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COGNITIVE RESPONSE ON FAVORITE PLACE CASE STUDY OF INDONESIAN YOUNG ADULTS

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ABSTRACT

Environmental behavior studies discuss the relationship between environment and the behavior of its users, namely humans. The human response to the physical character of the environment is divided into invisible and visible aspects. Cognitive aspects are invisible response that rarely got attention. Meanwhile, place preference study may result in desirable physical setting. embodiment of place preferences is a favorite place. Favorite place is a place with higher preference for each person. This article will discuss cognitive responses on favorite place so the result can complement the knowledge about response-based design. Findina cognitive response on favorite place can be achieved using quantitative methods. The data then analyzed using distribution. analysis of variance (ANOVA) and factor analysis. The respondents are Indonesian young adults aged 18-40 years old. The most favorite place of this age group are culinary place, urban commercial, and marine tourism objects. Meanwhile cognitive response that arise on favorite place are hospitality and togetherness. There are five latent variables of cognitive that is environmental experience, social affordance, ecological quality, personal interests, and urban quality

Keywords: cognitive response; environmental behavior; favorite place

INTRODUCTION

Behavioral science is considered as one way to solve architectural design problems. Environmental behavior discuss relationship between behavioral science and physical environment. There three major components environmental behavior, that is physical or environmental settings, humans, and interactions between the two (Najafi M.; Mohd Sahriff M.K., 2011). The forms of interaction between humans and the physical environment are very diverse. Perceived environment is the common perception of a group towards certain physical environment (Haryadi; Setiawan B., 2010). Environmental perception is obtained from affective, cognitive, and conative responses or activities (Haryadi; Setiawan B., 2010; Jorgensen B.S.; Stedman R.C., 2001; Casakin H.; Billig M., 2009). If physical environment is considered as a stimulus, then humans will response the stimulus. Human responses to their environment can be grouped into three types, namely affective, cognitive, and activity responses (Jorgensen B.S.; Stedman R.C., 2001; Casakin H.; Billig M., 2009; Jorgensen B.S.; Stedman R.C., 2001; Casakin H.; Billig M., 2009). Of the three responses, cognitive responses received less attention. The first reason may be the nature of the cognitive response which is difficult to observe. Cognitive responses are closely related to thought processes, so they are difficult to assess spontaneously. However, the value of a place can be seen from the responses

that arise, especially invisible responses. Affective responses are identified with place attachments, while cognitive responses are identified with place identity (Jorgensen B.S.; Stedman R.C., 2001; Casakin H.; Billig M., 2009). Discussing cognitive response at a favorite place may provide input for response-based environment design.

This article aims to discuss cognitive response on favorite place. Study about favorite place itself has been discussed in detailed on Lissimia F. (2018). Therefore this article will focus mainly on cognitive response rather than favorite place.

THEORETICAL REVIEW

Favorite Place

Preference study applies to a variety of things, specifically place preferences. If a group has a tendency to choose a place over other places, then the result is a perceived place by the group mentioned. The embodiment of place preferences is a favorite place.

Some research on favorite places discusses different aspects but in general is related to the reason for the selection. Newell P.B. (1997) explains that favorite places are built environment preferences that have high value for Another understanding individuals. states that a favorite place is a place that gives encourage people attachment to it (Korpela K.M., 2001). In this study, favorite place of each person can be different because each person has different preference. Favorite place in this study is a place with higher preference compared to other place.

Reasons for choosing a favorite place can be grouped into affective, cognitive, and activity responses (Sari A.A.; Kusuma H.E.; Tedjo B., 2012). Other studies focus on linking favorite places with human emotions or experiences (Korpela K.M., 2001, 2003).

Favorite places that emerged from the study results were very diverse. To facilitate analysis, the favorite places are categorized based on their similarity in function or physical character. Grouping favorite places based on physical attributes such the natural as environment, housing, open space, etc. P.B., 1997;Chapman (Newell Robertson M., 2009; Korpela K.M., 2003; Sari A.A.; Kusuma H.E.; Tedjo B., 2012). Whereas grouping is based on place functions such as malls, hobby spaces, private places, etc. (Sari A.A.; Kusuma H.E.; Tedjo B., 2012; Newell P.B., 1997). This research will follow previous categorization. Research on favorite places will be very helpful in compiling design guidelines based on preferences, especially the preference of spatial physical characters.

Cognitive Response

Reasons for choosing a favorite place are very diverse (Newell P.B., 1997; Sari A.A.; Kusuma H.E.; Tedjo B., 2012). Newell P.B. (1997) equates cognitive response with place-centered reason and affective response with self-centered reason. Equalization of responses is based on stimulus-response systems in behavioral architecture (envronmental behavior) (Lewicka M., 2011; Jorgensen B.S.; Stedman R.C., 2001; Casakin H.; Billig M., 2009). Explanation of cognitive responses is expected to help analyze the reasons for choosing favorite places. Cognitive responses are responses that have been filtered against stimuli. This response is not like an affective

response that is spontaneous. This response arises as a result of the human process of linking a situation with his experience. Semken S & Carol B. (2008) equates cognitive responses with place meaning Semken S & Carol B. (2008) use place meaning from Young's (1999) research on the relationship between

tourist motivation and place meaning. Young (1999) collected 30 responses that answered the question why the Daintree & Cape Tribulation in the tropical park World Heritage, Queensland is significant. The responses are described in the table below.

Table 1. Cognitive response from tourists of Daintree & Cape Tribulation, Queensland (Young, 1999)

Ancient	Pristine	Scenic	Beautiful	Spiritually valuable
Privilege to visit	Relaxing	Important for culture	Overdeveloped	Scientifically valuable
Fun	Threatened	Crowded	Dangerous	Interesting
Fragile	Wilderness	Historical	Exotic	Adventurous
Tranquil	Remote	Tropical	Unique	Important to preserve
Authentic	Comfortable	Educational	Unusual	Ecologically important

Age Group

This research focuses on the favorite places of young adult people aged 18-40 years and their cognitive responses. The focus age group are important aspects of environmental behavior research (Lewicka M., 2011; Jorgensen B.S.; Stedman R.C., 2001; Chapman J.A.; Robertson M., 2009; Korpela K.M., 2001; Korpela K.M., 2003; Sari A.A.; Kusuma H.E.; Tedjo B., 2012; Malinowski J.C.; Thurber C.A., 1996). Malinowski J.C. and Thurber C.A., (1996) examined the place preferences of boys aged 8-16 years. There is no significant difference in the favorite places that appear, but the reason for choosing favorite place shows visible difference. Boys in the younger age group choose a favorite place because of land function or activity, while boys in the older age group choose a favorite place because of its aesthetic and cognitive value.

Levinson divides the age of adulthood into 3 young adults (early adulthood) 17-39 years, middle adulthood (middle adulthood) 40-64 years, and old adulthood (late adulthood) 65 years and over (Murdy J.J.; Gibson H.J.; Yiannakis Α., 2002). Erikson and Vaillant conducted similar age groups (Berk L. E., 2007; Sokol J.T., 2009). Erikson groups age based on the conflict. The measure of the success of a general group is the success or failure of the group to handle conflict. Success builds relationships (intimacy) and failure (isolation) as a character that defines the young adult age group. Whereas Vaillant characterizes young adults as a time to focus on achievement in the field of relationships and careers.

METHODS

The nature of this research is explanatory. The result act as a confirmation of cognitive responses

toward certain place from previous research by Sari A.A.; Kusuma H.E.; Tedjo B. (2012), Young (1999).Chapman J.A.; Robertson M. (2009), Newell P.B. (1997), Chapman J.A. & Robertson M., (2009) and Newell P.B., (1997). Therefore quantitative methods considered more suitable rather than qualitative. Validity and reliability of methods achieved quantitative obtaining respondent proportioned to the question.

The population of this research is 347 Indonesian people. Based on a similar study by Sari A.A.; Kusuma H.E. & Tedjo B. (2012), a minimum quota of samples was 300 people. The respondents ranged from 18-40 years old, namely the young adult age group. Ages 18-25 years were included as validation from Sari A.A.; Kusuma H.E. & Tedjo B., (2012) using qualitative methods. Data collection uses internet media so that research locations are not restricted. However, most likely the respondents came from Java and surrounding areas. Data collection using internet media is suitable non-random snowball for sampling data collection (Rachman R.A.; Kusuma H.E., 2016). Online media facilitates the number of respondents increasing independently.

This study distinguishes two types of variables, namely independent variables and dependent variables. The nature of independent variable is flexible and can be intervened in accordance with the desired research results. The affected variable called dependent variable. This variable is bound to independent Favorite variable. place act as independent variable in this study meanwhile cognitive response act as dependent variable. Respondents will be asked two questions:

- 1. What is your favorite place?
- 2. What have you experienced / thought about in your favorite place?

Each question represents each variable in this study. The quantitative method focuses on the accuracy of the questions in answering the problem statement. For this reason, each question must be made carefully so that the data collected is suitable for analysis.

The questionnaire contains two types of questions namely open-ended questions and close-ended questions. Favorite places data collected using open-ended questions. Cognitive response identification utilized close-ended questions as a form of validation from existing studies. Translated variables into types of questions can be seen in Table 2.

Table 2. Translated variables

Variable type	Variable	Translated variable	Data collecting method
la den en dent	sociodemographic	Age, gender,	Close-ended
Independent		occupation, income	question
variable	Favorite place	Function	Open-ended
			question
Dependent variable	Cognitive response	Cognitive response	Close-ended
			question

Favorite place questions generate various answers. The results then

grouped using content analysis. This shows the explanatory nature of this

research. The result of favorite place question has been discussed previously on Lissimia F. (2018). Therefore this article will discuss favorite place result generally and focused on cognitive response instead.

Cognitive response use Likert scale as a psychometric scale. The Likert scale is used to express the level of agreement regarding the perception of various

statements (Creswell J.W., 2003). The measurement scale in the preparation of the research questionnaire uses a 1-5 Likert scale alternative answers to measure respondents' perceptions. From the cognitive variables available, respondents were asked to rate how strong the experience gained from a favorite place. The higher the scale the stronger the experience. A clearer picture can be seen in the next table.

Table 3. Likert scale for cognitive responses

	Value		Variable		Source		
0	1	2	3	4	5	togetherness	Sari et al (2012), Newell (1997)
0	1	2	3	4	5	kinship	Sari et al (2012)
0	1	2	3	4	5	independence	Sari et al (2012)
0	1	2	3	4	5	hospitality	Sari et al (2012)
0	1	2	3	4	5	privacy	Chapman & Robertson (2009), Newell (1997)
0	1	2	3	4	5	public	Chapman & Robertson (2009), Newell (1997)
0	1	2	3	4	5	familiarity	Galindo & Rodriguez (2000), Chapman & Robertson (2009), Newell (1997)
0	1	2	3	4	5	pristine	Young (1999)
0	1	2	3	4	5	unique	Young (1999)
0	1	2	3	4	5	exclusivity	Young (1999)
0	1	2	3	4	5	inclusivity	
0	1	2	3	4	5	crowded	Young (1999)
0	1	2	3	4	5	educational	Young (1999)
0	1	2	3	4	5	ecologic	Young (1999), Newell (1997)
0	1	2	3	4	5	developed	
0	1	2	3	4	5	adventurous	Young (1999)
0	1	2	3	4	5	nostalgic	Sari et al (2012)
0	1	2	3	4	5	novelty	Sari et al (2012)
0	1	2	3	4	5	interesting	Young (1999)
0	1	2	3	4	5	fascinating	Kaplan & Kaplan (1989)

Data collected through questionnaires analyzed quantitatively categorized. Favorite place contents are analyzed then categorized. The resulting categories then analyzed using distribution. Cognitive data in the form of distributed scale are Analysis of Variance (ANOVA) determine the dominant and nondominant data. Then cognitive data is analyzed using factor analysis. This analysis classifies variables that have similar scale values and makes them a new variable called latent variables. The end result answers the cognitive responses that appear at a favorite place.

DISCUSSION

Favorite Place

The total number of respondents obtained was 347 people. The number based on similar study by (Sari A.A.; Kusuma H.E. & Tedjo B. (2012) as explained on methodology. The result is 347 different favorite places. Openended questions are considered to be the reason why the results vary. The categorization of favorite places is seen from the similarity in the function of the place (Newell P.B., 1997; Sari A.A.; Kusuma H.E.; Tedjo B., 2012; Lissimia F., 2018). Each category labeled a name represents the similarity characters of the group. So many favorite places, the categorization is done up to two stages. The first categorization produces 33 categories that are made based on the similarity of functions. The results are still too many to produce meaningful patterns. Then the second stage of categorization is done which groups places with similarity physical characteristics characteristics. Details on favorite place categories can be seen in table 4.1. Second level categories produce 17 favorite place categories.

Table 1. Favorite Place Category (Lissimia F., 2018)

. ,		
2 nd level		
category		
Marine tourism		
object		
Highland		
Natural		
	environment	
-		
- Culinary place		
		Lodging

Hotel			
Grocery store	Rustic		
Market	commercial		
Mall	Urban		
Bookstore	commercial		
Recreational	Recreational		
facility	facility		
Historical site	Historical site		
Island			
City	Geographic		
Village	area		
Particular area	•		
City park			
Open public	City open space		
space			
Railway	Railway Station		
Station			
Lake	Lake		
Library	Educational		
School	Facility		
Religious	Religious		
Facility	Facility		
Home			
Personal	Personal space		
space			
Hobby space	· Habby ralated		
Guarding post	Hobby-related space		
Cinema			

Distribution analysis applied on second category of favorite place. This analysis helps determine what favorite places young adults like best and which are least popular. The frequency of each category is calculated based on the frequency of each favorite places. The results of the distribution analysis are shown in Figure 1. The result of this study has been published by Lissimia F., 2018).

The most favorite places chosen by young adults are culinary place, modern commercial, and marine tourism with frequencies above 40 people. The next group has a frequency of 20-30 people, namely the highlands, city open spaces, hobby-related space, educational

facilities, and religious facilities. The next category with a frequency of 10-19 people, namely historical sites, personal spaces, and geographic area. The last group with a frequency of less than 10 people are lake, lodging, natural environment, rustic commercial, railway station, and recreational facilities.

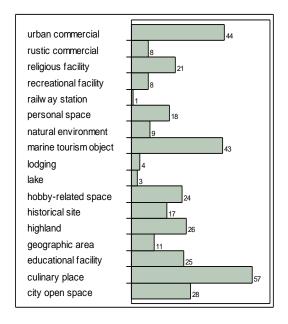


Figure 1. Distribution of Favorite Place (Lissimia F., 2018)

Cognitive Response Distribution

Cognitive responses were obtained from closed questions. The results of cognitive responses were analyzed using ANOVA to determine the tendency of cognitive responses in favorite places. The results can be seen in Figure 2. The range of cognitive responses ranged from 2.15 to 3.80.

The highest variables from 20 Likert scale questions are togetherness and hospitality. Both have the same value of 3.80. Place affordance, social and physical included in person-environment interaction perspective (Newell P.B., 1997). This means that the reason is the result of the relationship between place and human factors. The incompatibility of places with activities that can be done with people lower place preference. Place that is able to facilitate togetherness is preferred over a place that facilitates solitude.

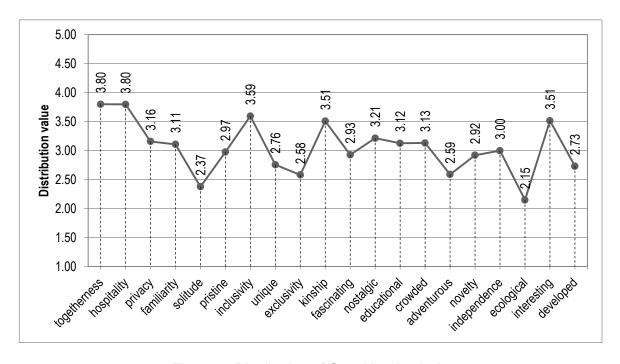


Figure 2. Distribution of Cognitive Analysis

The high value hospitality is probably more due to Indonesian culture. Hospitality is one of the common Indonesian characters. The key to good public service is hospitality. Maybe cultural background causes high hospitality values compared to other values. Other evidence is that this category only appears research with Indonesian student respondents (Sari A.A.; Kusuma H.E.; Tedjo B., 2012). Whereas in other studies with foreign respondents (Young, 1999; Galindo M.P.G.; Rodriguez J.A.C, 2000; Newell P.B., 1997) hospitality did not appear at

While the lowest value is ecologic with 2.15 value and solitude with a value of 2.37. It turns out that Indonesian young adults do not like places that give the impression of solitude. Research by Chapman J.A.; Robertson M. (2009) with student respondents generates personal space preferences because they need space to be alone. Cognitive private does get a higher value of 3.16 than solitude that is 2.37. The difference between the two is quite large. This indicates that young adults choose places that can provide privacy but that does not mean they have to be alone or isolated. This is slightly different from the research of Newell P.B. (1997) where the value of solitude was chosen by 3.1% of respondents while those who said they chose a favorite place because of privacy amounted to 2.6%. This can be related to culture or other factors. Another conclusion are solitude and privacy lower in value than togetherness. This result is consistent with Newell's study where social and physical affordance was chosen by 5.7% of respondents as opposed to privacy and solitude.

Low value solitude is considered normal because highest value the togetherness and hospitality. Respondents in the 18-40 years age group prefer a place that offers a sense of togetherness and hospitality. This also supports the theory put forward by Erikson and Vaillant (Berk L. E., 2007; Sokol J.T., 2009). Erikson and Vaillant formulated the characteristics of young adults characterized by success in building relationships (intimacy) and failure (isolation). Intimacy is shown by high cognitive response the togetherness. Whereas isolation shown in the low cognitive response to solitude.

Cognitive Response Factor Analysis

Factor analysis was performed on cognitive responses. The factor analysis standard used is an eigenvalue of more than 1. The result is five latent variables of cognitive response. The results of the analysis can be seen in table 4.

The first latent variable consists of novelty, adventurous, interesting, independence, fascinating, and educational. This group is labeled environmental experience because each measurable variable describes experience visitors get from their favorite places.

The next latent variable is labeled social affordability. Original variables include togetherness, hospitality, kinship, and solitude. Each measurable variable represents the social atmosphere presents in a favorite place so social affordability label considered appropriate for this group.

Table 4. Factor Analysis of Cognitive response

	Environmental experience	Social affordance	Ecological quality	Personal interests	Urban quality
Novelty	0.83	0.07	0.0	0.0	0.1
Adventurous	0.82	0.19	0.2	0.0	0.0
Interesting	0.70	0.32	0.1	0.2	-0.2
Independence	0.70	-0.09	0.2	0.3	0.1
Fascinating	0.66	0.34	0.1	0.3	-0.0
Educational	0.46	0.04	0.0	0.4	0.1
Togetherness	0.19	0.81	0.1	0.0	0.0
Hospitality	0.18	0.73	0.2	0.2	0.1
Kinship	0.19	0.73	0.3	0.2	0.1
Solitude	0.05	-0.68	0.2	0.3	0.1
Pristine	0.10	0.05	0.8	0.1	0.1
Unique	0.19	0.19	0.8	0.1	-0.1
Ecologic	0.30	0.18	0.5	0.1	-0.4
Inclusivity	0.19	0.44	0.5	0.3	-0.0
Privacy	0.13	-0.04	0.1	0.7	-0.1
Exclusivity	0.14	0.10	0.0	0.7	-0.0
Familiarity	0.08	0.08	0.2	0.5	0.3
Nostalgic	0.17	0.15	0.2	0.4	0.0
Crowded	0.23	0.31	0.0	-0.1	0.7
Developed	0.02	-0.02	-0.0	0.1	0.8

The first latent variable consists of novelty, adventurous, interesting, independence, fascinating, and educational. This group is labeled environmental experience because each measurable variable describes the experience visitors get from their favorite places.

The next latent variable is labeled social affordability. Original variables include togetherness, hospitality, kinship, and solitude. Each measurable variable represents the social atmosphere presents in a favorite place so social affordability label considered appropriate for this group.

Pristine, unique, ecologic, and inclusivity belong to the next latent variables. This group considered to be composer of ecological quality therefore this label is used.

Personal interests in the form of original variables such as privacy, exclusivity, familiarity, and nostalgic become single latent variable. This variable may have a variety of properties compared to others but is closely related to the interests of each individual.

Finally, the latent variable of urban quality consists of two measurable variables: crowded and developed cognitive. Two variables very accurately

describe the urban atmosphere so it is suitable to be labeled urban quality. This variable appears as a minority variable. Favorite places sought after by Indonesian young adults do not likely offer crowdedness or developed cognitive. They prefer favorite places that are ecologic and differ greatly from the crowdedness of urban areas.

Young (1999) also conducts a factor analysis of place meaning. The result is five latent variables which include natural, aesthetic, remote / natural quality, cultural values, and human impact. The quality of nature includes conservation, ecological, educational, unique, fragile, attractive, and exclusivity variables. Aesthetic variables include tranguil, scenic, relaxed, wilderness, beautiful, and exotic. Isolated/ pristine variables include authentic, remote. unusual and adventurous. unspoilt. Cultural value variables include importance for local, historical, ancient, and spiritually valuable culture. Human impact variables include overdeveloped, dangerous, crowded, and threatened.

Interesting variable included in first latent variable on this research and also research conducted by Young (1999). This means that the main criteria for design based on cognitive responses must consider the interesting experience that will be obtained by the user. Another similarity is that crowdedness ranks last on the latent variable. So crowdedness can be reduced in building design.

The analysis of tourist motivation factors by Young (1999) is very similar to the results of the factor analysis on this study. The results of latent variables of tourist motivation produced four latent variables including interest in nature,

escape and relax, social, and novelty. The novelty of a place may not be expected by tourists, but when combined with interesting experiences, fascinating, adventurous, educational, independence can increase the preferences of a place. Place preference value increase when people get rich cognitive experience. Social affordability becomes a constant that emerge in a favorite place. This variable came out in this study, Young (1999) and Newell P.B. (1997) research.

CONCLUSION AND RECOMMENDATION

Favorite places are products of place preferences. Favorite places that have emerged from Indonesian young adults are culinary place, urban commercial, and marine tourism. Malls are included in modern commercial. Malls are one of the places with high preference considering Sari A.A.; Kusuma H.E. & Tedjo B., (2012) research result the same. The mall has consistently emerged as the favorite place of choice for young Indonesian adults. Marine tourism has emerged as one of the most favorite places for Indonesian people, showing that geographic background plays an important role in place preferences. Maybe the impact is indirect, however geographic condition contribute native's knowledge of places. This finding is in accordance with the explanation from Newell P.B. (1997).

Cognitive responses in this study analyzed using ANOVA. The distribution results show the main cognitive response of Indonesian people to their favorite places are togetherness and hospitality. The results show that cognitive are influenced by culture. Whereas the lowest cognitive response

is ecologic and solitude. The solitude response is in accordance with the distribution results that show togetherness as the most opted cognitive response. This result did not get enough highlight on previous study. Most study combined cognitive, affective, and conative response rather than focusing on each response.

The age group influences cognitive responses that appear in a favorite place. Young adults are defined through success and failure in relationships that is intimacy and isolation (Berk L. E., 2007; Sokol J.T., 2009). It is natural that togetherness becomes the main reason for cognitive while solitude is the lowest cognitive in favorite place. This result never been explained in previous study. This confirm that cognitive response heavily influenced cognitive response.

Cognitive responses produce latent variables of environmental experience, social affordability, ecological quality, personal interest, and urban quality. Consistent with Young's research (1999) that interesting experiences important to be obtained by human, especially if those experiences are combined with other cognitive responses. Social affordability is also important in the design of places because young adult age group prefer places that accommodate favorite cognitive togetherness, hospitality, and kinship and minimize solitude.

REFERENCES

- Berk L. E. (2007). Development through the lifespan (4th Ed.) Chapter 14. Allyn and Bacon.
- Casakin H.; Billig M. (2009). Effect of Settlement Size and Religiosity on Sense of Place in Communal

- Settlement. Journal of Environment and Behavior, 41 (6), 821-835.
- Chapman J.A.; Robertson M. (2009).
 Adolescents Favourite Places:
 Redefining the Boundaries between
 Private and Public Space. Space
 and Culture, 12(4), 419–434.
- Creswell J.W. (2003). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. SAGE Publications, Inc.
- Galindo M.P.G.; Rodriguez J.A.C. (2000). Environmental Aesthetic and Psychological Wellbeing: Relationship Between Preference Judgements for Urban Landscapes and Other Relevant Affective Response. *Psychology in Spain*, 4 (1), 13–27.
- Haryadi; Setiawan B. (2010). *Arsitektur, Lingkungan, dan Perilaku*. Gajah Mada University Press.
- Jorgensen B.S.; Stedman R.C. (2001). Sense of Place as an Attitude: Lakeshore Owners Attitudes Toward Their Properties. *Journal of Environmental Psychology*, 21, 233–248.
- Korpela K.M. (2001). Restorative Experience and Self Regulation in Favorite Place. *Journal of Environment and Behavior*, 33 (4), 572–589.
- Korpela K.M. (2003). Negative Mood and Adult Place Preference. *Journal of Environment and Behavior*, 35 (3), 331–346.
- Lewicka M. (2011). Place Attachment: How Far Have We Come in The Last 40 Years? Journal of Environmental Psychology, 31, 207–230.
- Lissimia F. (2018). Favorite Places of Indonesian Young Adults. *International Journal of Indonesian Young Adults*, *2 (1)*, 15–26.
- Malinowski J.C.; Thurber C.A. (1996).

 Developmental Shifts in the Place
 Preferences for Boys Aged 8-16

- Years. Journal of Environmental Psychology, 16, 45–54.
- Murdy J.J.; Gibson H.J.; Yiannakis A. (2002). Predicting Nature-Based Tourist Roles: A Life Span Perspective. Proceedings of the 2002 Northeastern Recreation Research Symposium, 179–183.
- Najafi M.; Mohd Sahriff M.K. (2011). The Concept of Place and Sense of Place In Architectural Studies. World Academy of Science, Engineering and Technology, 56, 187–193.
- Newell P.B. (1997). A Cross Cultural Examination of Favorite Place. Journal of Environment and Behavior, 29 (4), 495–514.
- Rachman R.A.; Kusuma H.E. (2016). Karakteristik Fisik-Sosial dan Kriteria Kamar yang Membuat Betah. *Prosiding Temu Ilmiah IPLBI* 2016, D053–D058.
- Sari A.A.; Kusuma H.E.; Tedjo B. (2012). Tempat Favorit Mahasiswa Sebagai Sarana Restorative. *Jurnal Lingkungan Binaaan*, *1* (1), 1–14.
- Semken S; Carol B. (2008). Sense of place in the practice and assessment of place-based science teaching. *Science Education*, *92 (6)*, 1042–1057.
- Sokol J.T. (2009). Identity Development Throughout the Lifetime: An Examination of Eriksonian Theory. Graduate Journal of Counseling Psychology, 1 (2), article 14.
- Young, M. (1999). The relationship between tourist motivations and the interpretation of place meanings. *An International Journal of Tourism Space, Place and Environment*, 1(4), 387–405.