility resulted to be in a significant relationship with students satisfaction ( $\beta=0.349$ ,  $t=6.067$ ). Figure 1 and Table 2 provides further details in this regard.



**FIGURE 1  
STRUCTURAL MODEL**

Relationship	$\beta$	Standard Error	T-Value	Decision
<i>H1: Classroom Ambience-&gt;Student Satisfaction</i>	0.37	0.088	4.179	Supported
<i>H2: Classroom Layout-&gt;Student Satisfaction</i>	-0.037	0.094	0.391	Not Supported
<i>H3: Internet Facility-&gt;Student Satisfaction</i>	0.349	0.057	6.067	Supported

## DISCUSSION

The present study attempted to examine the role and relationship of classroom ambience, layout and internet facility on student's satisfaction. The results of the structural equation modelling have found significant impact of classroom ambience on students' overall satisfaction with the courses and studies. In other words, the study has outlined that students value air quality, classroom temperature, odour, humidity, lighting and noise in the classroom. The results are parallel to the empirical assertions of Han (2013), highlighting significant impact of classroom ambience towards students' satisfaction and academic outcomes. Contrary to this have been the results for classroom layout suggesting that sampled students in Bahrain were not focused and/or did not related it with their students' satisfaction. This result is contrary to the recent empirical finding of Han et al. (2017) who found significant results for this relationship in another setting. Notably, significant impact of internet facility, connectivity was reported significantly related with students' satisfaction. The finding suggests that students require good internet connectivity which also goes parallel to the increasing usage of e-tools and internet usage in the classes in the higher education industry these days which is also a regular feature amongst the university targeted in the class.

## IMPLICATIONS

The study forwards several theoretical and practical implications. The findings suggest that universities should focus on providing excellent classroom ambience to enhance student's satisfaction. This can be seen more crucial for universities and institutions struggling in maintaining students' satisfaction. Educational students should ideally use latest facilities in this regard. Similarly, the study has resulted that internet facility is another important feature to enhance student's satisfaction. Since technology has a major impact in all aspects (Ahmed et al., 2016); it hence explains that the growing usage of e-tools, online applications and academic learning management portals requires universities to have high internet connectivity to enable students to responsively participate in the class thus, enhancing their satisfaction. Similar to leadership role in other aspects (Khalid et al., 2016), leaders in the higher education can also play an important role in ensuring effective availability of these prospects.

Accordingly, the study results forward implications for general practice to outline how and in what different contexts physical classroom elements can be of prominence to aid to students' outcomes. The evolving nature of the higher education, the study encourages towards bringing improvement in the classroom conditions and ambience to generate student satisfaction. The findings potentially hint towards the fact that in situations whereby higher education institutions are working on improving quality in teaching and learning, it is also vital for them to focus on indoor physical environment and tangible prospects in the business.

## Limitations and Scope for Further Study

The study confined to sampling respondents from one higher educational institution in Bahrain, thus limiting the causal inferences of the findings. Future studies may therefore look into exploring how these variables can potentially enhance student satisfaction in other educational settings. More importantly, future studies may also look into how these relationships can be mediated or moderated to understand more about students' satisfaction and its enhancement.

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