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## The Role of Interior Design in Educational Institutions

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## ARTICLEINFO

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#### ABSTRACT

This research will display the role of interior design in education institutions, showing the relationship between them with highlighting on its importance and its effects. The problem of the study is the lack of attention on the importance of interior design in educational institutions that lead to many interior design omissions that have been applied for many years, which in their turn have numerous effects on the users of the institutions. Furthermore, this research will highlight on the solving approaches to some common interior design challenges that has been applied in educational institutions. As a primary data, info was collected from several people from books, journals, and scholar websites about their opinions of interior design in educational institutions, including the challenges, the approached solutions, and the effects. In addition, an online survey has been made that collected opinions of professors and students as they are the main users of educational institutions to know their opinions on the approached solutions and their reasons behind their response. This research has discovered that the approached solutions have positive effects on the users, especially the teachers and students that will play a huge role in the teacher's productivity and the student's academic achievements

## دور التصميم الداخلي في المؤسسات التعليمية

عبد الصمد الخالدي<sup>1</sup> كريمة الشوملي<sup>1</sup> شيماء يونس<sup>1</sup> الملخص:

يعرض هذا البحث دور التصميم الداخلي في المؤسسات التعليمية، موضعًا العلاقة بينهما مع تسليط الضوء على أهميته وتأثيراته. تكمن مشكلة الدراسة في قلة الاهتمام بأهمية التصميم الداخلي في المؤسسات التعليمية، مما أدى إلى العديد من الإغفالات في التصميم الداخلي التي تم تطبيقها لسنوات عديدة، والتي بدورها تركت تأثيرات عديدة على مستخدمي تلك المؤسسات. علاوة على ذلك، سيسلط هذا البحث الضوء على أساليب حل بعض التحديات الشائعة في التصميم الداخلي التي تم تطبيقها في المؤسسات التعليمية. وكبيانات أولية، تم جمع المعلومات من عدة أشخاص من خلال الكتب والمجلات والمواقع الأكاديمية حول آرائهم في التصميم الداخلي في المؤسسات التعليمية، بما في ذلك التحديات والحلول المتبعة والتأثيرات. بالإضافة إلى ذلك، تم إجراء استطلاع عبر الإنترنت جمع آراء الأساتذة والطلاب بصفتهم المستخدمين الرئيسيين للمؤسسات التعليمية لمعرفة آرائهم حول الحلول المتبعة وأسباب استجابتهم. وقد اكتشف هذا البحث أن الحلول المتبعة لها تأثيرات إيجابية على المستخدمين، وخاصة المعلمين والطلاب، مما سيلعب دورًا كبيرًا في إنتاجية المعلم وإنجازات الطالب الأكاديمية.

الكلمات المفتاحية: التصميم الداخلي ، المؤسسات التعليمية ، التحديات

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#### 1. Introduction

The world used to define interior design as a pleasing to eye decoration only, not to considering the actual importance of interior design and its effect on many different aspects. However, these days Interior design is getting attention more than any period, the society is focusing on interior design not only in their houses but basically everywhere else, especially in tourist spots and restaurants. Realizing that interior design is the art of visualisation, creation, conversion, realization, and beautifying the interior of places of man-made, to create dynamic, attractive, and pleasing spaces that fulfils the spiritual needs, the social needs, and the financial needs.

Interior design places a massive role in the life of the individuals since it is impacts almost all of the aspects of life, such as the theoretical side, the spiritual side, the social side, the practical side, the entertainment side, and the financial side. The interior design must be the focus specially in paramount places that impacts the upcoming years, for example, the educational institutions. An educational institute is where an individual gets education and gains new knowledge according to their various ages, like childcares, preschools, primary schools, secondary schools, high schools, universities, in addition libraries.

Interior design plays an enormous role in such institutions since it affects the learners and the employees in many ways. The problem of this study is that the society haven't yet realised the importance of focusing on the interior design in educational institutions. Most of the educational institutions have a design that doesn't reach the standards which can take place in many negative consequences and damages. Which places the purpose of this study is to highlight the importance of interior design in educational institutions and how it impacts in various ways.

The research questions are 1. What is the importance of interior design? 2. What is the relationship between interior design and educational institutions? 3. Which interior design

challenges are found in educational institutions? 4. How these approaches can be solved by suggested solutions?

The interior designer Erin Klein assume that the reason is, the lack of communication between the interior designer and the students, which they shall have ideas and thoughts about the space that they spend most of their time in. "One of the first things architects and designers do is they have to bid for jobs that they are interested in or clients come to them. Either way they are consulting with the client. However, that doesn't happen in education." (Klein, 2018).

There is an insignificant relationship between the interior design and the users, in our case, the students, teachers, and the stuff. The interior design shall be done in a way it influences not only the students, but the teachers as well, to provide them inspiration and motive. Which both leads to an increase in the student's desire to learn, with an increase in the teacher's stimulation to teach.

Many studies and experiments have been made due to the relationship of the interior design and educational institutions to discern and try the hypotheses, inclusion to state some facts. In year 2016, a study was made in Iran, Shiraz to look over the effect of the classroom interior design on the happiness of the learners. They chose sixty girls from the ninth grade in the academic year of 2015-2016 and divided them to two groups during the three stages, pre-test, post-test, also follow-up through the Oxford Happiness and Mental Health Questionnaire (Taheri, 2019). After the tests, the results showed an increase in the happiness measure among the two groups as shown in Table 1, beside a decrease in their deviation of mental health as shown in Table 2, proving that the interesting interior design does affect the students and provides them the suitable frame of mind for studying (Taheri, 2019).

**Table 1**The mean and standard deviation of happiness

Tests	Group	Mean	Standard deviation
Pre-test	1	121.7813	24.99772
	2	122.6429	16.94045
	Total	122.1833	21.44405
Post-test	1	133.4688	26.56457
	2	123.4643	19.25363
	Total	128.8000	23.78562
Follow-up	1	128.7813	29.18322
	2	120.3571	22.89139
	Total	124.8500	26.55651

Note. Adapted from Taheri, Z. (2019). Studying the Effect of Classroom Interior Design on the Happiness and Mental Health of the Female Adolescent Students. Retrieved November 06, 2020, from https://jbiochemtech.com/en/article/studying-the-effect-of-classroom-interior-design-on-the-happiness-and-mental-health-of-the-female-adolescent-students

 Table 2

 The mean and standard deviation of mental health

Tests	Group	Mean	Standard deviation
Pre-test	1	24.8750	16.42137
	2	25.7500	11.64164
	Total	25.2833	14.27941
Post-test	1	17.4688	14.79752
	2	24.0000	16.06468
	Total	20.5167	15.61886
Follow-up	1	17.6562	12.86809
	2	24.7857	13.67170
	Total	20.9833	13.61641

Note. Adapted from Taheri, Z. (2019). Studying the Effect of Classroom Interior Design on the Happiness and Mental Health of the Female Adolescent Students. Retrieved November 06, 2020, from https://jbiochemtech.com/en/article/studying-the-effect-of-classroom-interior-design-on-the-happiness-and-mental-health-of-the-female-adolescent-students



Figure 1 – Amity University Dubai

Retrieved from https://imagevars.gulfnews.com/2020/08/20/Amity 1740beddf4d large.jpg

There are numerous numbers of educational institutions in the United Arab Emirates since the country gives attention to the educational side of its society more than any other side. The care is conspicuous, but it has a lack of creativity in their interior design. However, visible changes in interior design have been made in many educational institutions for the past two years, exclusively, universities, for instance, the interior design of Amity University in Dubai as shown in Figure 1. For the nearing years, the interior design in educational institutions shall get more attention than it does these days, as stated by the increase in focusing on the interior design in universities as a first.

In this study, it displays more explanations about the importance of interior design, in addition the relationship between the interior design and the educational institutions. Presents

challenges of interior design in educational institutions, in addition solving approaches in interior design.

## 2. Literature Review

## 2.1 The Importance of Interior Design

"Since the walls of caves were first decorated with primitive paintings, it has been a natural instinct for humans to embellish their environment." (Gibbs, 2010, p.6). Gibbs saying proves that creating an eyecatching space is primitiveness and shows that interior design played a role in our lives since the beginning of the world.

In the next saying the author lights on some consequences of interior design to our lives, limited the importance of interior design in sixteen points. Some of the sixteen points are that it adds functionality to the space, fits the occupant's lifestyle, increases in the aesthetic quality, facilitate ample space, in addition it affects the mood of the individuals (16 Reasons Why its Important, 2020). "Interior design plays a very important role in our life

today, making our lifestyle more modern and stylish. Not only that it also introduces us to elegance and comfort and helps to raise the functionality in our life." (16 Reasons Why its Important, 2020).

"It is smart to know how interior design affects your creativity and behaviour as it can be the perfect solution for any commercial, residential, hospitality or educational problem that takes a toll on your everyday life." (How Interior Design Affects Your Creativity and Behaviour, 2017). The connection between the design and people is something people can't deny, since the people are the one who comes up with the design, applies it, and lives in it. Adding the health benefits out of interior design and how it can affect the mood and the level of creativity (How Interior Design Affects Your Creativity and Behaviour, 2017).

### 2.2 The Relationship Between Interior Design and Educational Institutions

In "The importance of Interior Design Elements as They Relate to Student Outcomes" article investigates about the relationship between interior design and educational institutions while providing studies. One of the studies are Schapiro's 2020 study which came up with these results, "Discovered that 73% of a national sample of teachers perceived the interior design of schools to be very important for creating a good learning environment; 55% perceived that classroom design impacts student achievement." (Tanner. C. Kenneth. Langford. Ann., 2003, p.3).

In a conclusion of the article studies, "Over 95% indicated that school interior design is important for creating a good learning environment. Over 90% suggested that the schools' interior design strongly impacts teacher retention. Approximately 85% agreed that interior design is somewhat to very important in influencing student attendance." (Tanner. C. Kenneth. Langford. Ann., 2003, p. 3).

"Studentship is an important and sensitive period for individuals, starting at the age of 6 and continues till 18 years of age. The classroom, environment and educational environment are very important issues that are related to their efficiency." (Taheri, 2019). Taheri have proven her words with several studies that she made concerning this saying, all of the studies shows how strong the interior design is related to the students and teachers in any educational institution, as shown an example of one the studies in the introduction details.

## 2.3 Challenges of Interior Design in Educational Institutions

"Yet, too many school library facilities continue to be poorly designed. Too many are riddled with serious mistakes. Too many fail to provide what students want because we have not included them in the planning process." (Erickson & Carolyn, 2007).

The authors are providing a whole book about tactics and how designing educational institute especially, a school library in the right way since they have gone through many libraries that have interior design mistakes. "Too many fail to reflect what is known about learning and are designed in fundamentally the same way that school libraries wee designed in the 1960s." (Erickson & Carolyn, 2007).

They also mentioned how the interior of educational environment have almost not changed since 1960s, due to the apparent repetition, which they think is a reason behind the aversion of students towards libraries to be specific. "Students are not the same learners they were ten years ago." (Erickson & Carolyn, 2007). In other words, saying that since the students are not the same, so shall the design.

Figure 2 – The Conversation

Retrieved from https://www.fohlio.com/blog/wp-content/uploads/2019/03/The-Psychology-of-Interior-Design-for-the-Learning-Space-Fohlio-interior-design-software-construction-management-software-traditional-classroom.jpg



"Schools followed the "sage on the stage" model — that is, a classroom layout with a central platform where the teacher stands, and chairs that face it. It is simple enough, and it worked well enough. But as

neuroscience helps us better understand how the brain functions and the

best ways to learn, so do teaching methods and technologies evolve. So should the learning environment." (Velasquez, 2020). Figure 2 shows a classroom designed according to the "sage on the stage" model.

The author gives example of a method, a plan layout that have been used for many decades, how it remained the same with all of the changes and development in the world, encouraging and starting the era of breaking the usual interior design of educational environment.

"Desks, chairs, tables, whiteboards; virtually any piece of classroom furniture can and should have the ability to be moved around in order to adapt to the student needs." (Wade, 2016)



**Figure 3** – *Design Curial* 

Retrieved from https://www.fohlio.com/blog/wp-content/uploads/2019/03/The-Psychology-of-Interior-Design-for-the-Learning-Space-Fohlio-interior-design-software-construction-management-software-Notre-Dame-Catholic-College.jpg

The author displays the common acts an interior design would do with an educational space, such as avoiding curvy lines and circular shapes, instead using geometrical shapes all over the space, a similar environment appears in Figure 3. Furthermore, dividing the classrooms in closed rectangular shapes with an unchangeable arrangement since the closed spaces can

increase the cortisol, the stress hormone. Furthermore, surrounded by the standard ceiling height, occupied with uncomfortable chairs, eventually far away from the nature and the nature's light (Velasquez, 2020).

Wade says "Students are looking for open, fluid designs in the classroom. Instead of a static classroom filled with individual desks, designers should look for ways to create breakout spaces." (Wade, 2016). In the article called "Relationship between Color and Emotion" a number of students displayed a study about the emotions of college students towards colours, which they divided them to three groups. The study shows the principle hues had the highest number of positivity, which we have lack of in our almost all educational environment, except the colour blue which is used in darker shades. White and green got a high number as well, white have been seen in educational environment, unlike the colour green. Most of the educational institutions have a white, plain interior, with some colour of brown, which is a total incorrect action to do. The study results should encourage interior designers to add some colours to educational environment instead of keeping it pale.

"The results revealed that the principle hues comprised the highest number of positive emotional responses, followed by the intermediate hues and the achromatic colors. The color green evoked mainly positive emotions such as relaxation and comfort because it reminded most of the respondents of nature. For the achromatic colors, white attained a large number of positive responses, followed by the colors

black and gray." (Relationship between Color and Emotion: A Study of College Students, 2004).

## 2.4 Solving Approaches in Interior Design

Oshin Vartanian, Adjunct Professor of Psychology at the University of Toronto Scarborough and his colleges: "A part of the brain's core emotion network is activated when viewing rooms with a curvilinear design. They were regarded as beautiful and pleasant. Rooms with

high ceilings, on the other hand, stimulated "visuospatial exploration"; that is, they made people pay more attention." (Vartanian. Navarrete. Chatterjee. Fich. Leder. Modrono, 2013). Once the students pay more attention it will affect their learning experience and will get more information. Also, if was an old school with unchangeable structure, mirrors can be added which increases the feeling of the space and the amount of the light, especially if it was facing the windows. ""Mirrors can transform small spaces." says Camille Overmeer, interior designer at The Camellia." (Persaud, 2020).

"In a rigorous study involving 21,000 students, it was found that those who studied in "classrooms with more natural light scored as much as 25 percent higher on standardized tests than other students in the same school district."." (Velasquez, 2020).



Figure 4 - West Windsor - Plainsboro High School South

Retrieved from https://www.fohlio.com/blog/wp-content/uploads/2019/03/The-Psychology-of-Interior-Design-for-the-Learning-Space-Fohlio-interior-design-software-construction-management-software-natural-light.jpg

The studies show the element of light role and the nature feeling affect in an educational environment, the more natural light enters the classroom the higher the grades are, means the

least artificial lights used, the more students take attention, as shown in Figure 4. Since the nature a like environment gives positive energy and refreshes the mind, the student's mood and physical comfort helps their brain to function, understand, and observe the information more than being a totally technological environment with no element of nature.

Learners shall be seated in a comfortable environment so all their focus is on learning, it could be achieved by comfort chairs, proper acoustics, suitable temperature, and the right lighting. As Jeremy Mettler, a social studies teacher at Batavia High School, says "The reality is, if you're sitting in an uncomfortable chair or you're distracted by glare, you're focusing on the source of the discomfort rather than the learning. The distraction is a stress, and if you're stressed, you're not learning." (Persaud, 2020).

### 3. Methodology

After reading several journals, books, and official websites about the role of interior design in educational institutions, this thesis' methodology incorporates an online surveys that aims at collecting data about the opinions of the main users of an educational institute about the approached solutions for the interior design challenges by mentioning the reason behind their response. The online survey earmarked professors working in universities and university students from various universities across the UAE. The survey link first was shared online to professors from University of Sharjah and Amity University Dubai only because of the other universities principles that doesn't allows sharing surveys from different university. In addition, the survey was also distributed to students from different universities across the world. The survey responds reached to thirty-five responds from professors and students from different universities. The survey contains nine questions, starts with two questions about their personal info, continues with seven questions that displays a specific interior design approach solution, asking them about their opinion and reason.

## 4. Findings & Discussions

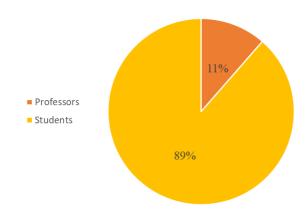


Figure 5 – First Survey Question

The first question was asked to discover the respondent current employment status. As Figure 5 shows that 11% of the respondents are professors means four out of thirty-five respond, and the other 89% are students means thirty-one out of thirty-five respond.

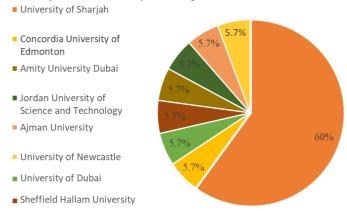
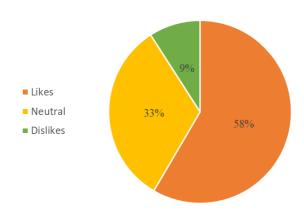


Figure 6 – Second Survey Question

The second question was asked to find out each respondent current university they are teaching at or studying in. Figure 6 appears that 60% of the respondents are from University of Sharjah, means twenty-one respond, four of them are professors while the others are students. The other 40% are divided equally on seven other universities such as Sheffield Hallam University in England, University of Newcastle in

#### Australia, and Concordia

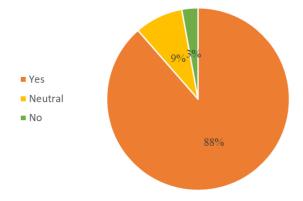
University of Edmonton in Canada. There were two respondents from each university except for University of Sharjah.



**Figure 7** – *Third Survey Question* 

The third question asked about the respondent overall opinion of their university interior design. Figure 7 indicates that 58% of the respondents dislikes their university's interior design which equals eleven respondents. Th other fourteen respondent were divided to five of them were neutral, and the remaining nine liked their university's interior design. The ones who answered with dislike were asked for their reason why. A student from Jordan University of Science and Technology replied with: "The interior design in my university is outdated and boring.". In addition a student from University of Sharjah said: "My major is fashion design and I do not find the interior design is creative enough compared with international design universities.". A professor from University of Sharjah as well, agreed with the student by saying: "Nothing amazing, the design is so simple!". On the other hand, a student from University of Dubai which liked the interior design of his university and provided us with the reason: "Sunlight is covering all of our corridors, with high ceiling, and greens everywhere. It is so warm and comfortable!". This question proved that most of the universities have a lack of creativity in their interior design, however, the nine respondent

who liked the interior design of their universities which most of them are studying in universities built one-two years ago, proves as well that the world is starting to focus on the importance of interior design in educational institutions as well.

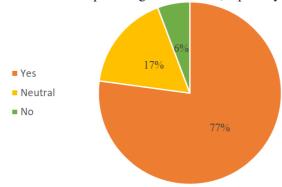


**Figure 8** – Fourth Survey Question

The fourth question inquiries about if the respondents think the sunlight is a necessity in a classroom or

not. Figure 8 shows that 88% thinks it is a necessity, while 9% neutral, and the remaining doesn't think it is a necessity at all. Most of the respondent agreed on the positive energy the sunlight gives and how it helps the students to stay awake and focus because it provides them energetic vibes. But a student from Jordan University of Science and Technology mentioned the fact that sunlight can affect in a negative way if a projector was used in a classroom or no. Agreed with a professor from University of Sharjah that said: "It will create high reflection on the surfaces.". Nonetheless another professor from University of Sharjah said: "It is, because it gives the students good studying vibes.". A third professor from the same university, had the simplest answer: "What's nicer than sunlight?".

Furthermore, the survey responds approves the necessity of a sunlight in a classroom by the agreement of the professors and students, while providing the sunlight sources some curtains and using materials for the classroom furniture that has a low percentage of reflection, especially the tables.



**Figure 9** – *Fifth Survey Question* 

The fifth question was to know if plants and greens in a classroom has a positive effect on the users or not, in their own opinion. Figure 9 indicates that 77% thinks that plants and greens in classrooms has a positive effect which means twenty-seven of the respondents. The other 23%, 17% of them are neutral and 6% disagrees which equals only two respondents from thirty-five respondent. Most of the reasons behind their agreement was because of the good vibes and the aesthetic view. Also, a student from Sheffield Hallam University says: "Classroom will feel more relaxing, less stress, and more productivity." So agrees a professor from University of Sharjah: "Plants gives the feeling of nature, and nature can help the students to relax and enjoy their time while being in class." But a professor from University of Sharjah as well, had another point of view by saying: "It distracts and won't help the students focus on the lecture." This question's responds summaries in saying that greens and plants are a positive addition to a classroom with agreement of the professors and students, which helps in increasing the user's productivity, nonetheless, bearing in mind the quantity and the placement so it won't be distracting or either stupendous.

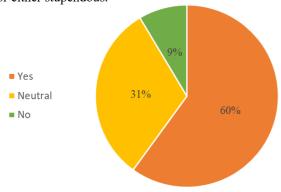


Figure 10 – Sixth Survey Question

The normal classrooms have a standard wall height of three metres approximately, so the sixth question inquired about what if the wall height was extended to four or five metres, that will give a feeling of a bigger classroom, would that affect the users in a positive way or the opposite. Figure 10 shows that 60% of the respondents agrees that it would have a positive effect means twenty-one person out of thirty-five.

Only 9% thinks it will affect in a negative way which equals three respondents out of thirty-five, while the remaining had a neutral feeling with a percentage of 31%. One of the professors of University of Sharjah agreed with a reason of that it gives a clear vision. However, his college disagrees because he thinks in his opinion that the size is not an issue for students, it is always how good looking the classroom and comfy the seats are. In the other hand, the students agreed on it is positive effect on them except for two, as said a student from University of Newcastle in Australia: "Defiantly it does, my class room has a high ceiling which makes me feel that the classroom is much bigger, that gives more relaxing and comfort feelings.". Another student from University of Sharjah also agreed by saying: "High ceilings are more comfortable, it is so pleasing to the eyes!". One of the two students that disagreed said: "It would make the space feel more formal, therefore it will make us feel less comfort, us as students.". After the respondents respond and the few opinions shared, high ceiling can have a positive effect on the users by the agreement of almost all the thirty-five respondents.

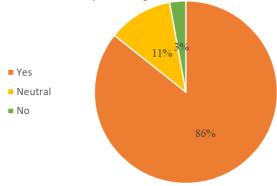


Figure 11 – Seventh Survey Question

In question number seven proposed the idea of having an eye pleasing view in a classroom either a nature view or a man-made constructions view, if it would leave a positive effect on them as main users or not. 86% of the respondents agreed to the statement including all four professors and twenty-six of the students as it shown in Figure 11. As mentioned all four professors from University of Sharjah had the same response, one of them says: "It is always nice to have a beautiful view, it provides positive energy and aesthetical atmosphere."

Continues the other professor who mentioned the boredom level the students can reach if the classroom was all about four white walls, which will affect their attendees and productivity as well. Moreover, a student who studies in University of Sharjah too agrees with her professors by saying: "A beautiful views always gives positivity energy, if it is in a classroom or anywhere else.". Only four of the students had a neutral opinion with a percentage of 11%, two of them issued their response with their reasons based on their personal info. One them who is a student in University of Newcastle in Australia said: "Not necessarily, it might provide positive effect, but it might provide negative effect also, such as student's distraction.". another student from University of Dubai said: "It would be nice but not really important in my opinion.". Remains only one student who totally disagreed which unfortunately did not explain the reason why. The seventh question responds encapsulates in the agreement of the most the respondents that a beautiful view have a positive effect on the

users, it might distract especially the students in a low percentage, however if that ever happened, the professor always knows how to grab the student's attention even if there were distracted by either the view, their phone, or anything else.

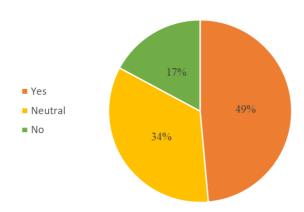


Figure 12 – Eighth Survey Question

The question number eight discussed about how normally classrooms are coloured with basic colours and occupied with furniture almost with the same simple colours such as white, blue, and brown. The survey suggested to the users what if one of the warm colours such as yellow, orange, and red were added to the interior of the classroom, would it have positive or negative effect upon their personal opinion. As Figure 12 shows 17% of the respondents disliked the idea means six respondents of thirty-five. One of the students who studies in University of Sharjah explained her disagreement as she said: "These colours might annoy the eyes after a while, it won't help us to feel comfortable for the long term.". another student from Ajman University agreed by saying: "Cool colours are more relaxing, they help us to stay focused on the class.". However, 34% were neutral means twelve of the respondents, one of them who studies in Amity University Dubai: "It would be a nice addition, however I would personally prefer pastel colours as a change.". The rest 49% who agreed to the ideas has several reasons for instance a student from University of Dubai says: "Using Light colours with the existence of the dark, traditional colours we are used to, it will take us out of the boredom we are used to, it will give us energetic vibes and motivation.". A professor from

University of Sharjah agrees with the statement as he said: "Of course it will have a positive effect, for example if we coloured one of the walls by one warm colour, it is like adding the right amount of salt to a recipe". Notwithstanding the other professor response who's teaching in University of Sharjah as well who preferred cool colours for classrooms, to illustrate green and blue. The penultimate question responds were between the agreement and the neutral more than disagreement. The ones who answered with neutral had logical reasons such as preferring less eye-catching colours but still agrees with the idea of adding unformal colours. However, most of the reasons behind who disagreed was the fear of it being so into the eyes that it would annoy the students and professors, instead of being a good addition. However, who answered with an agree, understood the idea of adding them in a reasonable way, the way the users could get benefit from not the opposite. The survey shows that if the unformal colour was added to the environment in the right quantity and placement, most of them respondents would agree on the statement.

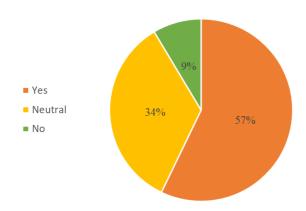


Figure 13 – Nineth Survey Question

The last question was distributed to know the opinion of the users among using furniture with circular lines and curved shapes instead of the traditional straight lines and geometrical shapes used in almost all classrooms. At the top, in Figure 13 it is clear that most of the users would like the idea of transforming the typical furniture into new, modern furniture as a

change. A student in Sheffield Hallam University in England who agrees says: "It would be such a beautiful change, smooth and curved surfaces gives better relaxation vibes, which helps to adapt rather than dealing with sharp edges and ordinary shapes." In contrast, 9% disagrees with using furniture with curved shapes, as a professor from University of Sharjah says: "It won't be as functional as the traditional or the furniture we are used to." In the other hand, a student who studies in Concordia University of Edmonton in Canada who answered with a neutral, had a different opinion that said: "Curved furniture would take classroom's interior design to a new level, but if it was placed with the traditional furniture to create balance. It would have a better effect." The last question's result is a change to the furniture the users are used to would be an extraordinary convert, keeping in mind designing them in a functional way without it being too curvy or in a way that it would not alienate the users.

### 5. Conclusion

To conclude, this research paper clarified the role of interior design in educational institutions and its importance, while it made the centre of its attention the lack of care it gets these days comparing to other fields. It gathered information about the importance of interior design and its relationship to educational institutions. Furthermore, it distributed the challenges and approached solutions that the research got to know the main users of educational institute, professors and students, their opinion and their reason why about them. Due to the knowledge this research provides, the result concludes in that interior design in educational institutions shall get more attention, educational institutions builders should issue a specialized interior designer, also interior designers should focus more on their creativity and out of the box thinking while designing these kind of institutes instead of taking the traditional and ordinary way. The officials and interior designers could get benefit from the solutions approached if studied them well in the right quantity and placement, since it got almost all the respondents of the survey agreement. When the right interior design, professors and students gets

motivation, which in its turn it increases the productivity, the acceptance of the knowledge, and the raise of the country. Interior design plays a massive role, one simple movement can motivate an entire generation, one wrong addition it can lead to distribution of a generation which interiors can avoid by following the user's requirements and needs. The world is in a continuous development, it is the time to shatter the old, traditional, basic interior design in educational institutes that the society is used to. The users are changing, so shall their environment!

#### 5.1 Recommendations

After the literature review and the survey analysis, this research distributed several approached solutions like 1. Extending the wall height in classrooms from the usual three metres heights to four-five metres height. 2. Thinking out of the box as an interior designer while designing a classroom for example using curved furniture but keeping it functional. 3. Going beyond the traditional used colours in educational institutes by adding an additional vital colour in limits. 4. Building educational institutions in strategic location so it can be surrounded with beautiful views or adding landscapes around the institute, especially the landscapes. 5. Using glass material for at least one wall of the classroom to get sunlight into the classroom as much as possible which helps the users in many ways as said before, beside it helps using less electricity, and it increases the level of sustainability in the institute, since the glass is sustainable and recyclable. 6. Placing interior plants into the design of the classroom while keeping in mind the quantity and the placement since it may distribute the users. Furthermore, there are lots of interior design solutions that can be done in educational institutions rather than the ones discussed in this research.

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