



Therapeutic Architecture in Café Buildings as Gen Z's Preferred Healing Place in Denpasar

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How to cite (in APA style):

Utari, Cokorda Istri Arina., Deddy Endra Prasandya., Wahyu Satya Nugraha. (2024). Therapeutic Architecture in Café Buildings as Gen Z's Preferred Healing Place in Denpasar. *Architectural Research Journal*. 4 (2), pp. 57-64. DOI:

Abstract—The number of people with mental disorders in Indonesian teenagers is very high. Bali itself is ranked fourth in the number of people with severe mental disorders in Indonesia, with Denpasar City being the city with the highest prevalence of depression in Bali, which targets Gen Z. Gen Z tends to feel that they need a place where they can go to relieve stress and relax, spend time alone or socialize with friends. Public spaces such as cafes can be used to mingle, spend free time and have fun are now increasingly popular with Gen Z. This study aims to determine the condition of the elements that form cafes in Denpasar regarding therapeutic architecture indicators. The concept of therapeutic architecture is considered to be able to reduce the prevalence of depression because it can provide a pleasant psychological effect for building users. The research method used is quantitative, where quantitative data comes from the results of cafe building users' assessments of the cafe's therapeutic architecture indicators. Quantitative data will then be analyzed with the help of JMP software. The results of the study concluded that several elements form cafes need to be adjusted and accommodated to accommodate the concept of therapeutic architecture to reduce the prevalence of depression in Gen Z.

Keywords: therapeutic architecture; cafe; psychology; Gen Z; Denpasar.

1. Introduction

Mental health plays an essential role in human life, but in reality, mental health is one of the significant health problems in the world, as well as in Indonesia. WHO data shows that in 2016 there were around 35 million people affected by depression, 60 million people affected by bipolar, 21 million affected by schizophrenia, and 47.5 million affected by dementia (Mashar, 2021). One of the factors in the increasing number of depression rates in Indonesia is caused by the millennial generation.

The millennial generation is a generation born in the period 1981 to 2000. In 2020, the millennial generation will be between 20 and 30 years old. According to data from the Central Statistics Agency on the Indonesian population, the millennial generation (20-34 years) contributes 23.77 percent of the total population of Indonesia which is 268 million people (Central Statistics Agency 2019). This generation also has risk factors for experiencing psychological problems, namely depression and

anxiety. This is due to the development of the era, problems such as monotonous life, high mobility, office environment factors, social media, bullying, and drugs are risk factors for mental health disorders. The demands of daily life as well as family and friendship relationships often make the millennial generation experience pressure and stress. According to data from the American Psychological Association quoted by Sifferlin in Prahara (2024), in the group of young adults aged 18–33 years, it is 11.6% or the prevalence occurs in 1 in 10 people in Indonesia who are at risk of experiencing increased stress levels, because they are unable to manage stress (Prahara and Setyaningtyas, 2024).

Gen-Z tends to feel that they need a place where they can go to unwind, relax, and so on by spending time alone or socializing with friends to share stories or just have fun. Because of this problem, one of the solutions that have developed is the creation of public spaces such as hangouts or cafes that can be used as a place to mingle, get involved in working in groups, or just spend free time and send their activities content to social media (Motoki and Spence, 2021). Sometimes the existence

of a cafe with all its facilities attracts people just to follow their desire to brand themselves on social media.

Based on these problems, the architectural design of the cafe is considered important to help reduce stress or depression among visitors. A building is closely related to accommodating human activities in it, including building designs that can meet the needs of human physical and mental health. To reduce the level of depression experienced by the community, a concept called therapeutic architecture emerged. The concept of therapeutic architecture emphasizes a human-focused environment, based on facts, to identify and support the process of interaction with the user's psychology and physiology (Laurentia and Choandi, 2022).

This study aims to analyze the application of the therapeutic architecture concept in the design of shopping center buildings in Denpasar City. The results of this analysis are useful for study materials or considerations of architectural design and concepts for cafe owners, investors, architects and the government. So it is hoped that the design that implements the therapeutic architecture concept can reduce stress or depression levels in society, especially among Gen Z in Denpasar City.

2. Methods

The research location was conducted at the three best cafes in Denpasar according to TripAdvisor 2023. Denpasar was chosen as the research location because Denpasar City is the city with the largest population (3,348 people) in Bali with the highest prevalence of depression in residents aged ≥ 15 years (Ministry of Health of the Republic of Indonesia, 2018). The three best cafes in Denpasar City according to TripAdvisor 2023 include The Alleyway Café; 9/11 Cafe & Concept Store; Loh Coffee & Eatery. This research is a descriptive study, using quantitative methods. The quantitative paradigm used in this study uses data from direct observation and assessments from cafe users and the research team, where the assessment data will be processed using JMP software to be able to conclude the application of the therapeutic architecture concept to each element that forms the cafe that is the object of research.

(1) Method of collecting data

The data collection method used in this study is through literature study and observation. Literature study, literature, and studies related to therapeutic architecture to be able to compile a list of questions used as a reference for observation. Observation and assessment of the elements forming the cafe will produce ordinal quantitative data that shows the condition of the elements forming the cafe when associated with therapeutic architecture indicators.

(2) Data Analysis Methods

Data analysis conducted in this study is based on data obtained through literature studies and observations. Data collected through literature studies will be analyzed to produce text data, in the form of therapeutic architecture indicator/criteria formulations which will later be used as observation guidelines. Data collected through observations in the form of Likert scale assessments will be analyzed with the help of JMP software so that it will be known which design elements of the cafe need to be adjusted or accommodated to better implement the therapeutic architecture concept.

3. Results and Discussion

Café as Gen Z's Preferred Healing Place

Based on their birth year, human generations can be grouped into five (Codrington, Graeme, et al, 2011) including the Baby Boomer Generation born 1946-1964, Generation X born 1965-1980, Generation Y born 1981-1994, often called the Millennial Generation, Generation Z born 1995-2010 also called the iGeneration, iNet Generation, Internet Generation, and Generation Alpha born 2011-2025. The five generations have differences in personality development. Generation Z is a generation with a mastery of the latest technology, has a more open mind, and is not too concerned with norms. One of the main factors distinguishing Gen Z's characteristics from other generations is the mastery of information and technology and the development of social media. Based on research by Hund & McGuigan (2019), the rapid development of social media has attracted the attention of Gen Z to compete to display their lifestyle to the public through social media with the aim of fame and existence, such as uploading photos while hanging out at famous locations (Hund and McGuigan, 2019).

The culture of hanging out, and gathering with friends, has become a popular culture among Gen Z to maintain the social quality of friendship. Gen Z competes to show the pride that results from the success of the "ngafe" culture, not just enjoying food and drinks. It is not uncommon for Gen Z to hang out in cafes to raise their social status in the eyes of those around them (Bado, Tahir, and Supatminingsih, 2023). In addition to content on social media, hanging out in cafes for Gen Z is a form of healing in the form of work-life balance (Berliana, 2023). Increasing stress levels, depression and lack of time for themselves cause Gen Z to choose to spend time in between their busy schedules by gathering with friends and healing at their favorite cafes. Spending hours enjoying a cup of coffee is preferred by Gen Z to relieve fatigue from their busy routines and activities (Sutomo, 2022).

Hanging out at cafes has become a lifestyle for Gen Z today. The condition is in line with the increasing coffee culture in the country so it continues to influence the growth of cafes and coffee shops in cities in the country. Based on the results of research conducted by Anak Bangsa Indonesia together with the KG Media Analytics Team and in collaboration with Litbang Kompas in 2019, there were 2,950 coffee shops in major cities in Indonesia, where this number has increased by around 20% per year since 2016. This shows a close psychological relationship between Gen Z and its architectural space, in this case, cafes, as a place for Gen Z to relieve stress and express their personality through social media.

Therapeutic Architecture

Architecture and environment contribute to creating a built environment that can provide a pleasant psychological effect for users. Architecture with various elements that form interior and exterior spaces greatly influences human psychology. Human psychological perception of space varies greatly, due to differences in physical and psychological, culture, education level, gender, and social and economic class (Mahmoud, 2017). The basic principles and elements of architectural design such as shape, color, scale, proportion, lighting, and materials have been proven to provide psychological effects that create a sense of calm, comfort, and enthusiasm for life (Jiang, 2023). Good quality natural lighting, the application of appropriate healing colors, the availability of natural sounds with therapeutic effects such as the sound of birds and flowing water, informative signage, and zoning of space that allows for privacy have the potential to reduce stress, pain, and anxiety (Sigalingging, et al., 2023).

Therapeutic architecture is a design concept where architectural elements are used as a healing medium or therapy medium for building users, because architectural design is considered to have psychological and physical effects on users, creating a calm, comfortable atmosphere, and raising the spirit of life (Fadilah and Lissimia, 2021). Six important aspects contribute to creating a healing environment, including a sense of personal control, social support, positive distractions, eliminating environmental stressors, connecting users to natural views, and engaging feelings. These six important aspects must be accommodated in the built environment in order to provide psychological comfort for users.

Before assessing the café design which was the object of study in this research, the criteria draft therapeutic architecture and assessment indicators need to be formulated first. The criteria and indicators for therapeutic architecture assessment will refer to six important aspects of the therapeutic environment (Iyendo, Uwajeh, and Ikenna, 2016), including a sense of personal control, social support, positive distractions, eliminating environmental stressors, connecting patients to natural views, and engendering feelings. These six variables become one unity that cannot stand alone and must be fulfilled in the therapeutic architecture concept to create an optimal healing place for visitors.



Figure 1. Formulation of the Concept of Therapeutic Architecture

Source: Adopting the Concept of Mahmoud, Iyendo, Uwajeh, and Ikenna, 2016

Table 1. Variables and Indicators of Therapeutic Architecture

VARIABLES: SENSE OF PERSONAL CONTROL		
No	Criteria/ Indicators	Source
1.	The cafe is accessible, easy to reach, and has a comfortable path for visitors.	Adopting the concept of Mahmoud Ivendo, Uwaieh, & Ikenna, 2016
2.	The level of lighting in a cafe can provide comfort for visitors to carry out activities.	
3.	The type of music played in the cafe provides auditory comfort for visitors.	
4.	The cafe provides several seating options that can be used by visitors, both individually and in groups.	
5.	The cafe has a quiet (not crowded) waiting area that can be used by visitors when waiting for a seat or waiting for food to <i>take away</i> .	
VARIABLE: SOCIAL SUPPORT		
No	Criteria/ Indicators	Source
6.	The cafe provides <i>a private seating</i> area for <i>family</i> members.	Adopting the concept of Mahmoud Ivendo, Uwaieh, & Ikenna, 2016
7.	The cafe provides various forms of <i>seating tables</i> that visitors can use for various activities, such as eating, working, resting.	
8.	Easy access to food, fast in serving, and well presented	
9.	The cafe has direct access to the garden which allows visitors to interact there.	
10.	The cafe provides <i>wifi</i> facilities that can be used well by visitors, cellphone signals in the cafe area are not disturbed.	
VARIABLES: POSITIVE DISTRACTIONS		
No	Criteria/ Indicators	Source
11.	The cafe offers various entertainment facilities such as music, games, TV/LCD screens.	Adopting the concept of Mahmoud Ivendo, Uwaieh, & Ikenna, 2016
12.	Cafe offers <i>interactive art</i>	
13.	The cafe displays pleasant natural images through murals, virtual videos, ornaments	
14.	The cafe has <i>interactive floors and walls</i>	
15.	The cafe area has water elements with pleasant natural <i>water sounds</i> .	
VARIABLES: CONNECTING PATIENTS TO NATURAL VIEWS		
No	Criteria/ Indicators	Source
16.	The cafe interior offers natural elements (<i>plants, flowers, natural sounds</i>)	Adopting the concept of Mahmoud Ivendo, Uwaieh, & Ikenna, 2016
17.	<i>Outdoor view</i> café offers a pleasant natural view	
18.	There is a water element (aquarium) in the cafe interior	
VARIABLES: ELIMINATING ENVIRONMENTAL STRESSORS		
No	Criteria/ Indicators	Source
19.	The interior and exterior of the cafe can mitigate noise, the environment around the cafe is quiet.	Adopting the concept of Mahmoud Ivendo, Uwaieh, & Ikenna, 2016
20.	The layout of the space in a cafe can create privacy for visitors, visitors can feel safe and comfortable doing activities in the cafe space.	
21.	The cafe provides <i>a restroom</i> that is always kept clean.	
22.	The cafe offers a comfortable and accessible dining area for wheelchair users.	
23.	The cafe interior offers varying levels of lighting to create a calming feel and <i>reduce eye fatigue</i> .	
24.	The cafe offers good and always fresh air circulation, thermal comfort can always be created, and good quality sanitation.	
VARIABLE: ENGENDERS FEELINGS		
No	Criteria/ Indicators	Source
25.	The interior and exterior of a cafe can create an impression of peace and positive hope.	Adopting the concept of Mahmoud Ivendo, Uwaieh, & Ikenna, 2016
26.	The interior and exterior of the cafe can provide visitors with the opportunity to relax well.	

Source: Utari, Prasandya, and Nugraha, 2024

The six therapeutic architecture concept variables will be derived back into several indicators according to the formulation of therapeutic environment indicators (Iyendo, Uwajeh, and Ikenna, 2016). The derived indicators will later be used to assess the design conditions of three cafes in Denpasar City. Five criteria were obtained from the sense of personal control variable, five criteria for the social support variable, five criteria for the positive distraction variable, three criteria for the connecting patients to natural views variable, six criteria for the eliminating environmental stressors variable, and two criteria for engenders feelings. Various therapeutic architecture design criteria can be seen in Table 1 above.

To find out the recommendations for cafe designs in Denpasar City that follow the therapeutic architecture concept, the research team has conducted an assessment of the conditions of three cafes in Denpasar City. The three cafes in Denpasar City that were used as study objects are the three best cafes in Denpasar City according to TripAdvisor 2023, including The Alleyway Café; 9/11 Cafe & Concept Store; and Loh Coffee & Eatery. The assessment of the condition of three cafes in Denpasar City was carried out by 3 research teams and 2 sample visitors at each cafe. The assessment was carried out using a Likert scale where a value of 1 indicates a very inappropriate condition, a value of 2 indicates an inappropriate condition, a value of 3 indicates a less appropriate condition, a value of 4 indicates an appropriate condition and a value of 5 indicates a very appropriate condition. The results of the assessment of the five assessors on the condition of three cafes in Denpasar City are as follows.

(1) Sense of Personal Control Variable Assessment Results

The sense of personal control variable has been predominantly accommodated by the three cafes that were used as study objects. There is only one indicator that is less accommodated by the three cafes, namely the cafe has a quiet waiting area (not crowded) that can be used by visitors when waiting for a seat or waiting for food to be taken away. This dominant indicator that is not accommodated must of course be reconsidered in the cafe building to be able to accommodate the therapeutic architecture concept more optimally. 9/11 Cafe & Concept Store is superior in the indicator of the level of cafe lighting that can provide comfort for visitors to do activities and the indicator of the cafe providing several seating options that can be used by visitors both individually and in groups, compared to the other two cafes.

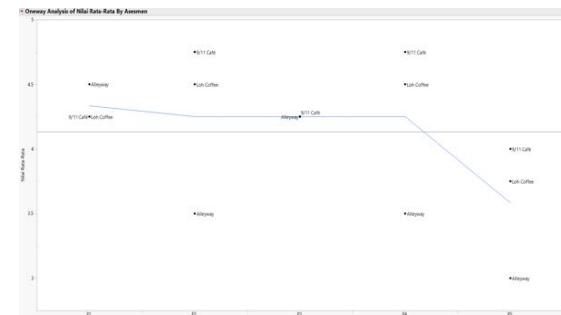


Figure 2. Results of Bivariate Analysis of the Sense of Personal Control Variable

Source: Utari, Prasandy, and Nugraha, 2024

(2) Social Support Variable Assessment Results

The results of the research team's assessment showed that the three cafes that were the objects of the study had predominantly accommodated the indicators of the cafe providing a private seating area for family members, easy access to food; fast serving; and well-presented, as well as the cafe indicator providing wifi facilities that can be used properly by visitors, the cellphone signal in the cafe area is not disturbed. The dominant indicators that cannot be accommodated in the three cafe buildings include the cafe providing various forms of seating tables that can be used by visitors for various activities; such as eating; working; and resting, and the cafe indicator having direct access to the garden that allows visitors to interact there. Assessment of the social support variable, 9/11 Cafe & Concept Store is superior to the other two cafes in terms of providing a private seating area for family members and having direct access to the garden that allows visitors to interact there.

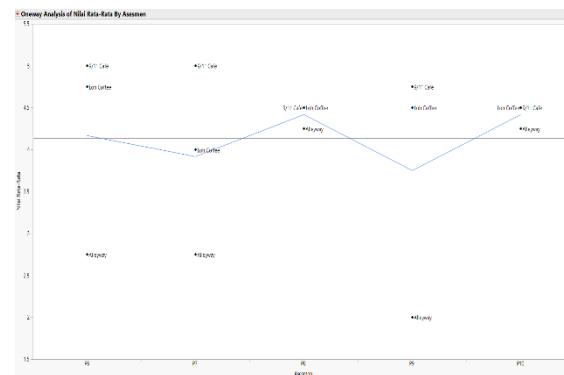


Figure 3. Results of Bivariate Analysis of the Social Support Variable

Source: Utari, Prasandy, and Nugraha, 2024

(3) Positive Distraction Variable Assessment Results

The results of the research team's assessment showed that the three cafes that were the objects of the study had predominantly accommodated indicators of cafes offering various entertainment facilities such as music; game facilities; TV/LCD

screens, cafes displaying pleasant natural images through murals; virtual videos; ornaments, and indicators of cafes having interactive floors and walls. There were only two indicators that were less dominantly accommodated in the three cafes, including offering interactive art and having water elements with pleasant natural water sounds. The research team's assessment revealed that 9/11 Cafe & Concept Store was superior in offering various entertainment facilities than the other two cafes. Meanwhile, Loh Coffee and Eatery were superior in displaying pleasant natural images through murals, virtual videos, and ornaments on its building compared to the other two cafes.

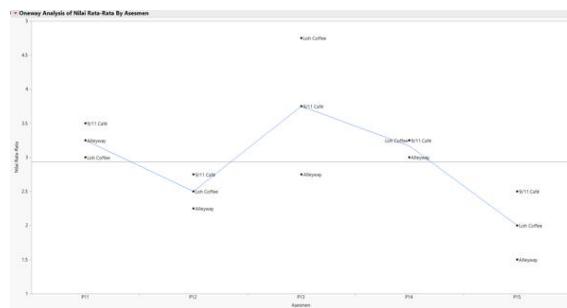


Figure 4. Results of Bivariate Analysis of the Positive Distraction Variable

Source: Utari, Prasandy, and Nugraha, 2024

(4) Connecting Patient to Natural Views Variable Assessment Results

The results of the research team's assessment showed that the three cafes that were the dominant study objects had met the criteria for cafe interiors offering natural elements (plants, flowers, natural sounds) and the cafe's outdoor view offering a pleasant natural view. Only one indicator was less dominantly fulfilled by the three study objects, namely the presence of water elements (aquarium) in the cafe's interior. This unfulfilled indicator can be used by relevant stakeholders in planning a cafe building that is more optimal in accommodating its role as a preferred healing place for Gen Z. Loh Coffee and Eatery is superior to the other two cafes in terms of the cafe's interior offering natural elements and the cafe's outdoor view offering a pleasant natural view.

(5) Eliminating Environmental Stressors Variable Assessment Results

The results of the research team's assessment showed that the three cafes that were the dominant study objects had fulfilled the indicators of interior space arrangement in the cafe that could create privacy for visitors; visitors could feel safe and comfortable doing activities in the cafe space, the cafe provided a restroom that was always kept clean, and the cafe indicator offered good and always fresh air circulation, thermal comfort could always be created,

and good quality sanitation. Three dominant indicators were not accommodated in the three study objects, namely the interior and exterior of the cafe could mitigate noise; the environment around the cafe was quiet, the cafe offered a comfortable and accessible dining area for wheelchair users, and the cafe interior indicator offered varying levels of lighting to create a calm impression and reduce eye fatigue. 9/11 Cafe & Concept Store was superior to the other two cafes in terms of good interior space arrangement so that visitors felt comfortable and safe and offered good and always fresh air circulation with good quality sanitation.

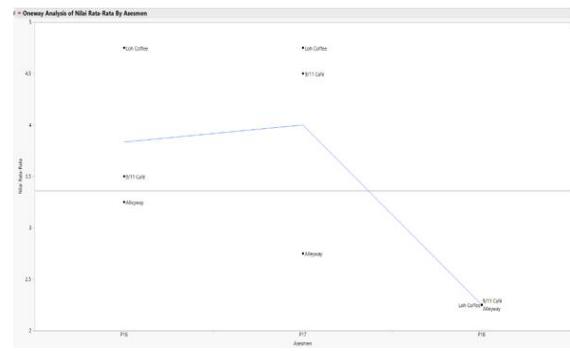


Figure 5. Results of Bivariate Analysis of the Connecting Patients to Natural Views Variable

Source: Utari, Prasandy, and Nugraha, 2024

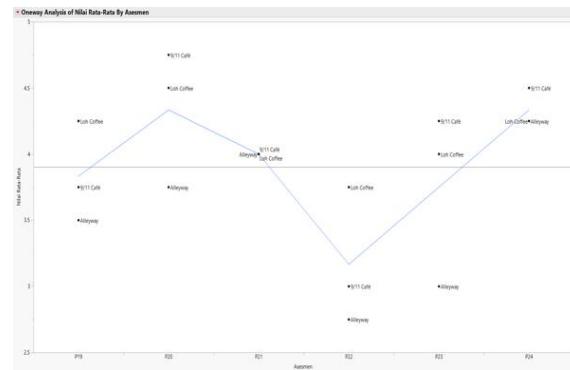


Figure 6. Results of Bivariate Analysis of the Eliminating Environmental Stressors Variable

Source: Utari, Prasandy, and Nugraha, 2024

(6) Engenders Feelings Variable Assessment Results

The results of the research team's assessment showed that the three cafes that were the objects of the study had predominantly met the indicators that the interior and exterior of the cafe could create a peaceful impression and positive expectations, while the dominant indicator that was not accommodated in the three cafes was that the interior and exterior of the cafe could provide visitors with the opportunity to relax well. These unfulfilled indicators can be used by relevant stakeholders in planning a cafe building that is more optimal in accommodating its role as a preferred healing place for Gen Z. Loh Coffee and

Eatery is superior to the other two cafes in terms of the interior and exterior of the cafe which can create a peaceful impression and positive expectations for visitors who come.

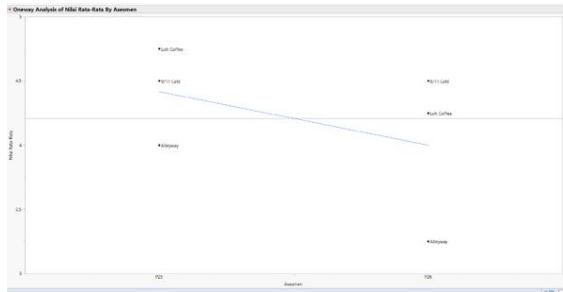


Figure 6. Results of Bivariate Analysis of the Engender Feelings Variable

Source: Utari, Prasandya, and Nugraha, 2024

Based on bivariate analysis, the three cafes that were the dominant study objects have accommodated therapeutic architecture indicators. Several indicators that are not met by cafes in Denpasar City and need to be considered in designing cafes that are optimally used by Gen Z as a healing place, with a therapeutic concept, include the availability of a quiet waiting area that can be used by visitors when waiting for a seat or waiting for food to take away, the availability of various forms of seating tables that can be used by visitors for various activities; such as eating; working; resting, direct accessibility to the garden that allows visitors to interact there, the availability of interactive art, the availability of water elements with pleasant natural water sounds, the availability of water elements (aquariums) in the interior of the cafe, the interior and exterior of the cafe that can mitigate noise; the environment around the cafe is quiet, the availability of a comfortable and accessible dining room for wheelchair users, the presence of varying lighting levels in the interior of the cafe to create a calm impression and reduce eye fatigue, and the interior and exterior of the cafe can provide visitors with the opportunity to relax well.

4. Conclusion

Several indicators that are not met by cafes in Denpasar City and need to be considered in designing cafes that are optimally used by Gen Z as a place for healing, with a therapeutic concept that accommodate several criteria, include a quiet waiting area that can be used by visitors when waiting for a seat or waiting for food to be taken away, various forms of seating tables that can be used by visitors for various activities; such as eating; working; rest, direct accessibility to the garden that allows visitors to interact there, the availability of interactive art, water elements with pleasant natural water sounds, the availability of water elements (aquarium) in the cafe interior, the cafe interior and exterior that can mitigate

noise, comfortable and accessible dining room for wheelchair users, various lighting levels in the cafe interior to create a calm impression, relaxing environment of the cafe interior and exterior.

Acknowledgment

We would like to express our deepest gratitude to Warmadewa University, especially the Directorate of Research and Community Service, which has provided grant funds for the progress of this research. In addition, we also thank all parties who have helped in the process of this research.

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