

Rethinking User Experience in Designing Cafeterias in Semi-Urban Pockets of India

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Abstract

Cafeterias are social gathering public spaces where people enjoy the experience of drinking coffee and tea with some light refreshments. They provide enhanced experience in terms of leisure, art, pleasure and culture. Moreover, human lifestyles, increasing working population and the growing influence of western culture have also increased the demand of cafes across globe in developing nations like India. They are also one of the most sought after architectural spaces. Spaces in Architectural Design are perceived differently by different professionals, designers and architects. It may be a three dimensional entity for some and volume filled with air by others. However, The success of any space depends not only on its design and functionality but also on opportunities provided to its users. Most of the architects take utmost care that minimum standards are met as per national building codes and regulations but didn't emphasize much on users. The main objective of this research is to incorporate user's opinion in the designing process of cafes. It is extremely important to design environments that take into account the largest range of users possible. Understanding user expectations ,their needs and human behavior is extremely crucial. An online survey was conducted that included questionnaire based on Don Norman's three levels of Design. It was an attempt to involve users in the design process of cafes. The major findings obtained from this study maps user's behavioural , emotional , cognitive , social and sensorial needs in cafeterias. The paper thus concludes with interesting insights into rethinking of Architectural Design Process for design of cafes that emphasizes upon user involvement.

Key Words: User Experience, Cafes, Accessibility , Inclusive Design, Architecture

1.Importance and Evolution of cafes

Post pandemic era has encountered significant reduction in public spaces such as parks , gardens , shopping complexes , malls etc as places for sociability (Steigemann, 2017). The cafes thus emerged out to be the safest and affordable spaces for social interaction. They have now become new hotspots where people cherish their moments and memories. Moreover, transformations in economic structures and the rise of middle class have encouraged the growth of café culture in most of the semi-urban pockets of India. The history of café is deeply rooted in the history of Pecevi which reveals that the first café was opened in Tahtakale, Istanbul in the year 1555 during Suleiman's reign.(Yilmaz, Tek& Sozlu, 2017).They aim to enhance coffee drinking experience of its customers by following the coffee roasting process in which they use beans which are sourced from best organic growers around the world. Later, cafés were established in Europe with interesting architecture as well as meeting places (Cleave ,2017). The Germany also started its first coffee house in Bremen in 1673. It expanded further to America in 1792 and a café called Tontine Coffee house was opened up in New York. Later in 1996, Cafe Coffee Day came into limelight and over 1500 locations all over the globe opened up , bringing the convenience of a barista and providing a proper place for the people to interact and socialize.

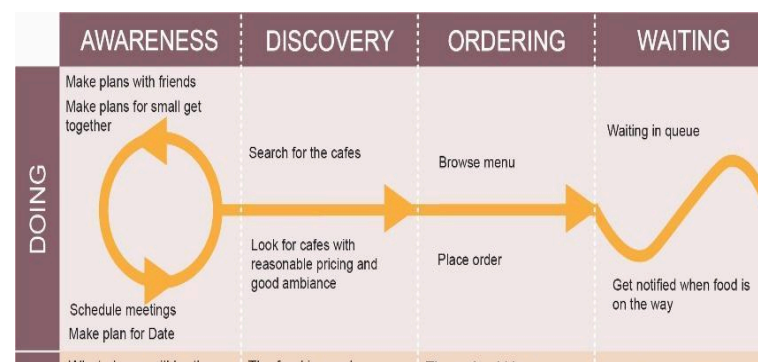
2.Need for the Study

The Journey of cafes as popular public places has focussed more on “coffee drinking experience” in comparison to other experiences of users which includes spatial experience, comfort in ordering food because of proper display of information including menus ,location of toilets, empathy with the users, comfort , affordability , accessibility , inclusivity , memorable atmosphere and much

more. Hence , In this paper , multidimensional needs of the users in terms of behavioral, emotional, sensorial ,cognitive and social response have been examined using both primary and Secondary research. Primary research in the form of an online survey and secondary research in the form of different theories and models proposed by researchers on emotions, behaviour, cognition , sensorial and emotional design have been carried. These parameters formulates the basis of Don Norman's three levels of designs which are applied in user experience studies.These are closely associated with human emotional system (Cheng & Shanat,2020). The Three levels discussed in theory includes Visceral , Behavioral and Reflective Design. Visceral design emphasized on first impression and physical appearance such as form , colour , texture , details etc. It can evoke emotional , cognitive and sensorial responses from users encouraging feelings, attractiveness and pre-consciousness. Behavioral design highlights the functions, performance and usability. It can encourage behavioral and social responses from users. The Reflective design generates meaning and intellectual understanding . These aspects have been elaborated in the paper that emphasize on the enhanced experience of the users and provide stronger foundation for Architectural Design Process of designing cafeterias.

3.Introduction: What is Architectural Design Process?

The process of developing a design for any building or a public space is extremely arduous. It is a blend of art , science , engineering and



economics. Different designers and architects have defined the architectural design process differently. Fraser defines it as a sequential series of linear steps (Fraser, 1972). Jones defines it as selection of the best solution out of numerous other solutions (Jones,1970) whereas Lawson believes that every stage works simultaneously in the design process and there are no steps or sequence involved (Lawson, 1997). Similarly , the conventional architectural design process for designing a café is no different then any other building. However, the diversity in cultures and societies often pose a challenge to the designers and architects.

4. Mapping User Experience in Cafes

Mapping of User Experience or customer journey (Roto,Bragge,Lu &Pacauskas,2021) is extremely important for design of any product , space or service. It gives users pain and gain points that helps in better design solution. Figure 1 shows user journey map that indicates specific human behavior in particular set of situations. These maps helps in visualizing the process users go through to obtain particular objective. Most often the customer journey maps records four aspects which includes actions depicting what a customer is doing at a particular moment. Thinking is another aspect which is recorded while performing a particular action. The feelings attached with the action and thinking are also included. Finally the experience which the feelings, thinking and actions create is of utmost importance in these maps. This process helps professionals such as designers and architects in fulfilling users needs with respect to his experience with the product ,space or a service.

5. Research Methodology

India is a very diverse country with a total population of 139 crores (Census,2021). As per Census 2021, semi-urban areas of India are areas

which have a total population of 10000 and above and less than 1 lakh. Semi- Urban Pockets are found both in rural and urban areas. In rural settings and villages , these are usually found as small towns and as underdeveloped regions within the boundaries of urban settings (Trivedi,1969). Therefore, The study for this paper was carried for 1007 participants in different semi-urban pockets of India to gather a better understanding of users preferences for a café. User-Centered Design (UCD) (Mao,Vredenburg, Smith &Carey, 2005) focuses on developing experiences rather than the more conventional methods of designing a space or a product .(Lai, Honda& Yang,2009) .The user-centered design should be built upon user research and facts rather than on assumptions. For better user experience , it is advisable to follow multiple qualitative and quantitative methods of data collections .

The data for the study carried out in this paper on cafes is also gathered through interviews, online

platforms, surveys, field studies and literature. An online survey was conducted targeting users from the different age groups and with varied backgrounds . Participants received the questionnaire through social media platforms such as whatsapp, facebook, Instagram etc. in the form of google form. Survey focussed on collecting users' inputs on the use of cafeterias . There were total of 15 questions which were asked from users to enquire about their preferences in certain situations as shown in table -1.

The questions in the survey emphasized on understanding the behavioral , social , cognitive , emotional and sensorial responses of users in cafes. It also reflected on important aspects of design and spatial elements that influence users. All the

questions are colour coded. Similar questions are grouped under one colour and the results have been recorded in the chart shown in Figure -2 and 3. For instance questions 14 and 15 are shown in blue colour that targets the social responses of users in a

café. Questions 8 , 9 and 10 explores the spatial quality and design elements that influence users. Rest of the questions explores the behavioural , cognitive and emotional dimensions of users.

Table-1. Questionnaire for online survey

Questionnaire	
1.	Which age- group do you belong ?
2.	Do you like to visit Cafes?
3.	How often do you visit cafes?
4.	On what days do you generally prefer to visit cafes?
5.	How much time do you generally prefer to spend in a café ?
6.	What is the main reason for your frequent visit to your favorite cafe?
7.	Which of the following factors would you like to contribute to if involved in the design process of cafeterias?
8.	Which of the following design elements in cafes elicit your sensorial experiences ?8
9.	What kinds of furniture design forms or spaces do you like the most in cafes?
10.	What kind of cafes do you enjoy the most ?
11.	Do you feel that majority of the cafes are fair enough to provide equal treatment to variety of users? (Equitable)
12.	Do you feel that majority of the cafes can be entered or reached by users with specific needs and impairments?(Accessibility)
13.	Do you feel that majority of the cafes includes human diversity and largest range of users possible?(Inclusivity)
14.	Whose company do you enjoy the most while visiting cafes?
15.	Which of the following activities do you often perform while visiting cafes?

The questions in survey were very carefully designed by taking experts opinions. A number of field visits were carried across different semi-urban pockets to enquire café and restaurant owners about their customer experience. Surprisingly , majority of them haven't considered users's needs while designing process. As a result of which , they face

many problems while dealing with different types of users. Some of them don't have toilets for physically challenged while others lack ramps for wheel chair users. Hence , questions were designed after rigorous discussions with owners , customers and experts.

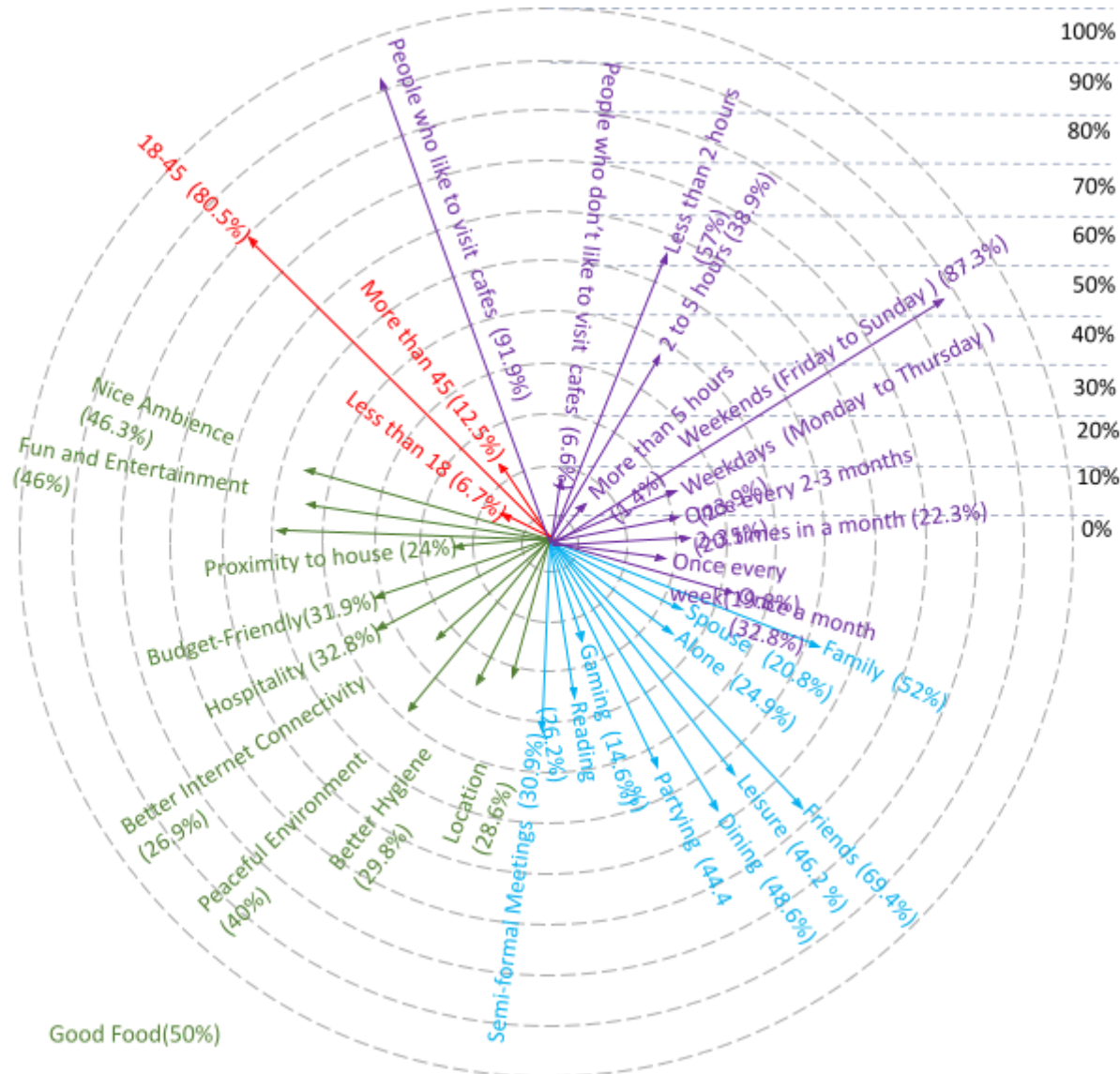


Figure-2. Users responses to survey questions dealing with behavioural and social aspects

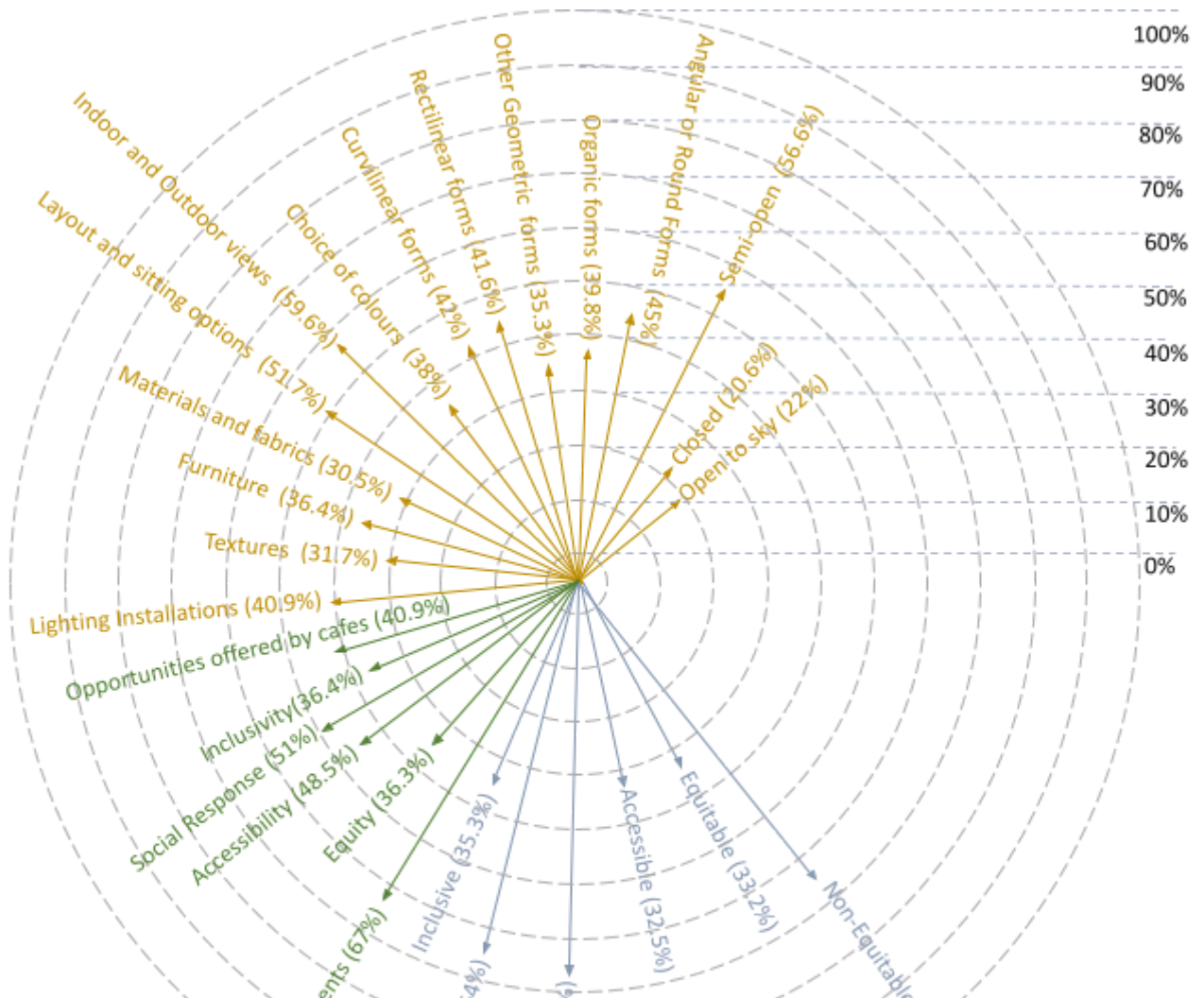


Figure-3. Users responses to survey questions dealing with spatial design and experience.

4. Results

The study gave interesting results .Cafes are one such public places where users from all age groups enjoy visiting. 91.9% of the total people surveyed enjoys visiting cafes whereas a meagre 6.6% of them don't prefer to go. 32.8 % people visits cafes atleast once a month ,19.8% once every week , 22.3 % twice or thrice a month and 20.5% once every 2-3 months.87.3% of people prefer to go at weekends whereas 23.9% prefer to go during weekdays. The study revealed that 80.5 % of the people from age group 18-45 visits the cafeterias most as compared to other age groups.12.5% of users above the age of 45 and 6.7% users below 18 years of age also loves visiting cafes. 57% of the total people surveyed spend less than 2 hours at any café, 38.9% spends 2 to 5 hours and 1.4% spends more than 5 hours. Cafes keep us socially fit and makes us feel more energetic . (Ayalp, Yildirim & Cagatay, 2017). The study revealed that 69.4% users enjoys company of friends at cafes, 52 % enjoys with family members ,20.8% with spouse and 24.9% users enjoys their own company and prefer to go alone. There are a number of activities performed by users in cafes. 48.6% goes for dining , 46.2% for leisure and 44.4% for partying . Celebrations at cafes includes birthdays, anniversaries, retirement parties etc. Reading cafes

are becoming popular in many parts of the world (Nguyen, Han,Sahito& Lam ,2018) People love the concept of enjoying reading with coffee and snacks at their favorite cafes (Chao,2019) .It has been observed that 26.2% of the users visit cafes for reading books , novels and work related matters. It gives them appropriate and peaceful environment to concentrate. It provides them a suitable working environment based on customer work practices(Mimoun &Gruen,2021) along with their favorite cup of coffee and snacks. Cafes are also visited by businessmen for formal discussions and meetings with their clients. Not every businessman can afford his own office space therefore, cafes are best alternatives for such situations. It makes around 30.9% of such users. However , very few users approximately14.6% have also started visiting cafes for gaming. People enjoy popular games like carom board, table tennis , Billiards, football ,pinball, virtual reality video games etc offered by many of the cafes.(Haseloff,2005). Design elements that relates to any kind of gaming thus fascinates users and enhance their experience.(Azouz, Karioh &Lefdaoui,2021) . It is observed that cafes are not only loved by students alone but also users from different occupations such as teachers, businessmen , software engineers, fashion designers , home makers etc. 46 % of the users visits café for fun

and entertainment. 31.9% visits cafés because they are budget friendly. Users not only enjoy the food but the ambience of cafes also refreshes them (Wansink,2006). 50% enjoys good food while 46.3% enjoys the ambience. 40% users visits café as some of these offer peaceful environment. Many of the users i.e.32.8% enjoys the hospitality.24% of the users visits cafes in the vicinity of their house. A meagre percentage of users that is 26.9% also visits because of better Internet Connectivity. 29.8% of users visits cafes having better hygiene.28.6% visits because of prime location. The location may vary from core or far flung areas of the city . Users were enquired about what factors would they like to contribute to if taken their opinions in the design processs of cafes. It came out that customer Satisfaction.(Hanaysha,2016) can be enhanced by improving certain factors such as design elements. Majority of the users that is 67 % showed interest in design elements which also proves the scope of the study. Design is the soul of Architecture and hence design elements are most important for consideration. 51% users want to contribute to aspects of design that deals on improving social responses of the users.48.5 % want to make cafes more accessible ,36.3% want to make them equitable and 36.4% want to make them more inclusive.40.9% believed that there can be immense opportunities which cafes can offer. These percentages gave clues to users expectations from cafes. Each of these factors were then elaborated in the survey and feedbacks from different users were recorded on each one of these. For instance , 56.6% of the users likes café which are semi-open in design, 22% likes cafes open to sky and 20.6% likes closed cafes. Users also provided interesting insights into design components of café as architectural space. 59.6% of the users enjoy corners in café that provides some sort of views which could both be an outdoor or indoor view.

51.7% of the users also carefully notice layout and sitting options depending upon the number of guests. 40.9% also pay attention to lighting fixtures and installations and 38% of them are influenced by choice of colours used in both interior and exterior space. 31.7% of users are also influenced by textures and patterns used in ceiling , walls and floors. 30.5% are being fascinated by materials and fabrics used in cafes. 36.4% of them connects themselves with varied forms of furniture being used. 45% of them prefer round or angular forms of furniture , 42% likes curvilinear forms, 41.6% likes rectilinear forms, 35.3 % likes other geometric forms and 39.8% likes organic forms.

65.3% of users feel that most of the cafes are non-equitable whereas 33.2% feel cafes as equitable. 32.5% believes cafes to be accessible whereas 66.7% feels cafes to be non-accessible. 35.3% of users feels cafes as inclusive whereas 64% feels cafes to be non-inclusive.

5. Discussion

The results obtained from the study gave some significant insights. Cafes that have unique design elements that triggers emotional responses are most frequently visited. Emotions and senses play an important role in humans' ability to comprehend and learn about the environment. Emotions has a profound affect on decision-making , memory and generate meanings (Triberti, 2017). Senses focusses mainly on senses namely sound, touch , smell or taste in connection with real, virtual, or experiential settings (Spence, 2020). Optimistic emotional experiences escalates our interest and make us want to learn more , while pessimistic experiences discourage us and keep us away from what we can achieve. According to Plutchik's Psycho-Evolutionary Theory of Emotions , there are 8 basic emotions which are Anger , Disgust , Fear , Sadness, Anticipation , Joy , Surprise and

Trust. He believed that blending these basic emotions will create varied levels of emotional responses from users. Hence, this wheel of emotions assist designers and architects to introduce spatial design elements that elicit emotional responses. The kind of light installations in addition to natural lighting (Wardono, Hibino & Koyama, 2012), fragrance of the delicious food as well as plants and trees in open spaces around the cafes that provides indoor and outdoor views with the music around plays an important role. Music can be chirping of birds, melodious voice of a singer or sounds of water. The textures of the material used in floors, walls, ceilings and furniture and the choice of colors forms an important part of such design elements. Combination of Warm and cool colours and temperature also triggers senses. For instance Red color relates to passion, energy, excitement and also enhances appetite therefore people are extremely fond of food served at KFC. KFC is the most popular brand for chicken lovers. Similarly most of the juice containers like Tropicana, Real etc are also in Red and orange color. Orange color is also known to denote healthy food.

The study also revealed varied cognitive and behavioural responses from respondents. According to the Cambridge cognition, Cognition is defined as “the mental action or process of acquiring knowledge and understanding through thought, experience and the senses.” It includes a range of mental processes relating to thinking, remembering, learning and decision-making. Different forms of furniture and ceiling heights also influenced their cognitive responses. People liked curvilinear forms more than rectilinear ones. The circular or elliptical coffee table often acts as a center for conversations and impromptu games (Dazkir & Read, 2012). As per the discussions with some of the respondents of the study, it was also

identified that the height of the ceiling also influences users thinking. Low ceiling heights can evoke a sense of confinement and restrictedness whereas high ceiling heights elicit sense of freedom and openness. (Levy & Zhu, 2007).

As per Lisa Waxman's research (Waxman, 2006), Social responses of different people in cafes varies as per their opportunity to linger, own a particular space, territorialize, develop trust amongst fellow visitors and staff, gain respect, become productive and support from other beings. Hence, the built environment must offer its users the opportunity to connect with their community.

Therefore, Designers and Architects should give utmost care to all the abovementioned characteristics of users during design process of cafes. It would result in more effective and efficient space. They shouldn't design barely on the basis of total footfall of the space, per person area requirements and their movement patterns. (Wang & Ruhe, 2007).

The other important parameters to include are accessibility and equity. Accessibility is concerned with whether all the users can have an equal user experience regardless of how they interact with a product, service or a space. Accessible design is an approach of design that considers the needs of individuals with physical disabilities. This aids people with a variety of impairments to utilize products, services, and facilities independently. (Meshur, 2013). Another biggest challenge in designing process is to identify the users whose experiences are difficult to understand for designers. These could include users with some personal conditions, impairments etc. Though there have been certain design practices that have emerged over the time which encourage designed environments including diversity, equity and accessibility such as barrier free designs. Barrier

Free Design is a concept which removes all the barriers and obstacles for people with disabilities in a particular space or a product or a service (Badungodage,2020.) Another one is “Universal Design”.(Agarwal & Sharma,2014) The term became popular in the united nations convention on the rights of persons with Disabilities (UNPRPD) and it was initially coined by Ronald Mace. Universal Design is defined as “the design of products , environments ,programs and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.” (Shea, Basnak & Steinfield ,2018.This concept aims to reduce inequalities in built environments by humanistic principles (Evans &Hearn,1977) that encourage social participation by people irrespective of their age , disability or any circumstances. Use of assistive technology can also encourage accessibility. (Netherton and Deal, 2006).). Equitable Design attempts to design for historically underrepresented ,marginalised and vulnerable groups creating inclusive experiences. (Gutierrez&Jurow, 2018)

Architects and Designers should also aim for “Inclusive Design”. Inclusive Design is concerned with creating a framework for people that empathizes human diversity via research and analysis of a varied variety of users. (Zallio &Clarkson, 2021).Designers and researchers use this paradigm to create design decisions that take into consideration personal aspects such as gender, age, sexual orientation, language, race, and skills. The purpose here is to help traditionally underrepresented populations while keeping their needs and aspirations in mind. When we build a product to make it simpler for a certain group of consumers, we often create better experiences for everybody else too. Varying color schemes can evoke varied emotions. Thus the process of user research and the kind of the experience users enjoy

plays an important role in improving the quality of cafeterias for its users

6. Conclusion

The study provides strong insights into rethinking of architectural design process of cafes. It should not merely include conceptual , preliminary and literature study stages but also user studies. There is a need to adopt an empathetic approach to design process that involves largest range of users possible and diversity of users with varied life experiences. It is very crucial to involve users at early stages of design process to gather users feedback to create user-friendly spaces. It also shows that user research should not only be limited to the design of mobile apps, products, services, websites etc but should also form an indispensable part of design of spaces. In order to design user friendly spaces , there is also a dire need to address user’s pain points. Pain points could range from lack of easy parking , non availability of barrier free design elements such as ramps, lifts , escalators , non-standardised sitting etc. Architects often did not emphasize much on users behavioural , cognitive, emotional , social and sensorial responses. Though they pay more attention to the total number of users coming into a particular space. There has also been certain attempts to enhance experiential qualities of a space in terms of aesthetics and functionality but not much emphasis is laid on users with specific needs . Hence , we should aim for accessible, inclusive and equitable design by introducing spatial design elements. Also, food consumption is more of a leisure than a need nowadays.(Macht, Meininger&Roth, 2005) Its not just the quality of food that plays an important role but the space itself is important .Use of materials, furniture , interiors ,color scheme and other design elements in a space contributes in enhancing user’s experience. The kind of ceiling

design , flooring and décor plays an equally important role. For instance, the seating arrangement should be distributed in a manner that space doesn't suffocate its users when café is at its full capacity. The staff should also behave nicely with the customers along with serving good food quality. (Ryu & Han, 2011). In fact, if we can learn to access people's experiences (past, current and potential), then we can make user experience the source of inspiration and ideation for design. and by making user experience the source of inspiration, we are better able to design for experiencing which is the essence of any space.

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8. Reference

1. Agarwal, S. & Sharma, S.N. (2014), *Universal Design to Ensure Equitable Society*, International Journal of Engineering and Technical Research . 2(1).
2. Ayalp, N., Yildirim, K. & Cagatay, K., *Effect on Users of the Seating Element Types in Cafés/Restaurants* , Gazi University, Journal of Science, 30(4):15-28.
3. Azouz, O., Karioh, N. & Lefdaoui, Y. (2021), *A Systematic Mapping Study: How Can UX Design*

Be Adapted to Improve the Design of Meaningful Gamified Solutions, International Journal of Innovation and Technology Management, 18(6). Retrieved from <https://doi.org/10.1142/S0219877021300068>

4. Badungodage, A.S.N. & Amirthalingam, K. (2012), *Importance of Barrier Free Design in Built Environment to empower physically disabled persons with special reference to the quality of Accessibility in public building in western province*. Sri Lanka Economic Journal, 13(2): 58-73.

5. Chao, Z. (2019), *Rethinking User Experience Studies in Libraries : The story of UX Café* , Journal of library user experience, 2(2). Retrieved from <https://doi.org/10.3998/weave.12535642.0002.203>

6. Cleave, P. (2017), *Leisurely consumption, the legacy of European cafés*, International Review of Social Research , 7(1): 31–45.

7. Cheng, W.T. & Shanat, M. (2020), *Application of Norman's Three Levels Design- Theory For Artefact Analysis Of Cultural Related Design Process* , International Journal of Applied and Creative Arts, 3(1). Retrieved from <http://dx.doi.org/10.33736/ijaca.2201.2020>

8. Dazkir, S.S. & Read, M.A. (2012) , *Furniture Forms and their Influence on our emotional Responses Toward Interior Environments*, Environment and Behavior , 44(5), 722-732. Retrieved from <http://dx.doi.org/10.1177/0013916511402063>.

9. Evans, D.R. & Hearn, M.T. (1977), *The Growth of humanistic Psychology : A review*, The Journal of Educational Thought, 11(1), 64-76.

10. Fraser, Reekie R. (1972), *Design in the built environment* first edition, Edward A. Publication, London.
11. Gutierrez, K.D. & Susan, A.J. (2016), *Social Design Experiments : Toward Equity by Design*, Journal of the learning Sciences, 1-34 Retrieved from <http://dx.doi.org/10.1080/10508406.2016.1204548>
12. Haselff, A.M. (2005), *Cybercafes and their potential as Community Development Tools in India*, The Journal of Community Informatics ,1(3) : 53-65. DOI:10.15353/joci.v1i3.2032
13. Hanaysha, J.(2016), *Testing the Effects of Food Quality ,Price Fairness and Physical Environment on Customer Satisfaction in Fast Food Industry.*, Journal of Asian Business Strategy, 6(2): 31-40. DOI:10.18488/journal.1006/2016.6.2/1006.2.31.40
14. Jones, J.Christopher (1970), *Design Methods: Seeds of Human Futures*, London: Wiley-Intersection, 1970
15. Lai, J., Honda, T.& Yang, M.C. (2010), *A study of the role of user centered design methods in design team projects*, AI EDAM , 24(3): 303-316.
16. Lawson, Bryan (1997), *How Designers Think: The Design Process Demystified* 1st edition. Sheffield, Architectural Press.
17. Levy, J.M. & Zhu, R. (2007), *The Influence of Ceiling Height : The Effect of Priming on the Type of Processing That People Use*, Journal of Consumer Research, 34.
18. Macht, M., Meininger, J. & Roth.J. (2005), *The Pleasure of Eating :A Qualitative Analysis*, Journal of Happiness Studies, 6(12): 137-160.
19. Meshur, F.A. (2013), *Accessibility for people with disabilities in Urban spaces : A case study of Ankara ,Turkey*, International Journal of Architectural Research Archnet, 7(2) ,43-60. DOI:10.26687/archnet-ijar.v7i2.154
20. Mimoun, L.& Gruen, A. (2021), *Customer Work Practices and the Productive Third place*, Journal of Service Research, 24(4), 563-381.Retrieved from <https://doi.org/10.1177%2F10946705211014278>
21. Mao, J.Y.,Vredenburg, K. , Smith , P.W.,Carey, T. (2005), *The state of User-centered design practice*, Communications of the ACM ,48(3):105-109.Retrieved from <https://doi.org/10.1145/1047671.1047677>
22. Nguyen, T.V.T et al. (2018), *The Bookstore-Café : Emergence of a New lifestyle as a “Third Place” in Hangzhou China*. Journal -Space and Culture, 22(2):216-233.
23. Netherton, D. L., and Deal, W. F. (2006). *Assistive technology in the classroom*. Technol. Teach. 66, 10–15.
24. Ryu, K. & Han, H. (2011), *New or repeat customers : How does physical environment influence their restaurant experience*, International Journal of Hospitality Management, 30(3),599-611.Retrieved from <https://doi.org/10.1016/j.ijhm.2010.11.004>
25. Roto, V. et al. (2021), *Mapping Experience research across disciplines : Who , where and when*. Quality and User Experience, 6.
26. Spence, C.(2020), *Senses of place: Architectural Design For Multisensory Mind*, Cognitive Research :Principles and Implications.s
27. Shea, O.E.C., Basnak, M.& Steinfield, E. (2018), *A review of Universal Design in Professional Architectural Education: Recommendations and guidelines* , Studies in Health Technology and Informatics, 256 :716-727.

28. Steigemann, A.M. (2017), *Social Practices in Café :Community Through Consumption?*. GEOGRAPHICA HELVETICA+.72:45-54.
29. Triberti, S. et al. (2017), *Developing Emotional Design :Emotions as Cognitive Processes and their Role in the Design of Interactive Technologies, frontiers in Psychology*. Frontiers in Psychology.
30. Trivedi, Harshad. (1969), *The Semi-Urban Pocket" as Concept and Reality in India*, Human Organization. 28 (1): 72-77.
31. Wang, Y., Ruhe, G. (2007), *The Cognitive Process of Decision Making* , International Journal of Cognitive Informatics and Natural Intelligence , 1(2):73-85. DOI:10.4018/jcini.2007040105
32. Wardono, P., Hibino, H. & Koyama, S.(2012). *Effects of Interior Colors , Lighting and Décors on Perceived Sociability , Emotion and Behavior Related to Social Dining*, Procedia-Social and Behavioral Sciences, 38: 362-372. Retrieved from <https://doi.org/10.1016/j.sbspro.2012.03.358>
33. Wansink, B. (2006). *Mindless Eating: Why we eat more than we think* .Bantam Books.
34. Waxman, L. (2006), *The Coffee Shops: Social and Physical factors Influencing Place Attachment* .Journal of Interior Design , 31(3): 35-53.
35. Yilmaz, B., Tek, N.A. & Sozlu, S.,(2017), *Turkish Cultural Heritage : A cup of Coffee*, Journal of Ethnic Foods, 4(4): 213-220. Retrieved from <https://doi.org/10.1016/j.jef.2017.11.003>
36. Zallio, M. & Clarkson, P.J. (2021), *Inclusion , diversity , equity and Accessibility in the built environment : A study of architectural design practice*, Building and Environment , 206. Retrieved from <https://doi.org/10.1016/j.buildenv.2021.108352>