

Selection of Residence Based on Public Perception of Settlements as an Effort to Support the *KOTAKU* Program

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ABSTRACT

Currently, there are many programs from the government related to urban villages. One of them is Kampung Kota Baru Tengah in Balikpapan City, which is the location for the Community-Based Settlement Environmental Management program (*KOTAKU* Program). The socialization program is carried out with an approach to the informal community. Socialization through community media is the mainstay of the government so that existing programs can be realized properly in society. This study aims to see the similarity of perceptions regarding space as a place to live. Considering that a common perception is one of the first steps to achieving the success of the *KOTAKU* program, where a common perception of where to live will become the vision of development in residential areas so that people will be more consistent in implementing the *KOTAKU* program. This study uses Multidimensional Scaling (MDS) analysis, which will then map the perceptions of settlements. The results of the perception mapping formed show that individuals in each community have different perceptions of settlements. Based on perceptions of reconciliation grouping, we found that 51% chose identity as the main reason for staying and 48.5% chose location dependence as the main reason for staying. This perception formed in the community suggests that government strategies for environmental and housing improvement programs are advocated to reflect or strengthen people's sense of identity and place dependability. Strengthening this sense of identity can be linked to any development activity that can reflect local wisdom, while the location dependency aspect can be linked to improving settlement infrastructure.

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INTRODUCTION

Urban kampong is a large part of the informal settlement in Indonesia, which was unplanned and recently unserviced housing with good infrastructure (Devas, 1980). This is a rural area that would be developed to be a part of urban but still preserve traditional culture (Ever, 1985). Day by the

day, the high level of migration in and out has caused urban villages to develop into a heterogeneous nature. The urban village community consists of a group of individuals who carry on the old traditions applied to urban settlements (Wiryomartono, 1999).

Today, there are many programs from the government related to urban kampong, especially in the environmental and social aspects of the community which aim to improve the welfare of the community by using a community participation approach. one of them is the *KOTAKU* program, which is a program that aims to improve the quality of slum settlements and prevent the emergence of new slums (Kementrian Pekerjaan Umum dan Perumahan Rakyat, 2020).

The community becomes a key success of this program, so the community must be concerned with the government before launching the program.

Community refers to a group of individuals who come together to share concerns, problems, or hobbies for an object and develop knowledge and skills by interacting intensely with each other (Gauthier, L, 2016).

The community can be based on development capital stock, which is known as social capital. Social capital can be interpreted as a form of relationship between individuals that is intimate and consistent (Beilmann et al, 2012).

One of the parameters of social capital is the social network (Ridel, 1997), which is a dynamic form of cooperation between individuals (Subiyakto et al, 2020). The network allows for interaction so that a sense of trust grows and strengthens cooperation between individuals. The stronger the social network, it reflects that the community is a healthy society that interacts both formally and informally (Everingham, 2019).

According to Allan (2021), social networks at least contain elements of compactness or density, the frequency of meetings in the discussion concept on the level of participation (rate of participation), as well as the span of control and the stages of the relationship (centrality). this case can be represented as a community attachment. Community attachment is related to the individual's relationship with the local social network that is owned and the interactions that occur between individuals (Manzo & Devine-Wright, 2021).

This study aims to evaluate the community as social capital, especially regarding density. The similarity of their settlement perception will be reviewed based on the result of density. Settlement perception can be created by their long stay in the area. Someone who lives in a certain area for a long time will grow feelings of affection and a sense of belonging or make the area a part of their identity (S Wijaya et al, 2018).

Place an affinity for the context of the community (social bond). This can be interpreted as a community bond. That is, there is a connection between the place of residence and its community, which is closely related to the individual's relationship with the local social network. (Xu, et al., 2021). McNamara et al (2021) call the relationship between an individual and a social network environment social bonding. Social connections can also be interpreted as the feeling of belonging to a group or community of friends, family, etc. based on the same history, interests, and desires.

S. Wijaya et al, 2018; McNamara et al., 2021; Manzo & Devine-Wright, 2021; Ramkissoon et al., 2012; Urquhart & Acott, 2013). Community ties are defined as emotional attachment to a place of residence. Community connections based on community social relationships can evoke emotional feelings about their place of residence as a result of a shared life journey (Buta et al., 2012). Community attachment is also defined as the attachment of a person to a place of residence (Vargo & Hopp, 2016). This engagement can be shown emotionally (emotional) or through behaviour (S Wijaya et al, 2018). Effective community engagement (value) consists of four forms (Crowe 2017):

- a. There is a sense of belonging to the community
- b. Having the belief that one can have an impact on the community
- c. Have confidence that the community can meet and provide satisfaction to the personal needs of each member
- d. There is a form of expression that reflects feelings towards the Between the community and members within the community.

Emotional (emotional) social attachment and behaviour take almost similar forms, Buta, et al (2017) state that there is a difference between the two (Crowe, 2017). Some researchers limit the definition of community involvement in terms of behaviour, that is, participation in the community, which is a measure of community commitment in terms of some value (Xu, et al, 2021; Bastani et al., 2014). Community connections in terms of values are also explained in terms of feelings about the living environment, knowledge of the activities that take place in the living environment, and feelings about staying or leaving the place of residence (Deleveaux, 2014)

The location of this research is in the urban kampong of Kelurahan Baru Tengah, which organized the *KOTAKU* program. This an old urban kampong, that was dominantly lived by fishermen. This paper has shown how perception settlement among the community can be based on the running of the *KOTAKU* program.

The main purpose of this study is to see the common perception of settlement in a society, where institutions are a form of social attachment in society which is an important variable in the concept of community attachment to place attachment.

METHODS

In this study, the object studied was the community of RT 11 Kampung Baru, the centre of Balikpapan City, where the location was designated as one of the locations for the *KOTAKU* program. The *KOTAKU* program is a community-based environmental improvement program, therefore this research begins by looking at the social network of the community in RT 11, where community attachment is also a supporter of place attachment.

The data analysis method is a technique used to analyze the data obtained following the research objectives to be achieved. The analytical method used in this study is Multidimensional Scaling (MDS).

Multidimensional scaling (MDS) is a data analysis technique used to analyze the similarities or similarities of a particular object. This analysis allows researchers to comprehensively read and

interpret data using visual representations (Borg et al, 2012). MDS analysis can be done with SPSS software, where the results formed can be judged valid or not by looking at the R-square value of more than 0.6. The R-Square value indicates the suitability of the model with the facts on the ground. In addition, to see whether the MDS results are valid or not, you can also see the stress value. In some widely quoted guidelines, Borg et al, (2012) suggest that a Stress1 value of 0.1 is "fair", while 0.05 is "good", and any value less than or equal to 0.025 is "excellent". Kruskal's strain is a measure of poor fit, where values near zero are better.

Researchers want to see the perception of settlement from individuals who are members of an institution based on the place attachment variable that has been obtained from the literature study (Manzo & Devine-Wright, 2021), namely:

1. Personal variables are place identity and dependence on place
2. Social variable is the community
3. Environment variable is environment attachment

After the perception map is formed, then the name labelling for the Y axis is carried out. Labelling is done based on the subjective assessment of the researcher based on the results obtained in the field, or it could be respondents who provide direct name labelling according to what they value in the field.

RESULTS AND DISCUSSION

The data obtained is then manually inputted into the SPSS application which is then processed by MDS analysis (ASCAL). Based on the results obtained, the first thing to consider is the stress value. Stress value is used to see the level of feasibility or suitability of the research model. The smaller the value (closer to 0), the better. The stress value obtained in the perception assessment of members of the RT 11 Recitation institution is 0.38 (close to 0) which indicates that the output results are close to the actual situation.

Next is to pay attention to the RSQ value which has the same function as the coefficient of determination (R-square) in the regression analysis. This RSQ value is also used as the basis for the model's feasibility test, which is the close relationship between the data on the perceptual map. The RSQ value obtained is 0.859, where if the RSQ result is 0.60 (60% or more) it means that the data can be accepted and is said to be quite good, which indicates that the results of the perceptual map can be mapped well. After getting a decent stress value and RSQ, the next step is to look at the scatter plot between disparities and distance which has a distribution pattern towards the upper right or linear so that it can be said that the respondents of Recitation institutional members are consistent in assessing the perception of settlement.

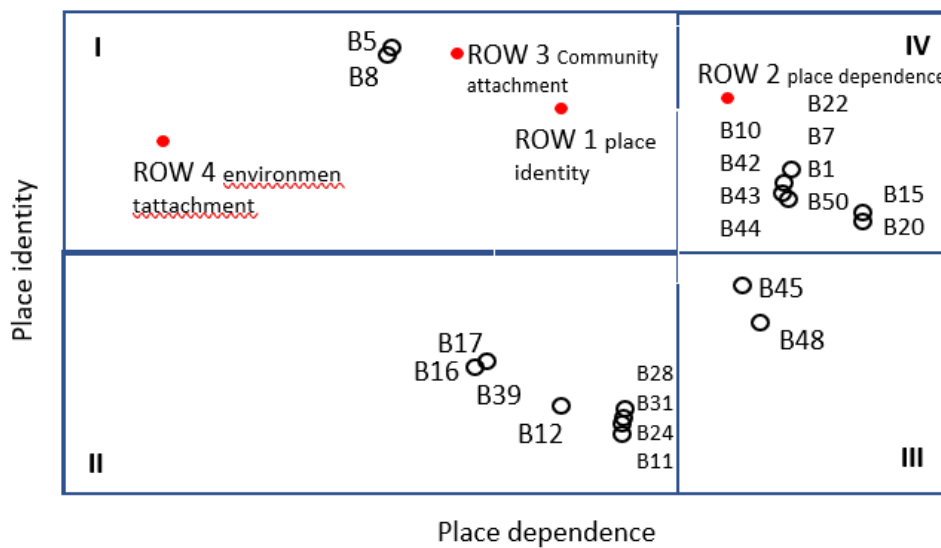


Figure 1: Multidimensional Map Scaling Perceptions of Members of Recitation Institutions

Figure 1 shows that the spatial map formed consists of two dimensions, namely dimension 1 is spatial dependence of place while dimension 2 is place identity. Ideally, the fewer dimensions that are formed, the better, this is because it makes it easier to interpret the data. The formation of two dimensions shows that only 2 sub-variables have the most significant differences, in this study the two sub-variables are place dependence (row 2), and place identity (row 1).

Based on Figure 1, the two sub-variables are used as names in determining dimensions. Dimension 1 is representative of place dependence, while dimension 2 is place identity, so the translation of the results of the spatial map related to perception is as follows:

1. There are two major groups in the spatial map related to community perceptions in RT 11 which are divided into place dependence and place identity groups.
2. The community attachment (row 3) and environment attachment (row 4) are not the main reasons for the community in determining the reason for living, it can be seen that there are no respondents who approach the community attachment (row 3) and environment attachment (row 4).
3. Quadrant I consists of B5 and B8. Based on the survey results and perception maps, it is known that in this quadrant respondents choose the community attachment (row 3) as the main reason they live, the next is because of the identity of the place (row 1), then space dependence (row 2) and the last is environment attachment. (row 4).
4. Quadrant II consists of: B16, B17, B39, B12, B28, B31, B24, B11. Based on the survey results and perception maps, it is known that in this quadrant respondents choose the identity of the place (row 1) as the main reason they live, the next is due to space dependence (row 2), then community attachment (row 3) and the last is environment attachment. (row 4).
5. Quadrant III consists of B45 and B48. Based on the survey results and perception maps, it is known that in this quadrant respondents choose spatial dependence (row 2) as the main reason they live, the next is because of the identity of the place (row 1), then community attachment (row 3) and the last is environment attachment. (row 4).
6. Quadrant IV consists of: B10, B42, B43, B44, B22, B7, B50, B15, B20. Based on the survey results and perception maps, it is known that in this quadrant respondents choose

spatial dependence (row 2) as the main reason they live, the next is because of the identity of the place (row 1), then community attachment (row 3) and the last is environment attachment (row 4).

Based on these data, it can be seen that the perceptions of people living in their places of residence vary, but when grouped in an outline, it can be seen that 51% choose a place identity, while 48.5% choose location dependence as their main reason for living. These two main variables are strong reasons for people to choose and stay in the settlement environment.

CONCLUSION

Based on the grouping of living perceptions, it can be seen that 51% chose place identity, while 48.5% chose location dependence as their main reason for living. The place identity variable indicates that local characteristics, such as habits and culture are the main elements that become the factors for respondents to stay in that environment. The location dependency variable represents that respondents choose to live in the area due to accessibility to the main means of supporting life, such as easy access to offices, markets, and schools. These two variables can be used as a reference in the *KOTAKU* Program, where the environmental improvement program must be able to maintain local wisdom and infrastructure for accessibility as a priority. It is hoped that the community will be more enthusiastic in welcoming the program provided. In addition, after the program is completed, it is hoped that the community will be able to independently maintain and continue the results that have been achieved.

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REFERENCES

- Allan, G. A. (2021). A sociology of friendship and kinship. <https://doi.org/10.4324/9781003215011>
- Bastani, Susan; Nikzad, Salmeh. (2014). Personal Networks and Neighborhood Attachment in Tehran city: with emphasis on the role of modern communication mediums. *Quarterly of Social Studies and Research in Iran*. 2(2)
- Beilmann, M., & Realo, A. (2012). Individualism-collectivism and social capital at the individual level. *Trames. Journal of the Humanities and Social Sciences*, 16(3), 205. <https://doi.org/10.3176/tr.2012.3.01>
- Borg, I., Groenen, P. J. F., & Mair, P. (2012). MDS algorithms. *Applied Multidimensional Scaling*, 81–86. https://doi.org/10.1007/978-3-642-31848-1_8
- Buta, N, Brennan, M. A. & Holland, S. M. (2012). "A Mixed-Methods Investigation of Community Attachment in Rural Romania." *Journal of Rural Social Sciences* 27(1), 24-51
- Crowe, J. (2017). "Community Attachment And Satisfaction: The Role Of A Community's Social Network Structure." Accessed March 21. doi:10.1002/jcop.20387.
- Deleveau, J. V. (2014). Maintaining Community On Hardship Island: A Case Study Of Demographic Change And Community Agency. Dissertation in University of Mississippi
- Devas, N. (1980). Indonesia's Kampung Improvement Programme. University of Birmingham
- Everingham, C. (2019). *Social Justice and the politics of community*. ROUTLEDGE.

- Gauthier, L. (2016). Redesigning for student success: Cultivating communities of practice in a higher education classroom. *Journal of the Scholarship of Teaching and Learning*, 16(2), 1–13. <https://doi.org/10.14434/josotl.v16i2.19196>
- Kementrian Pekerjaan Umum dan Perumahan Rakyat. 2020. Sekilas Informasi Program Kota Tanpa Kumuh (KOTAKU). Accessed from http://KOTAKU.pu.go.id:8081/pustaka/files/170928_print_handbook_sekilas_info_KOTAKU.pdf on 15 November 2021
- Manzo, L. C., & Devine-Wright, P. (2021). Place attachment advances in theory, methods and applications. Routledge.
- McNamara, N., Stevenson, C., Costa, S., Bowe, M., Wakefield, J., Kellezi, B., Wilson, I., Halder, M., & Mair, E. (2021). Community identification, social support, and loneliness: The benefits of Social Identification for personal well-being. *British Journal of Social Psychology*, 60(4), 1379–1402. <https://doi.org/10.1111/bjso.12456>
- Ramkissoon, H., Weiler, B., & Smith, L. D. (2012). Place attachment and pro-environmental behaviour in national parks: The development of a conceptual framework. *Journal of Sustainable Tourism*, 20(2), 257–276. <https://doi.org/10.1080/09669582.2011.602194>
- Ridell, M. 1997. Social Capital and Policy Development. Institute of Policy Studies. Wellington.
- S Wijaya, I. N., Purnamasari, W. D., & Sitaresmi, D. (2018). Defining place attachment in community base development program for urban settlement – a theoretical review. *IOP Conference Series: Earth and Environmental Science*, 202, 012052.
- Subiyakto, B., Sari, N. P., Mutiani, M., Faisal, M., & Rusli, R. (2020). Bonding social capital in social activities of Urang Banjar in the Martapura Riverbank. *The Innovation of Social Studies Journal*, 2(1), 17. <https://doi.org/10.20527/iis.v2i1.2307>
- Urquhart, J., & Acott, T. (2013). A sense of place in cultural ecosystem services: The case of cornish fishing communities. *Society & Natural Resources*, 27(1), 3–19 <https://doi.org/10.1080/08941920.2013.820811>
- Vargo, C. J., & Hopp, T. (2016). Socioeconomic status, social capital, and partisan polarity as predictors of political incivility on Twitter. *Social Science Computer Review*, 35(1), 10–32. <https://doi.org/10.1177/0894439315602858>
- Wiryomartono, B. P. (1999). "Urbanitas dan Seni Bina Kota", ITB, Bandung. 1995. "Seni Bangunan dan Seni Bina Kota di Indonesia", Gramedia Pustaka Utama, Jakarta.
- Xu, Y., Lee, J. H., & Cascante, D. M. (2021). Profiling Attached Residents in an Urban Community in the U.S.: An Empirical Study of Social–Landscape Interactions within a Park. *Social Sciences*, 11(5). <https://doi.org/10.3390/socsci11010005>