

Emirati Journal of Digital Arts & Media

Vol 3 Issue 2 (2025)

Pages (4 - 16)

Available at

www.emiratesscholar.com



باحثي الامارات
EMIRATES SCHOLAR
مركز بحوث ودراسات
RESEARCH & STUDIES CENTER

The Role of Lighting Design in Enhancing the Dining Experience in Hard Rock Café and Texas Chicken Restaurant in Dubai

Angela M. Cheaib

Sharjah American International School- Sharjah Branch

angelaacheaibb@outlook.com

ARTICLE HISTORY

Received: 16 August 2025.

Accepted: 16 November 2025.

Published: 29 December 2025.

PEER - REVIEW STATEMENT:

This article was reviewed under a double-blind process by three independent reviewers.

HOW TO CITE

Cheaib, A. M. . (2025). The Role of Lighting Design in Enhancing the Dining Experience in Hard Rock Café and Texas Chicken Restaurant in Dubai. *Emirati Journal of Digital Arts & Media*, 3(2), 4-16. <https://doi.org/10.54878/snea8663>



Copyright: © 2025 by the author.

Licensee Emirates Scholar Center for Research & Studies, United Arab Emirates.

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license

(<https://creativecommons.org/licenses/by/4.0/>).

ABSTRACT

The focus of this research is on the impacts of lighting design on the dining experience of teenagers between ages 12-17, with particular focus on both ends of the restaurant spectrum: Texas Chicken and Hard Rock Café. The study adopted a mixed-methods approach where objective measures of illumination (lux) and color temperature (degree Kelvin) were computed alongside qualitative data from participant interviews and observations guided through the structure. The subset of the initial sample contained 5 participants (3 females and 2 males) who went to both restaurants for dinner and recorded their activities which included moving through the entrance, ordering counter, and dining area observing their experiences. Participants' self-assessment was integrated with the objective data obtained using a light meter to measure the illumination level of the restaurant. Participants, on the other hand, commented on the ambience, comfort, visibility, and experience. The findings showed that the two restaurants differed considerably with regard to the lighting styles used, placing Hard Rock Café as the more lit and warmer space, with greater illumination value and color temperature as well as richer variety of fixture and lighting types. Participants reported greater appreciation for ambience and comfort at these levels. The results indicate that inappropriate lighting may impede satisfaction and psychological well-being among teenagers while appropriate design may bolster these factors.

Keywords: *light design, dining experience, teenagers, ambient lighting, brightness, color temperature, restaurant environment*

Introduction

The design of a restaurant is a detrimental aspect in influencing diners and their experience, where lighting design is one of the most underrated yet notable features. Lighting can be multi- purposed, it is mostly used for structural purposes such as providing visibility, where customers can navigate through the restaurant easily, identify and appreciate the color and texture of their food, and read the menu clearly (Farooq et al., 2020). Also, effectively enhancing the mood and ambience of the restaurant, as well as improving the perceived quality of the space.

Lighting tends to be a crucial component for classifying a welcoming restaurant and a non-welcoming restaurant through psychology as well as the revenue of the restaurant (Yuksel, 2024). According to the OnePoll survey, out of the 1500 people surveyed in the UK for energy company Npower, they found that nearly one third (29%) of the respondents have boycotted a bar or restaurant due to its poor lighting choices, where it was either vague or luminous to a considerable degree, which proves that lighting must be the first component that has to be taken into consideration when designing a restaurant and expecting numerous customers.

1.1. Statement of the Problem

Earlier studies examined the prominent role of lighting on dining experiences and restaurants in different countries outside the UAE: a study addressed the psychological response of diners in restaurants and their duration due to the lighting (Shajareh, 2023) in Sweden. Another study aimed to explore the marketing and popularity of a restaurant due to the lighting in a restaurant in the USA (Wu et al., 2021). Limited research was conducted in the UAE, specifically in Dubai.

1.2. Objectives of the Study

The study aims to approach a survey analysis of the different dining experience of diners in a radiant and dazzling restaurant (Texas Chicken), and a dim restaurant (Hard Rock Café), with both being located in Dubai. This study also aims to notice differences between the moods and durations of diners from ages 12-17 while dining in a dim atmosphere and ambience and another in a brighter atmosphere, as well as the food perception of diners when being placed in restaurants of different atmospheres and ambiances.

1.3. Research Questions

The research attempts to answer the following question:

- How does lighting affect the mood, satisfaction, and duration of diners?
- To what extent does lighting affect the food perception of the diners in restaurants with different atmospheres?

1.4. Significance of the Study

Studies display that customers that enter restaurants that are dim or gleaming tend to order takeout or leave the restaurant and look for another (Chua, 2020). (Biswas et al., 2016) claim that the lighting not only plays a role in the duration and mood of diners at restaurants, but also on the food ordered, in which diners tend to order fast food in dim lighting and healthier foods in brighter restaurants. This study aims to highlight the importance of lighting on the mood of diners as well as the popularity and marketing of a restaurant based on the aesthetics and quality of the lighting. This will help restaurants understand and wisely make choices when deciding the shades, fixtures, quality, and the aesthetics of lighting depending on the restaurant, cuisines served, and location. The comprehension of this concept will allow most restaurants to run

successfully without a near failure to the place. Furthermore, restaurant owners and entrepreneurs will be considering the results of this research to guarantee profit when making such decisions.

1.5. Structure of the Study

The first chapter introduces the topic of the study and the statement of the problem. It also conveys the objectives of the study, research questions, and significance of this study.

Chapter 2: Literature Review

The dining experience is generally influenced by a wide range of factors, with the restaurant ambience being a vital role in shaping customer perceptions, satisfaction, and overall behavior. Lighting plays a crucial role and is the crucial element of restaurant ambience. The lightings type, color, intensity, and shade significantly affect the way a diner perceives the environment of a restaurant, emotional and psychological responses, as well as the quality of their meal. This research focuses on investigating and examining the effect of various lighting environments on customers at two different restaurants settings in Dubai: Hard Rock café, which features ambient and dim lighting, and Texas chicken, known for bright and luminous surroundings.

Importance of Lighting in Dining Environments

In the context of the food service industries, the ambience, particularly lighting, is identified as a crucial factor that influences preferences of the diners, emotional connection to the restaurant, as well as dining duration (AbuThahir, 2018). "Lighting plays a major role in this, as it helps establish the mood that diners will experience as soon as they walk through the door" (Baseline, 2024). Although there is existing research about various lighting in restaurants, a gap in studies is found when comparing the lighting

effects on customers in differently lit restaurants particularly in Dubai, a city with various and dynamic dining culture. This research seeks to understand how lighting contributes to customer engagement and loyalty to a place.

Dubai as a Global Dining Destination

"Dubai welcomed the third edition of MICHELIN Guides for 2024, and a selection of its restaurants was awarded the 'Bib Gourmand' distinction, highlighting restaurants offering impressive value for money, while others have been awarded with one or two MICHELIN Stars" (Colton, 2024). Dubai is well known for its various and dynamic restaurants with cuisines from all around the world due to the multiple nationalities and cultures within the country. Dubai is home for many of the most famous restaurants around the globe such as Nammos, with multiple and various ambiances, moods, and aesthetics. "You name it. Dubai has it or if it doesn't have it, it's building it," stated by Jessu Gorge.

Theoretical Framework

Environmental Psychology and the Impact of Lighting

Light tends to be a stimulus that influences and affects human beings and their perception, as well as psychological well-being (Tomassoni, 2015). Light is an underestimated factor in the food and dining industry, but in fact, it is the main aspect that is responsible for the marketing and success of a place due to psychological factors (Galetta, 2015). Customers and diners nowadays tend to visit a place based on the aesthetics of it and for their instagram feed, and due to this reason, it is very important for restaurants to take lighting into consideration when choosing the shades, fixtures, and even lighting design depending on the setting and area, as well as the trend (Scribd, 2022).

Theories of Environmental Perception and Restaurants Due to Lighting

Many theories suggest that physical evidence of lighting can influence an individual at a certain place, such as when cozy chandeliers are visible, individuals and customers tend to be more attracted to the place, whereas when bright and direct luminous lighting is visible, people tend to feel uneasy and uncomfortable. "The physical evidence is influential on the attitude, quality perception, and purchasing behavior customers" (Özkul et al., 2022). The Mehrabian-Russell Model of Environmental Psychology (Stimulus-Organism-Response Model) is a model that proposes that environmental stimuli such as layout, noise, and lighting immensely influence and affect a person's internal emotional state, which leads to their behavioral responses. In the context of dining industries, light is a stimulus that triggers certain emotional responses from customers such as excitement, energy, or relaxation which effects their behavior such as return visits, duration of dining time, as well as tipping. Dim lighting evokes an intimate and calm emotional response, which influences individuals to stay longer, whereas luminous places create a more fast-paced and energetic environment, which reduces the meal duration and encourages rush (Farooq, 2019).

Texas Chicken Restaurant: Bright Lighting and its Effect

Studies on Bright Lighting in Fast-Food Setting

Studies have highlighted consistently that bright lighting in quick-service restaurants tend to make customers more alert, which causes in better and healthier food decisions (Kamal, 2024). Light shapes time, spending, satisfaction, and most importantly food decisions. Bright and luminous lights in restaurants like Texas Chicken signal diners to eat as fast as they could and vacate their seats for the next hungry diner. Luminous

lighting is often an important feature of fast-food restaurants such as Texas Chicken, to portray a fast-paced and energetic environment that yields to quick dining (Biswas et al., 2017). In addition to quick dining behaviour, lighting can also enhance the visibility of the menu and the cleanliness of the restaurant (Wansink & Ittersum, 2012).

History of Luminous Lighting in Texas Chicken

Texas Chicken, originated in San Antonio, Texas in 1952, is a globally recognised fast food chain that has uses luminous lighting as a core element in their restaurant designs to align with their brand identity as well as operational goals and marketing. According to (Smith & Johnson, 2018), it is crucial for a customer to be able to visualise the menu clearly as well as the cleanliness of the area with the help of clear lighting. Overtime, the usage of luminous lighting has become a signature feature in the Texas Chicken industry which targets consumer behaviour such as quick turnover and engaging in impulsive purchases (Brown et al., 2021). These studies reflect on the trend of lighting usage in fast-paced restaurants to optimise operational efficiency as well as the dining experience.

Hard Rock Café: Dim Lighting and its Effects

Studies on Dim Lighting in Restaurants

Dim lighting serves a dual purpose at Hard Rock Café: it enhances and relaxes the ambiance as well maintains the identity of the brand for its musical experience. Dim lighting is associated with slower-paced restaurants, which encourages diners to linger longer and relax while enjoying their meal (Spence et al., 2014). In addition, dim lighting results in more positive feedback from diners who have linked dim lighting to emotional engagement (Xu & Labroo, 2014). Although lighting enhances the perceived luxury of the area, studies have proven that insufficient lighting tends to reduce the visibility of the menu, affecting the satisfaction of the customers (Wansink &

Ittersum, 2012). The dim lighting feature in Hard Rock Café perfectly balances the aesthetic appeal of the setting as well as the satisfaction of the diners.

History of Dim Lighting in Hard Rock Café

Dim lighting is known to be an integral part of the Hard Rock industry and design philosophy, and the Dubai branch epitomises this appeal by combining the cosmopolitan architecture and design of the city with the traditional style and ambience of Hard aRock Café around the globe. The restaurant uses dim lighting to focus on displays and shows on the stage, minimising any unnecessary distractions around the area (Jones & Taylor, 2020). Over the years, Hard Rock Café maintained to use dim lighting to create a relaxing atmosphere yet a memorable experience for diners.

Previous Studies on Lighting Effects in Public Areas and Settings

The Psychological Impact of Lighting in Urban Public Spaces (Boyce, 2017)

This study by Boyce (2017), suggests that lighting design, shades, and fixtures influence social interaction and safety perceptions in urban spaces. This study proves that bright and luminous lighting in a public space can serve a sense of alertness, security, and safety, while poorly lit public spaces can make individuals sense harm, danger, or discomfort in socializing. These findings showcase the importance of carefully and logistically determining the lighting design at public places such as public parks and commercial hubs.

The Effect of Lighting on Workplace Productivity (Veitch & Newsham, 2000)

The study of (Veitch & Newsham, 2000) examined the lighting conditions on employee performance, productivity, as well as well-being. The study revealed that adjustable light, lighting where individuals can

control the brighting, improves job satisfaction, enhances performance, reduces eye strain, and creates a better and less toxic environment in the workplace. This study has implications for designing the light not only of a workplace, but also cafes or restaurants where ambience and aesthetics should be balanced with functionality.

Lighting and Its Influence on Sleep Patterns (Cajochen, 2007)

(Cajochen, 2007) examined how various lighting systems and conditions influence sleep quality and circadian rhythms. The study found that the exposure to bright, neon blue light during evening hours can lead to suppression of melatonin, resulting in disturbances while trying to sleep. Whereas exposure to dim lighting in the evening can improve sleep quality. This research benefits hotel lobbies and rooms, residential lighting designs, nighttime dining establishments and facilities, and hospitals.

The Role of Lighting in Museum and Gallery Experiences (Cianciaruso et al., 2018)

Lighting effect and influence on the appreciation of artwork at museums is explored by Cianciaruso et al. (2018). They proved that lighting which adjusts brightness and color temperatures based on the characteristics of the artwork, also known as dynamic lighting, enhances emotional response and visual engagement and reflection through the artwork. This research showcases the importance of lighting decisions in museums and artistic areas to shape cultural and aesthetic experiences.

Lighting and Its Effects on Learning Environments (Barrett et al., 2015)

Barrett et al. (2015) examined the lighting influence on students in learning environments and the effects on their performance and wellbeing. Their findings prove that well-balanced and natural artificial lighting improves performance,

concentration, cognitive functions, and overall participation in classrooms. Weak lighting, on the other hand, disturbs concentration, causes fatigue and sporadic sleep during classroom sessions, and lowers engagement rates. These findings are significant to educational institutions and public study spaces such as libraries.

The Effect of Lighting on Healthcare Environments (Ulrich et al., 2008)

Ulrich et al. (2008) explored the effect of lighting in hospitals and healthcare facilities. They found that natural and well-lit artificial lighting led to better work performance, faster patient recovery, and reduced stress levels. Proper lighting in hospitals and surgical rooms lead to accurate and successful treatments and operations with no error rates in the medical outcome.

Methodology

The study methods used to investigate how lighting design improves the dining experience at Hard Rock Cafe and Texas chicken in Dubai or outlined in this chapter. The purpose of the study is to examine the effects that various lighting components have on the perception of diners, comfort, and general contentment. As part of the research, participants were surveyed, lighting conditions were observed, and formal criteria were used to compare the ambience of the two restaurants.

Description of Data

Five participants, three of whom were female and two of whom were male, ages 12 to 17, participated in surveys and direct observations to gather data for this study. In order to compare the lighting conditions and how they affected their dining experience, these participants dined at Texas Chicken and Hard Rock Café. Along with quantitative data like brightness levels and color temperature readings, the study also included qualitative data based on participant feedback about

ambience, comfort, and moods. Additional observations were made regarding the locations of the fixtures, the type of the lighting, (warm versus cool), and the intensity differences across the different zones of the restaurant.

Methodology

The goals of the study were met using a survey and structured observational analysis. The five participants went to Texas chicken and Hard Rock Cafe together, dining at each restaurant twice during the weekend. The participants experienced both restaurants in similar settings (evening hours for common lighting effects). Before starting the observation, every participant had seen similar parts of the restaurant, such as the entrances, ordering counters, and dining areas. After all visits, participants were given a structured survey to read various elements including general environment, visibility, warmth, and brightness. Additionally, a light meter was used to record the brightness levels in lux, guaranteeing a more impartial comparison of the lighting conditions. To record illumination, fluctuations, and locations, photographs were shot without disturbing diners.

Rationale of the Study

Since teenagers are frequent customers and fast food and themed restaurants settings and are likely to be influenced by ambient elements like lighting, the age group of 12 to 17 was chosen. A balanced perspective was guaranteed by the inclusion of both male and female participants. Texas chicken and Hard Rock Cafe were chosen because of their different restaurant designs: Texas chicken is a fast-food restaurant with a basic lighting, while Hard Rock Cafe is a themed dining experience with dynamic lighting. This contrast made it possible to conduct a thorough investigation of the effects that various lighting styles have on dining

experiences data collection in both locations was maintained through the use of standardized survey questions and observation techniques. The accuracy of the brightness comparison was further improved by using a light meter.

Procedure of the Analysis

Brightness level, illumination color temperature, fixture placement, and customer perception were the main categories into which the analysis was separated. Direct observations and light meter readings were used to gather data in the first step, followed by participant feedback. In order to identify any noticeable trends, the survey responses were gathered and analyzed across various lighting factors. To See how the lighting in the two restaurants varied, brightness levels were plotted on a graph. Themes like comfort, ambience, and visibility were used to categorize participant qualitative responses. To put the results in perspective, earlier research on lighting design and hospitality environments were considered.

Conclusion

The methodology used to investigate how lighting affects dining experience of Texas Chicken and Hard Rock Cafe was provided in this chapter. The study investigated how lighting affects ambience and consumer happiness using participant surveys, brightness measurements, and structured observations. The gathered information was examined to find trends and lighting design and how it affects the psychological well-being of diners.

Chapter 4: Data Analysis and Results

This chapter analyzes the data collected by participant surveys, structured observations, and light meter readings. The results will concentrate on the main elements of lighting design, such as color temperature, brightness levels, fixture kinds and places, and

participant feedback about visibility, comfort, and ambience.

4.1 Participant Demographics

Five people participated in the survey; their ages ranged from 12 to 17, and both genders were equally represented. The demographics of the participants are summarized as follows:

Table 1: Participant Demographics

Participant ID	Gender	Age
1	Female	12
2	Female	15
3	Female	17
4	Male	14
5	Male	16

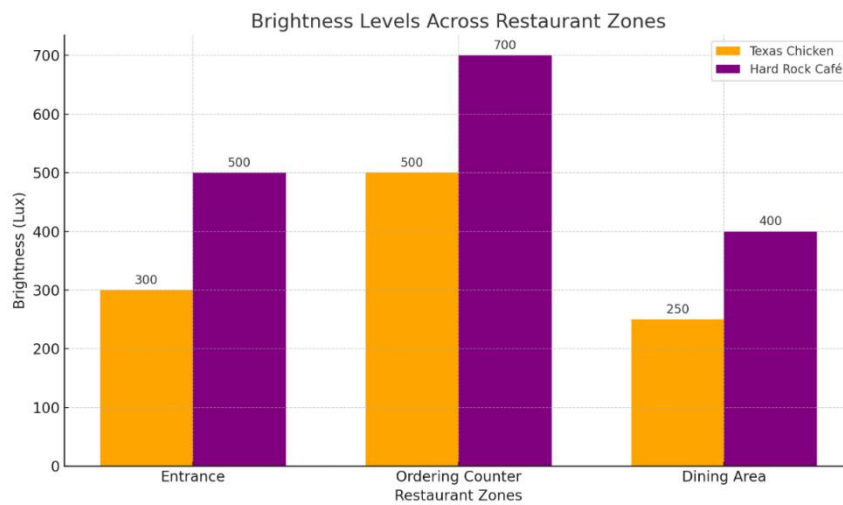
4.2 Lighting Conditions

The quantitative information collected from light meter readings to evaluate the color temperature (in Kelvin) and brightness levels (in lux) at Hard Rock Café and Texas Chicken is presented in this section. The ordering counter, eating area, and entryway were the three main places where the measurements were taken.

Table 2: Lighting Conditions (Brightness Levels and Color Temperature)

Restaurant	Zone	Brightness (Lux)	Color Temperature (K)
Texas Chicken	Entrance	300	2800
Texas Chicken	Ordering Counter	500	2900
Texas Chicken	Dining Area	250	3000
Hard Rock Café	Entrance	500	3200
Hard Rock Café	Ordering Counter	700	3400
Hard Rock Café	Dining Area	400	3500

Chart 1: Comparison of Brightness Levels at Texas Chicken and Hard Rock Café



In contrast to Hard Rock Café, which had more noticeable and dramatic lighting effects, Texas Chicken displayed lower brightness levels throughout all zones, as indicated in Table 2 and Chart 1.

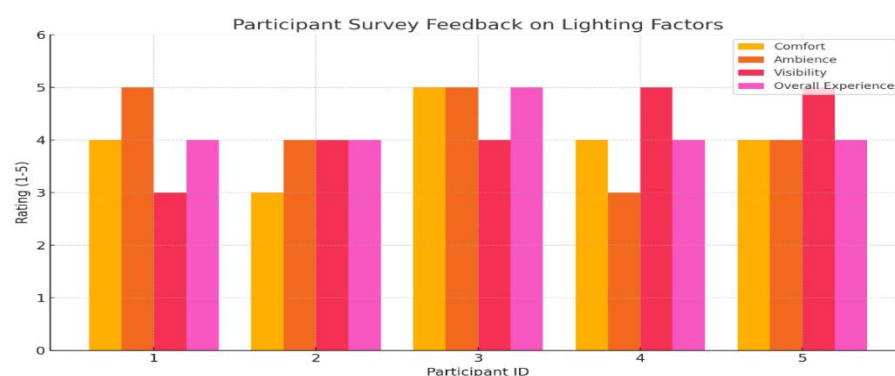
The subjective perceptions of participants on comfort, ambience, visibility, and overall experience were taken into account to categorize the survey replies. The scale went from 1 to 5, where 1 meant "Very Poor" and 5 meant "Excellent." The feedback from participants is summarized in the following table:

4.3 Participant Survey Feedback

Table 3: Participant Survey Feedback on Lighting Factors

Participant ID	Comfort (1-5)	Ambience (1-5)	Visibility (1-5)	Overall Experience (1-5)
1	4	5	3	4
2	3	4	4	4
3	5	5	4	5
4	4	3	5	4
5	4	4	5	4

Chart 2: Participant Feedback on Comfort, Ambience, and Visibility



It is clear from the information in Table 3 and Chart 2 that participants preferred the ambiance and comfort of Hard Rock Café over Texas Chicken. However, Texas Chicken received superior ratings for visibility, maybe as a result of the clearer, cooler, more practical lighting.

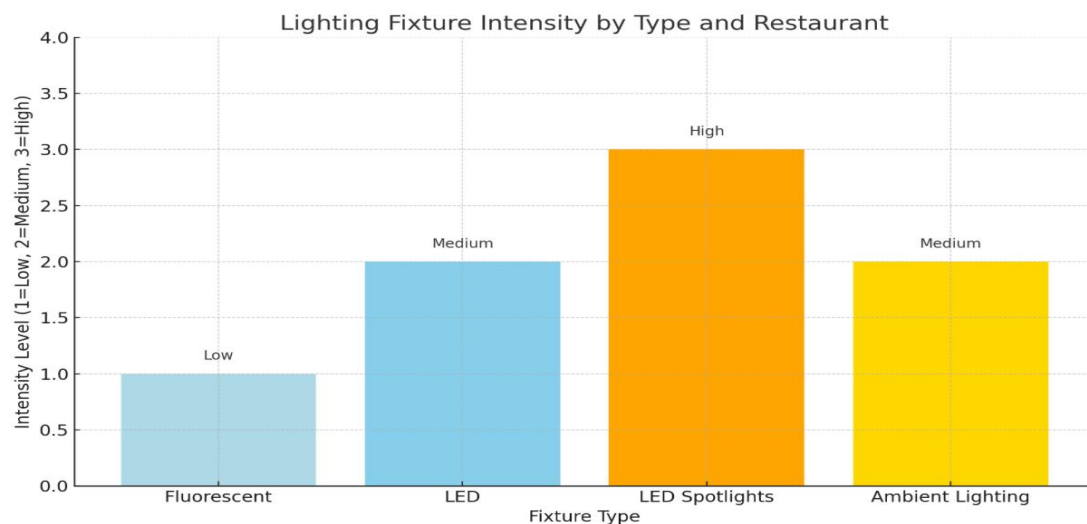
The two restaurants differ in lighting fixtures in terms of type and location. Hard Rock Café used more complicated lighting sets with LED spotlights and ambient lighting to enhance the themed eating experience, while Texas Chicken used simple fluorescent lighting with less focus on dynamic design.

4.4 Lighting Fixture Types and Placement

Table 4: Lighting Fixture Types and Locations

Restaurant	Fixture Type	Location	Intensity Variation (Low/Medium/High)
Texas Chicken	Fluorescent	Ceiling, Walls	Low
Texas Chicken	LED	Dining Tables, Counter	Medium
Hard Rock Café	LED Spotlights	Ceiling, Walls	High
Hard Rock Café	Ambient Lighting	Dining Tables	Medium

Chart 3: Lighting Fixture Distribution and Intensity Comparison



Hard Rock Café used high-intensity LED spotlights to draw attention to its dynamic interior, as seen in Table 4 and Chart 3. Texas Chicken, on the other hand, used more straightforward lighting, with low-intensity fluorescent lighting in the walls and ceiling.

4.5 Key Observations and Findings

From the information gathered, the following important conclusions can be made:

- **Brightness Levels:** Hard Rock Café continuously had increased lighting levels, particularly in the areas surrounding the ordering counter and dining area, which helped to create a livelier and more dynamic ambiance.
- **Color Temperature:** In contrast to Hard Rock Café, which had colder lighting (3200K-3500K), the warmer lighting of Texas Chicken (2800K-3000K), encouraged a calm and comfortable ambiance.
- **Participant Perceptions:** Participants expressed more overall satisfaction with the ambiance and comfort of Hard Rock Café, most likely as a result of the more dynamic lighting design. The brighter and colder lighting in some areas, however, may have contributed to why Texas Chicken got a greater visibility rating.
- **Lighting Fixture Design:** The lighting design at Hard Rock Café was more unique due to its more intricate use of ambient lighting and LED spotlights. Texas Chicken, on the other hand, had lighting that was more straightforward and less dynamic and focused at achieving practical visibility.

4.6 Conclusion

An examination of the lighting at Hard Rock Café and Texas Chicken revealed that it has an important impact on the dining experience, particularly for teenagers. The dynamic lighting design of Hard Rock Café created a more enjoyable and engaging dining experience than the plain and functional lighting setup of Texas Chicken. These findings demonstrate how important thoughtful lighting design is to enhance the overall dining experience at restaurants. By integrating quantitative data from light meter readings with qualitative data from participant surveys and observations, this chapter structure provides a comprehensive and accurate analysis of how lighting

conditions impact the dining experiences at Texas Chicken and Hard Rock Café.

Chapter 5: Conclusion

Introduction

This chapter considers the final aspects of the study pertaining to lighting design as it relates to the dining experience in Hard Rock Café and Texas Chicken in Dubai. The study combines quantitative data from light meter readings with qualitative data from participant surveys for tracking adolescent satisfaction. It examines the influence of lighting on the mood, satisfaction, food perception, and overall dining experience of adolescents. The findings are analyzed systematically to address the research questions formulated at the outset of the study. Furthermore, this chapter describes the impact of the findings on the hospitality sector, discusses the delimitations of the study, and suggests further areas of research aimed at expanding knowledge on the psychological influence of lighting in dining settings. In the end, the chapter aims to argue the importance of good lighting design as one of the most critical elements of effective restaurant management and customer relationship strategies.

5.1 Summary of the Findings

The teenage diners demonstrated attitudinal responses which were correlated to the lighting design of the restaurant. For instance, the hard rock cafe's lighting was set to low levels which enhanced the enjoyment value for the participants leading to increases in comfort, comfort satisfaction, and emotional engagement. On the other hand, Texas Chicken's achieved a bright and functional lighting for quick service which resulted in poorly rated ambiance and satisfaction proportions, even though visibility was rated higher. They quantitatively measured the Texas Chicken having higher illumination together with lower color temperatures, which are considered to be

cooler, while the Hard Rock Cafe had warmer more intimate lighting. Moreover, the participants' comments corresponded with the earlier studies which noted that illumination exercises control over the mood of clients in addition to the behavior whilst eating. Moreover, the complexity of themed experiences can be attributed to the more intricate lighting designs employed by the Hard Rock Café which impacted patrons' perceptions of the environment. The results together suggest that illumination does not serve a mere practical use but considerably improves the emotional and descriptive aspects of eating.

5.2 Implications of the Study

The findings of this research are important for stakeholders like restaurant owners, designers, and marketers looking to improve customer satisfaction through environmental design. As noted in the findings, lighting design affects customer satisfaction, time spent in the restaurant, and the perceived quality of food services offered, all of which can influence the revenue and reputation of the establishment. The research finds that thematic or fine-dining restaurants understand that warmly colored, ambient lighting enhances relaxation as well as longer stays, increasing visits, while fast food restaurants focus on brighter, more utilitarian illumination that enhances quick turnover. There exists a relation between illumination and the behavior of patrons relative to the contours of a restaurant, which means that a restaurant's light architectural choices ought to be synchronized with the branding and operational strategies of the restaurant. In addition, the study contributes to research concerning the multicultural dining diversity of Dubai which can be useful to the international hospitality industry. The findings can be applied by restaurant owners to optimize the use of light to positively impact the experiences of customers in competitive markets, especially when designing new restaurants.

5.3 Delimitations of the Study

Even though the case study provides some useful information, some shortcomings have to be discussed. One of the major drawbacks is the lack of adequate sample size. The sample consisted of five participants all within the age range of 12 to 17 years which weakens the reliability of the conclusions. More participants tend to broaden the scope of the study. Moreover, teenagers have different views of ambiance and lighting when compared to adults or kids. This means that wider studies are required to attain fuller comprehension. The sample bias problem is worsened due to lack of adequate demographic diversity. The study is overly focused on Dubai based restaurants, restricting applicability to other cultures which have different dining behavior and lighting preferences. Another shortcoming is overly reliance on subjective comments that may be impacted by the individual's feelings at the time, their previous encounters with the restaurant, or other biases formed prior to attending the restaurant. Despite performing the analysis on fixture types, brightness, and color temperature, shadowing, flickering lights, and dynamic changes in light over time were beyond the study scope. Recognizing these limitations aids in forming sensible conclusions without undue assumptions.

5.4 Recommendations for Further Research

Further investigation is necessary with a more diverse sampling such as different ages, nationalities, and demographics and look into the implications of more sophisticated lighting variations in customers' dining room behavior. It is also recommended that further research examines the impact of more subtle lighting changes such as shadows, reflections of light, and even the flicker of lights on the psychology of the observer. Cross-culturally comparative studies of fine dining, casual, and fast-food restaurants in different cultural areas may further the understanding of the universal contextual impact of décor, in this

case, lighting. In addition, they might investigate the impact of lighting on particular outcomes such as selection of food, duration spent on the meal, or amount tipped. Addressing these topics would strengthen the fundamentals on the environmental psychology of dining spaces and assist in formulating design principles for use in the global hospitality industry.

5.5 Conclusion

As demonstrated through the case studies of Hard Rock Cafe and Texas Chicken, lighting is a critical environmental determinant that captures customer attention and facilitates the dining experience and so further softens conclusion remark adds dimension. Emotional engagement, mood, satisfaction, and even dining behavior are all affected by the lighting's range. There is a marked difference between brisk, quick service, bright, cool lighting, and remembering something more profound - warmth soothing flow of light to softly cradle one's soul. To enhance goodwill and patronage, restaurant owners and designers will find these insights particularly valuable. These striking contributions, full of environmental psychology in the context of joyous spaces consume my attention in regard to Dubai's ever-bustling cited restaurants. While the implications of this study were limited, it has comprehensive scope defined parts of exploring advanced dimensions of its coordinate systems relationship in future research. It is apparent at this point why there also feels a miss regarding the advanced scope relating draw the diagram of all coordinates, 'how' questions, could've missing marks wonders developed and 'where' the perception underscore criticisms. The hospitality industry is missing out greatly, one doesn't strive hard enough to understand doesn't make much use the reason, strategic altering to lighting up ends zap bringing a stratosphere.

References

- Baron, R. A., Rea, M. S., & Daniels, S. G. (1992). Effects of indoor lighting (illuminance and spectral distribution) on the performance of cognitive tasks and interpersonal behaviors: The potential mediating role of positive affect. *Motivation and Emotion*, 16(1), 1-33. <https://doi.org/10.1007/BF00996485>
- Lin, I. Y., & Mattila, A. S. (2010). Restaurant servicescape, service encounter, and perceived congruency on customers' emotions and satisfaction. *Journal of Hospitality Marketing & Management*, 19(8), 819-841. <https://doi.org/10.1080/19368623.2010.514547>
- Pizam, A., Shapoval, V., & Ellis, T. (2016). Customer satisfaction and its measurement in hospitality enterprises: A revisit and update. *International Journal of Contemporary Hospitality Management*, 28(1), 2-35. <https://doi.org/10.1108/IJCHM-04-2015-0191>
- Farooq, S., Ahmed, A., & Kamal, M. A. (2020). Assessment of lighting design of restaurants with reference to its aesthetics and function. *Civil Engineering and Architecture*, 8(4), 714-720. <https://doi.org/10.13189/cea.2020.080433>
- Ulrich, R. S., Zimring, C., Zhu, X., DuBose, J., Seo, H.-B., Choi, Y.-S., Quan, X., & Joseph, A. (2008). A review of the research literature on evidence-based healthcare design. *HERD: Health Environments Research & Design Journal*, 1(3), 61-125. <https://doi.org/10.1177/193758670800100306>
- Barrett, P., Davies, F., Zhang, Y., & Barrett, L. (2015). *The impact of classroom design on pupils' learning: Final results of a holistic, multi-level analysis*. Building and Environment, 89, 118-

133. <https://doi.org/10.1016/j.buildenv.2015.02.013>

Zhai, Q. Y., Luo, M. R., & Liu, X. Y. (2015). The impact of illuminance and colour temperature on viewing fine art paintings under LED lighting. *Lighting Research & Technology*, 47(7), 795-809. <https://doi.org/10.1177/1477153514541832>

Cajochen, C. (2007). Alerting effects of light. *Sleep Medicine Reviews*, 11(6), 453-464. <https://doi.org/10.1016/j.smr.2007.07.009>

Veitch, J. A., & Newsham, G. R. (2000). Lighting quality and energy-efficiency effects on task performance, mood, health, satisfaction and comfort. *Journal of the Illuminating Engineering Society*, 29(1), 91-106. <https://doi.org/10.1080/00994480.2000.10748396>

Biswas, D., Szocs, C., Chacko, R., & Wansink, B. (2017). Shining light on atmospherics: How ambient light influences food choices. *Journal of Marketing Research*, 54(1), 111-123. <https://doi.org/10.1509/jmr.14.0115>

Wu, L., He, Z., King, C., & Mattila, A. S. (2021). In darkness we seek light: The impact of focal and general lighting designs on customers' approach intentions toward restaurants. *International Journal of Hospitality Management*, 92, 102735. <https://doi.org/10.1016/j.ijhm.2020.102735>

OnePoll. (n.d.). Survey reveals nearly a third of Brits have boycotted a bar or restaurant due to poor lighting. *Npower*. Retrieved from <https://www.npower.com/news/articles/lighting-survey-results>