Asian Journal of Social Science and Management Technology
ISSN: 2313-7410
Volume 2 Issue 6, November-December, 2020
Available at www.ajssmt.com

Community Building Behavior Management Green Open Space

Rahmansah [1], Mithen Lullulangi [2], Muhammad Ardi [3],
Lecturer in the Faculty of Engineering, Universitas Negeri Makassar.

ABSTRACT : This study aims to determine the behavior of the Bugis people managing green open space. Research sites are in the districts of Bone, Soppeng, and Wajo. Respondents of the study, as many as 300 families, namely 100 households in each district, were chosen randomly. Research variables: (1) community behavior managing green open space as the dependent variable (Y), (2) conservation knowledge (X_1), (3) environmental knowledge (X_2), and (4) green open space knowledge (X_3) as independent variables. Data collection techniques are questionnaires, and data analysis techniques with descriptive analysis and multiple regression. The results showed that: (1) community behavior managing green open space (Y) in the high category, (2) conservation knowledge (X_1) in the medium category, (3) environmental knowledge (X_2) in the medium category, and (4) green open space knowledge (X3) medium category. The magnitude of the effect of X_1, X_2, and X_3 together against Y = 98%, and there are 2% influence from other variables not examined.

Keywords: behavior, knowledge, attitude, green open space

1. INTRODUCTION

The districts of Bone, Soppeng, and Wajo are the base areas of the Bugis tribe in South Sulawesi Province. The Bugis tribe in the region is very thick with local wisdom in various aspects of life. In the present condition some aspects of people's lives have experienced a shift in values caused by the development of science and technology. This shift in values actually fades out and even eliminates local wisdom. In addition, technological developments also change the behavior of the environment, attitudes towards the environment, and various issues of knowledge about the environment for the Bugis community (preliminary study, September, 2017).
Management Law No. 23/1997 article 3 says that the management of the living environment which is carried out with the principles of state responsibility, the principle of sustainability, and the principle of benefits aims to realize sustainable development that is environmentally sound in the context of developing a fully Indonesian society who believes and is devoted to God The Almighty. Republic of Indonesia Law No. 32/2009 concerning Environmental Protection and Management; explained that, the environment consists of biotic components and abiotic components where the environment needs to be maintained and preserved. Furthermore Singh, (2006) further clarifies that the environmental components consist of three parts, namely: the physical environment, the biological environment, and the social, economic and cultural environment. These environmental components influence each other. Therefore, the environment needs to be managed well so as to provide great benefits, especially for humans far in the future, such as green open space in residential complexes or homes. The behavior of managing a responsible and sustainable environment is very much determined by many factors. These factors include knowledge of issues, motivations, attitudes, situational factors, and so on (Hungerford & Volk, 1990).

In Law No. 4. In 1992 concerning housing and settlements, it is said that housing is a group of houses that functions as a residential or residential environment that is equipped with environmental infrastructure and facilities. The environmental infrastructure and facilities referred to in the Law are like faeces landfills, landfills, green open spaces and so on. Therefore, for the comfort of the occupants of the house, the green open space should be managed properly so that it creates a sense of pleasure, aesthetics, and produces fresh air.
Doxiadis, (2003) explains that humans have needs such as space, air, temperature, etc. and to take shelter requires building houses as a means of social service. The space in question is the living room, family room, bedroom, car garage, and green open space. The spatial planning law No. 26/2007 requires 30% overall green open space (20% public green open space and 10% privacy green open space) of the total city area. On the basis of this law, green open space for each residential or residential complex is 20% for parks in residential areas and 10% for parks for every 1 unit of house.
The various theories that underlie this research are described as follows. Kollmus and Agyeman, (2002) say that there is a linear relationship between knowledge, attitudes, and environmental behavior. Hines et. Al, (2010) said that acting skills, knowledge of action strategies, knowledge of issues, personality factors, and other situational factors, influence the environmentally responsible behavior. Furthermore Rachmat, (2011) said that the situation or environmental conditions that affect human behavior. This means that behavior arises because of the environment that is the cause, or a function of interaction between individuals and their environment.
Adnil, (2011) said that human behavior is the whole done or human actions starting from the actions, thoughts, and feelings that are seen integrally. Furthermore Mar'at and Lieke, (2010) say that behavior is a very complex event or material that can be observed from the outside. Veithzal & Deddy, (2011) said that, behavior is all actions carried out by individuals.

National Law. 26 of 2007 concerning the Arrangement of Green Open Spaces in Urban Areas says that urban green open spaces are part of an open space of an urban area filled with plants and plants to support ecological, social, cultural, economic, and aesthetic benefits. In the Ministry of Public Works Regulation Number: 05 / PRT / M / 2008 concerning Guidelines for Provision and Utilization of Green Open Space in Urban Areas, it is explained that green open space for large and medium-sized houses, green areas for buildings is 40%, for small types and very simple by 30%, for villages of 10-20%. Furthermore, it is said that in large and medium type houses, 40% of the land should be green and small and very simple, at least 20% or 10% of the land is green open land. Budiharjo, (2009) said that green open space is a container that accommodates human activities in an environment that does not have a cover in physical form. Rahmi and Bakti Setiawan, (1999) said that green open space functions as: ecological values, socio-cultural values, psychological values, and aesthetic or beauty values. This green open space is in its final position in urban areas, settlements and housing.

Suriasumantri, (2010) said that knowledge is essentially all that we know about something that is obtained through sensing certain objects including science. Furthermore Bloom, (1981) quoted by Notoatmodjo, (2007) said that knowledge has three components, namely cognitive, affective, and psychomotor components.
Arsyad, (2017) defines conservation as the utilization management of the biosphere so that it can generate greater profits in a sustainable manner for the current generation while maintaining its potential for the needs of future generations. Law Number 32 Concerning the Protection and Management of the environment explains the notion of conservation of natural resources is the management of natural resources to ensure their wise use and continuity of availability while maintaining and improving the quality of values and diversity.
Ahira, (2011) said that the environment is a living system where there is human intervention in the ecosystem. Ahira, (2011) basically says that the environment consists of three important components, namely: abiotic environment, biotic environment, and cultural environment. Physical environment in the form of elements of water, air, land, and energy of mineral materials and the like. Biological environment in the form of elements of animals, plants, wildlife, and industrial biological raw materials. The social environment is in the form of social, economic, cultural and welfare systems.

2. Research Methods

This type of research is quantitative research, with a correlational approach. The research locations are housing complexes in Bone, Soppeng, and Wajo Regencies. The research respondents were 300 households, or 100 households in each district, chosen by random private residence. Research variables: (1) community behavior managing green open space as the dependent variable (Y), (2) conservation knowledge (X1), (3) environmental knowledge (X2), and (4) green open space knowledge (X3) as independent variable. Data collection techniques are questionnaires, and data analysis techniques with descriptive analysis and multiple regression.

3. Results and Discussion

Results

1. Behavior of Buginese Tribes Managing Green Open Space (Y)

To find out the behavior of the Bugis people in managing green open space, the following results of descriptive statistical analysis are presented in table 1.

Table 1: Descriptive on the behavior of the Bugis people to manage green open spaces.

No	DESCRIPTION	STATISTICAL VALUE
1.	The mean	27,14
2.	Standard Deviation	4,37
3.	Minimum	18,00
4.	Maximum	32,00

Source: Results of data analysis

Based on table 1 above, obtained a minimum value of respondents of 18 and a maximum value of 32, has the meaning that there are respondents who have the lowest value of 18 with a standard deviation of 4.37 shows the behavior data is somewhat far apart (less homogeneous). For the results of descriptive analysis of the behavior of the Bugis tribe towards the management of green open space measured by 5 categories namely very low, low, medium, high, and very high can be seen in table 2.

Table 2. Frequency distribution of respondents based on behavior (Y)

No	Category	Number scale	Frequency	Percentage (%)	Mean Category
1	Very low	18,0 -20,8	0	0	-
2	Low	20,9 – 23,7	36	12	-
3	Medium	23,8 – 26,6	120	40	-
4	High	26,7 – 29,5	144	48	27,14
5	Very high	29,5 – 32,0	0	0	-
	Amount		300	100	-

Source: Results of data analysis

Based on the frequency distribution (Table 2), it appears that none of the Bugis people have very low and very high behavior. As many as 12% have low behavior, 40% have medium behavior, and 48% have high behavior. The results of this analysis show that the behavior of the Bugis tribe managing green open space is in the high category.

The data in table 2 above, can also be described in the form of a histogram as shown in Figure 1 below.

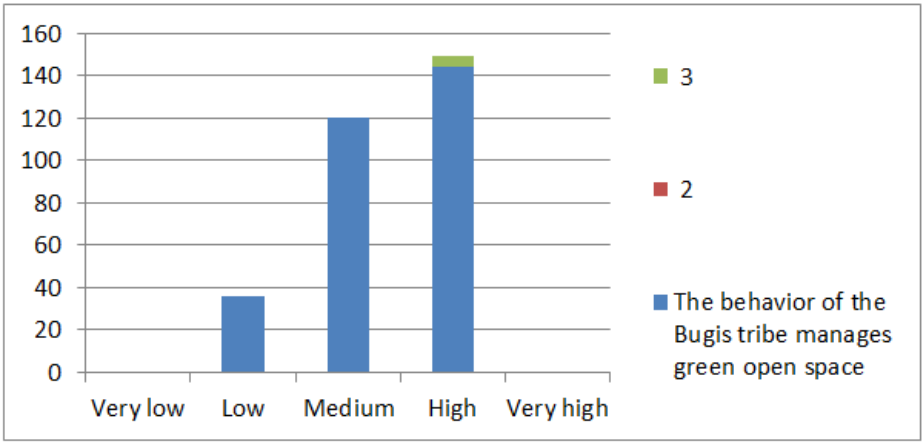

Figure. 1. Distribution of respondent's frequency based on behavior

Based on the results of the descriptive analysis, the mean value = 27.14 is in the high range so it can be concluded that the behavior of the Bugis people to manage green open space is high.

2 Conservation Knowledge (X_1)

To find out the conservation knowledge of the Bugis people in managing green open space, the following results of descriptive statistical analysis are presented in table 3.

Table 3: Descriptive knowledge of the conservation of the Bugis people for green open space management.

No	DESCRIPTION	STATISTICAL VALUE
1.	The mean	5,66
2.	Standard Deviation	1,48
3.	Minimum	3,00
4.	Maximum	8,00

Source: Results of data analysis

Based on table 3 above, obtained a minimum respondent value of 3 and a maximum value of 8, means that there are respondents who have the lowest value of 3 with a standard deviation value of 1.48 showing data on knowledge of ecosystems that are not far apart (homogeneous). For the results of a descriptive analysis of the Bugis tribe conservation knowledge of green open space management measured by 5 categories: very low, low, medium, high, and very high can be seen in table 4.

Table 4. Distribution of respondents' frequency based on conservation knowledge (X_1)

No	Category	Number scale	Frequency	Percentage (%)	Mean Category
1	Very low	3,0 - 4,0	0	0	-
2	Low	4,1 – 5,0	72	24	-
3	Medium	5,1 – 6,0	150	50	5,66
4	High	6,1 – 7,0	78	26	-
5	Very high	7,1 – 8,0	0	0	-
Amount			300	100	-

Source: Results of data analysis

Based on the frequency distribution (Table 4), it appears that none of the Bugis people have very low and very high conservation knowledge. As many as 24% have low conservation knowledge, 50% have moderate conservation knowledge, and 26% have high conservation knowledge. The results of this analysis indicate that the knowledge of Bugis conservation is in the medium category.

The data in table 4 above, can also be described in the form of a histogram as shown in Figure 2 below.

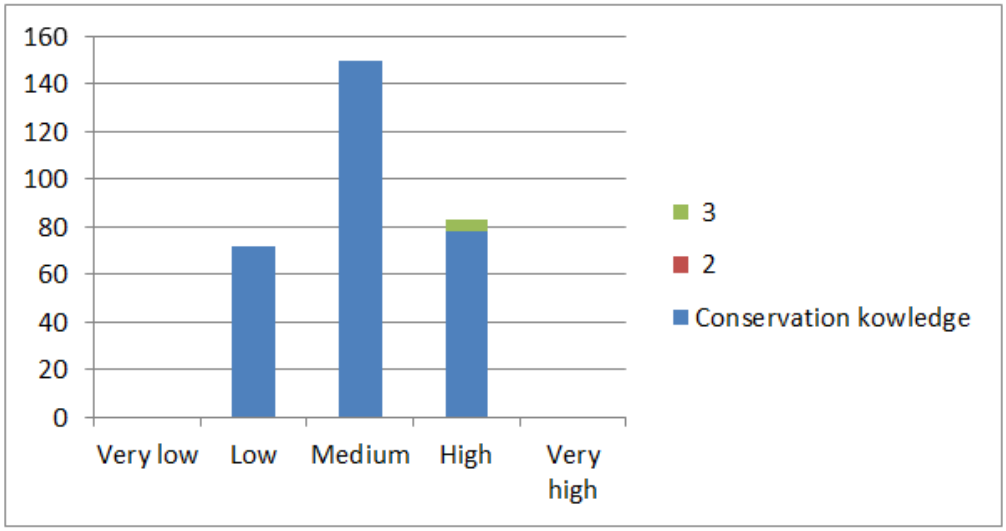

Figure. 2. Frequency distribution of respondents based on conservation knowledge

3. Environmental Knowledge (X_2)

To find out the environmental knowledge of the Bugis people in managing green open space, the following results are presented in descriptive statistical analysis in table 5.

Table 5: Descriptive environmental knowledge of the Bugis people for green open space management.

No	DESCRIPTION	STATISTICAL VALUE
1.	The mean	5,80
2.	Standard Deviation	1,31
3.	Minimum	4,00
4.	Maximum	8,00

Source: Results of data analysis

Based on table 5 above, obtained a minimum value of respondents of 4 and a maximum value of 8, has the meaning that there are respondents who have the lowest value of 4 with a standard deviation of 1.31 This shows data on environmental knowledge is not far apart (homogeneous). For the results of a descriptive analysis of the environmental knowledge of the Bugis people on the management of green open space measured by 5 categories namely very low, low, medium, high, and very high can be seen in table 6.

Table 6. Distribution of respondents' frequency based on environmental knowledge (X_2)

No	Category	Number scale	Frequency	Percentage (%)	Mean Category
1	Very low	4,0 - 4,8	0	0	-
2	Low	4,9 – 5,7	72	24	-
3	Medium	5,8 – 6,6	150	50	5,80
4	High	6,7 – 7,5	78	26	-
5	Very high	7,6 – 8,0	0	0	-
Amount			300	100	

Source: Results of data analysis

Based on the frequency distribution (Table 6), it appears that none of the Bugis people have very low and very high environmental knowledge. As many as 24% have low environmental knowledge, 50% have moderate environmental knowledge, and 26% have high environmental knowledge. The results of this analysis show that environmental knowledge of the Bugis is in the medium category.

The data in table 6 above, can also be described in the form of a histogram as shown in Figure 3 below.

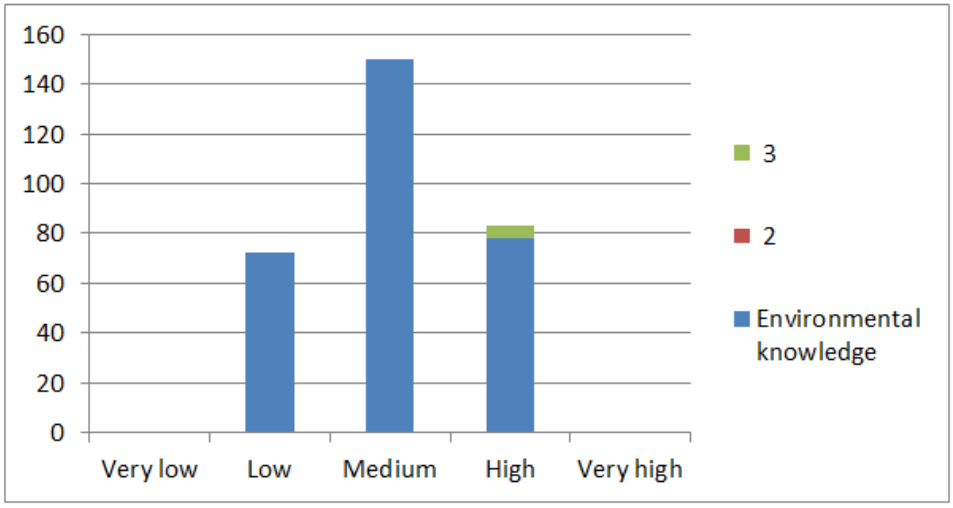

Figure. 3. Distribution of respondent's frequency based on environmental knowledge

Based on the results of the descriptive analysis, the mean value = 5.80 is in the medium range so it can be concluded that the environmental knowledge of the Bugis people to manage green open space is medium.

4.Green Open Space Knowledge (X_3)

To find out the knowledge of the green open space of the Bugis people, the following is the result of descriptive statistical analysis in table 7.

Table 7: Descriptive knowledge of the green open space of the Bugis people

No	DESCRIPTION	STATISTICAL VALUE
1.	The mean	5,56
2.	Standard Deviation	1,51
3.	Minimum	3,00
4.	Maximum	8,00

Source: Results of data analysis

Based on table 7 above, obtained a minimum value of respondents of 3 and a maximum value of 8, it means that there are respondents who have the lowest value of 3 with a standard deviation value of 1.51. This shows the data of knowledge of green open space not far apart (homogeneous). For the results of descriptive analysis of knowledge of green open space the Bugis tribe is measured by 5 categories: very low, low, medium, high, and very high can be seen in table 8.

Table 8. Distribution of respondent frequencies based on green open space knowledge (X_3)

No	Category	Number scale	Frequency	Percentage (%)	Mean Category
1	Very low	3,0 - 4,0	0	0	-
2	Low	4,1 – 5,0	72	24	-
3	Medium	5,1 – 6,0	150	50	5,56
4	High	6,1 – 7,0	78	26	-
5	Very high	7,1 – 8,0	0	0	-
Amount			300	100	

Source: Results of data analysis

Based on the frequency distribution (Table 8), it appears that none of the Bugis people have very low and very high green open space knowledge. As many as 24% have low green open space knowledge, 50% have medium green open space knowledge, and 26% have high green open space knowledge. The results of this analysis show that the knowledge of the green open spaces of the Bugis is in the medium category.

The data in table 8 above, can also be described in the form of a histogram as shown in Figure 4 below.

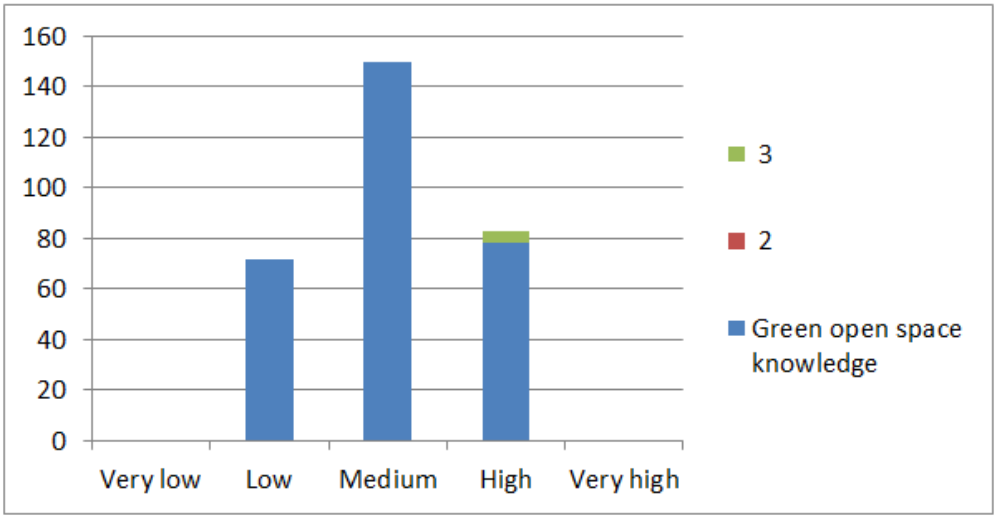

Figure. 4. Distribution of respondent frequencies based on green open space knowledge

Based on the results of the descriptive analysis, the mean value = 5.56 is in the range of the medium so that it can be concluded that the green open space knowledge of the Bugis people is medium.

5. Effects of X_1, X_2, and X_3 on Y

To find out the effect of X1, X2, and X3 together on Y, the following results of the multiple regression analysis X1, X2, and X3 are presented, in Table 9 (Anova).

Table 9. Tables of Anova X_1, X_2, and X_3 against Y

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5712,120	3	816,017	111,7445.	0.0000.[b]
	Residual	2086,225	292	7,303		
	Total	5712,120	299			

a. Dependent Variable: Y

Based on the results of the multiple regression analysis of Table 9, Summary Models X1, X2, and X3 together with Y (Table 9), it appears that significant = 0,000 <0.05. This figure shows that X1, X2, and X3 jointly influence Y and its influence is very significant. To find out the magnitude of the effect of X1, X2, and X3 on Y, the following results of multiple regression analysis (Model Summary) are presented in Table 10.

Table 10. Summary Models X_1, X_2, X_3, together Against Y

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	99,000[a]	,98	,97	,00000

a. Predictors: (Constant), X_1, X_2, X_3

Based on the results of the multiple regression analysis (Table 10), it appears that the coefficient of determination or R Square = 0.98 means, the magnitude of the effect of X1, X2, and X3 together on Y is 98%. So there is still the influence of other variables by 2% but not included in the analysis model.

6. Discussion

The behavior of the Bugis people to maintain green open space is in the high category, with an average value of 27.14. This value is lower when compared to the results of Hafid's research, (2018) with a value of 36, but it is still better when compared to the behavior of the community in the Gunung Sari Kelurahan housing complex, with an average value of 3.75 (Handayani, 2015). To improve this behavior, they must first increase their knowledge on aspects of knowledge about environmental conservation, knowledge of the environment,

and knowledge of green open space itself. This is possible because these variables show a very significant effect on the behavior of maintaining green open space. As explained by Gustaniar, (2012) that all creatures on this earth have a role, where the ecosystem itself is formed from biotic and abiotic components that have interdependence. Therefore knowledge about the environment including the Bugis tribal community ecosystems needs to be improved so that the behavior of managing green open spaces in their environment can increase. Ajzen, (2002) explains that there are five important variables that can encourage behavior change, (including improving behavior), namely attitudes, knowledge, self efficacy, locus of control, and intention. Therefore, attitudes, knowledge of the ecosystem, ability to adapt, self-control, and interest or motivation of the Bugis in maintaining green open space need to be improved. Deslanie, (2011) said that the occurrence of behavior changes due to the process of interaction between individuals and the environment through a learning process. Therefore, the way to improve the behavior of the Bugis community to maintain green open space is through a learning process, for example providing scheduled education and training on the interrelationships between living and non-living things, green open space, environmental improvement and maintenance, at least once in six months or twice a year. Attitudes towards the environment, motivation to maintain the environment of the Bugis people still need to be directed and improved. The way to improve it is to increase environmental knowledge, provide a model of a healthy environment, and assist them in applying their existing environmental knowledge.

7. Conclusion

The conclusions of this study are as follows. (1) the behavior of the Bugis people in managing green open space in each of their homes is good from the aspect of land supply, ecological, economic and social aspects, but it still needs to be improved, (2) knowledge of green open space, knowledge of environmental conservation , environmental knowledge of the Bugis people in terms of cognitive, affective, and psychomotor aspects is in the medium category so it still needs to be improved, (3) knowledge of green open space, knowledge of environmental conservation, environmental knowledge together have a significant effect on community behavior The Bugis tribe manages green open space, with a value of 98%.

8. Acknowledgment

Thank you to: Rector of Makassar State University as the supervisor of the implementation of research at Makassar State University who has disbursed grants for conducting this research, Makassar State University Research Institute who has helped in the process of conducting this research, the Provincial Government of South Sulawesi, the Government of Soppeng Regency, Bone Regency and Wajo Regency and their entire staff for their permission to grant permission for this research, as well as all the people who participated in this study. Acknowledgments are also extended to all those who have been willing to provide the data needed in this study, both Government agencies, and other parties, especially to respondents who have provided direct data needed in this study.

9. References

1. Adnil, Edwin Nurdin. (2011). Tumbuh Kembang Perilaku Manusia. Jakarta: Penerbit Buku Kedokteran EGC.
2. Ahira, Anne. (2011). Kesehatan Lingkungan Perumahan. (ww.anneahira.com/ kesehatan-lingkungan-permukiman.htm, diakses 20 April 2017).
3. Ajzen, Icek.(2002). Perceived Behavioral Control, Self – Efficacy, Locus of Control, and the Theory of Planned Behavior. University of Massachutsetts – Amherst. Journal of Applied Social Psychology, 2002, 32,4 pp 665 – 683. V.H.Winston & Son.Inc.
4. Arsyad, Sitanala. (2017). Konservasi Tanah dan Air. Bogor: IPB Press.
5. Budiharjo, Eko. (2009). Kota Berkelanjutan. Semarang: P.T. Alumni.
6. Deslanie, N.K. (2011). Teori Perilaku Psikologi. (Peace Zone. Lonies Kingdom.Blogsport.com, Diakses 13 Mei 2018).
7. Doxiadis, Constantinos A, (2003). An Introduction to the Science of Human Settlements'.
8. Gustantinar, Ardiana Medha. (2012). Teori Ekosistem. (https://indonesiamengajar.org/cerita-pm/medha.../teori-ekosistem, Diakses 12 Feb 2019).

9. Hafif, Sarfa. (2018). Analisis Pengelolaan Ruang Terbuka Hijau Pada Perumahan di Kota Makassar (Kajian Pengetahuan, Sikap, dan Perilaku Masyarakat). http://eprints.unm.ac.id/11566/1/Jurnal61.pdf
10. Handayani, Risma dan Ramadhani, Laily Fitri. (2015). Perilaku Msyarakat Dalam Penyediaan Ruang Terbuka Hijau Pada Perumahan di Kelurahan Gunung Sari. Makassar : TPWK FST-UIN Alauddin.
11. Hines, I.M., H.R. Hungeford and N. Tomera. (2010). Analysis and synthesis of Research on Responsible Environmental Behavior: A Meta-Analysis. The Journal of Environmental Education, (online) (http://www.tndfonline.com/loi/vjee20. Diakses 19 Januari 2016).
12. Hungerford, Horald D. and Volk, Trudi L. (1990). "Changing Leaner Behavior Through Environmental Education". Journal of Environmental Education. 21(3) Spring. pp. 8-21. Illinois USA.
13. Kollmus, Anja dan J. Agyeman. (2002). "Mind the Gap: why do people act. environmentally and what are the barriers to pro-environmental behavior?" Journal of Environmental Education Research, Vol. 8, No. 3, 2002. USA.
14. Mar'at dan Lieke. (2010). Perilaku Manusia Pengantar Singkat tentang Psikologi. Bandung: Refika Aditama.
15. Notoatmodjo. (2007). Ilmu Perilaku dan Sikap. Jakarta: Rineka Cipta.
16. Peraturan Kementrian Pekerjaan Umum Nomor: 05/PRT/M/2008 Tentang Pedoman Penyediaan dan Pemanfaatan Ruang Terbuka Hijau di Kawasan Perkotaan.
17. Rahmi, Dwita Hadi dan Bakti Setiawan. (1999). Perencanaan Kota Ekologi. Jakarta: Direktorat Jeneral Pendidikan Tinggi. Departemen Pendidikan dan Kebudayaan.
18. Rakhmat, Jalaluddin. (2011). Psikologi Komunikasi. Bandung: PT. Remaja Rosdakarya.
19. Singh, Y. K. (2006). Environmental Science. New Delhi: New Age International (P) Limited Publisher.
20. Suriasumantri, Jujun S. (2010). Filsafat Ilmu Sebuah Pengantar Populer. Jakarta: Pustaka Sinar Harapan.
21. Undang-Undang Republik Indonesia Nomor 32 Tahun 2009 Tentang Perlindungan dan Pengelolaan Lingkungan Hidup.
22. Undang-Undang Republik Indonesia Nomor 26 Tahun 2007 Tentang Penataan Ruang.
23. Undang-Undang Republik Indonesia Nomor 23 Tahun 1997 Tentang Pengelolaan Lingkungan Hidup.
24. Undang-Undang Republik Indonesia Nomor 4 Tahun 1992 tentang perumahan dan permukiman.
25. Veithzal, R. & Deddy, M. (2011). Kepemimpinan dan Perilaku Organisasi. Jakarta: Rajawali Press.

INFO:-

Corresponding Author: ***Mithen Lullulangi, Lecturer in the Faculty of Engineering, Universitas Negeri Makassar.***

How to cite this article: ***Mithen Lullulangi, Community Building Behavior Management Green Open Space, Asian. Jour. Social. Scie. Mgmt. Tech. 2(6): 07-15, 2020.***