

Research Article

Relationship of Social Bonding with Settlement Perception Case Study: in Tulusrejo Village, Malang City, Indonesia

Devi Triwidya Sitaresmi

Urban and Regional Planning Study, Institut Teknologi Kalimantan, Indonesia

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Abstract: This study is located in Tulusrejo village, which is an urban village who was develop with unplanned way. It was involved residents of RT 03, Tulusrejo sub-district. Urban villages are a typical traditional settlement in Indonesia, which has special characteristics where the citizens have tight social bonding each other (Endang, 2006). Social bonds that result from long-term social interaction and life journey create emotional feeling upon their residences (Hummon, 1990). The place where people live and do their daily activities has certain deep meaning for them (Kyle et al, 2003), which at the same time affects the social psychological domain called place attachment (Lewicka, 2011). An aim of this study was to describe relation between social bonding which was realized to local community group to settlement perception. Identification the level of social bonding which representative to social density / familiarity was analyzed using the Social Network Analysis (SNA). Meanwhile, to explain the settlement perception, Multidimensional Scaling was used. The results of both would be analyzed by chi-square. The result of this study exhibits that a person's participation does not have agreement with the perception of residence they consider / feel.

Keywords: Settlement Perception ; Social Bonding; Social Network Analysis (SNA); Multidimensional Scaling, *Chi Square*.

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INTRODUCTION

Social bonds that result from long-term social interaction and life journey create emotional feeling upon their residences (Hummon, 1990). The place where people live and do their daily activities has certain deep meaning for them (Kyle *et al.*, 2004), which at the same time affects the social psychological domain called place attachment (Lewicka, 2011).

In Indonesia, urban village are a residential area, where it's citizens have tight social bonds and identically with high of place and social bonding. Urban village' citizens consist of a group of individuals who carry and carry on the old traditions applied to urban settlements (Wiriyomartono, 1999). Nowadays, the high level of in and out migration caused the urban villages to develop into heterogeneous, so the place attachment and social bonding to be fade away. One of them is the urban village of Tulusrejo village, Malang City, Indonesia.

Based on that reality, the aim in this study were knowing the relation of f citizen density/familiarity

which realised to members local group to settlement perception in Tulusrejo village.

MATERIAL AND METHODS

Social Network Analysis

This study employed a mixed-method research method in which the data related to the social groups were obtained from the respondents which later were used to map the social networking pattern in the society using the social network analysis (SNA). SNA is defined as a technique of mapping and measurement of communication and interaction that occur within local social groups including the members of the group, certain society, information, and any social services in the group. Social network refers to studies on social entities (such as someone's role in an organization) and interaction as well as a relation between the entities (Wasserman & Faust, 1994). SNA included:

Density/Familiarity test was administered to see the density/familiarity of the interaction in the society. Within the density/familiarity analysis, inclusivity refers to the number of the connected dots (individuals or actors who did not join any organization).

Density analysis is used to see the density between individuals in a social network. The resulting density value is between 0-1, the closer it is to 1, and the better the density is.

To facilitate the categorization of density values ranging from 0-1, each category has a range of 0.33. The following are the categories obtained along with the range of values for each category:

- Low = 0 - 0.333
- Medium = 0.334 - 0.667
- High = 0.668 - 1

In density analysis there is the term inclusivity which refers to the number of points connected (actors who do not follow any institution)

$$\text{Inclusiveness} = \frac{(n - n_0)}{n}$$

Notes:

- n = Number of actors
- n₀ = Number of actors who did not join any organization

The density test was administered in the form of indirect density/familiarity analysis considering the narrow scope of the study which is limited to the neighboring groups. Hence, it was assumed that individual A knew individual B and vice versa.

$$\text{Density of indirected graph} = \frac{2l}{n(n - 1)}$$

Notes:

- l= Number of inter-actor connection line
- n= Number of actors

Multidimensional Scaling

Multidimensional Scaling (MDS) is a data analysis technique used to analyze similarities or varieties of a certain object. This analysis allows researchers to read and interpret the data comprehensively using visual representation (Borg and Groenen, n.d, 2005). In this study, similarities and differences of the data were measured based on three variables of place attachment (Raymond, Brown, and Weber 2010) including:

1. Personal Variable. The sub-variables included place identity and place dependence.
2. Social Variable, which sub-variables included community attachment.
3. The environmental variable with connectedness to nature as the sub-variable.

Chi-Square Test

In this study, to see the relationship between citizens density and settlement perception using the chi-square method. This test is also usually to test a hypothesis about the comparison between the frequencies of observations with the expected frequency

of a certain hypothesis in an observed case (Subiyakto, 1994).

Chi-Square Test Calculations Are Done Using SPSS, With The Provisions:

- If the price of Chi Square (X²) Chi Chi Square Table è (0.05) Zero Hypothesis (H0) is rejected & Alternative Hypothesis (Ha) is accepted
- If the price of Chi Square (X²) < Chi Square Table è (0.05) Zero Hypothesis (H0) is accepted & Alternative Hypothesis (Ha) rejected.

DATA COLLECTION METHOD

The data of this survey research were collected from questionnaires, observation and direct interview with the respondents to find out their density/familiarity. The questionnaires and interview attempted at exploring respondents' organizational memberships, views on the organization, frequency of organizational gathering, and the role of actors in the organization.

Variables of settlement perception are place identity, accessibility, social conditions, and natural conditions. They are will be scoring 1-4 by respondents.

The respondents of this study included 51 families in RT 03 RW 09 Tulusrejo village. Only the heads of the families were interviewed as the representative of the family.

RESULTS AND DISCUSSION

Citizen's density in RT 03 RW 09 Tulusrejo Village

The result of the density test of RT 03 at 0.69, in which the closer the value to 1, the higher the opportunity for the respondents to meet each other in the organization. Therefore, based on the density value, it can be stated that the similarity level of the residents in joining certain organization was at the intermediate level. This level can showing that level of citizen density is not really tight or low.

Settlement Perception in RT 03, Tulusrejo Village

Data Input for MDS analysis were questionnaire from 51 respondent whos spread on 4 local group in RT 03. This is to describe the settlement perception of everyone as the members in local group. There are 4 local groups in RT 03, such as:

- Arisan ; this community usually for women who want to saved their money with mutual cooperation way
- Pengajian Bapak-bapak ; this is a religion community for moeslem men
- PKK ; this community for women which has many good and simple programs in any aspects to empower the women in their area
- Lembaga Keswadayaan Masyarakat (LKM) ; this community has many programs in any aspects to

develop the area. This community open to everyone to be the members

Every respondent should give the scoring 1-4 to variables about settlement perception. The results of this can be showed on **figure 1**.

Based on Figure 1, it can be seen that the density of respondents based on local group participation in RT 03 does not have the same of settlement perception. This can be seen from the difference in the grouping of respondents on the perception map.

Explanation on the Spatial Map Related To Settlement Perception in RT 03 (Figure 1) Is Presented As Follows.

- There are two big groups in the spatial map of residents' perception in RT 03 which is divided into accessibility group and self-identity group.
- 2. Social condition (Row 3) and environmental condition (Row 4) are not their main reason for choosing where to live since there are no respondents who pick the social condition (Row 3) and environmental condition (Row 4) as their reasons.
- Based on the dimension 1 (accessibility): coordinate points in the right side exhibit similar perception related to accessibility.
- Based on the dimension 2 (self-identity): coordinate points in the upper side exhibits similar perception influenced by self-identity.
- Quadrant I consists of B3, B9, B22, B28, B31, B34, B39, B44, and B48 who picked self-identity (Row 1) as the main reason, followed by accessibility (Row 2), social condition (Row 3) and environmental condition (Row 4).
- Quadrant II consists of B4, B6, B8, B14, B15, B43, B47, and B49 who chose self-identity (Row 1) as the main reason, followed by social condition (Row 3), accessibility (Row 2) and environmental

condition (Row 4). However, respondent B17 chose self-identity (Row 1) as the main reason, followed by social condition (Row 3), environmental condition (Row 4) and accessibility at the last (Row 2).

5. Quadrant III consists of three groups:

- a. B1, B2, B5, B7, B11, B12, B13, B16, B29, B33, B35, B36, and B40 are respondents who chose accessibility (Row 2) as the main reason, followed by social condition (Row 3), environmental condition (Row 4) and self-identity (Row 1).
- b. B18 and B21 are respondents who chose accessibility (Row 2) as the main reason, followed by the environmental condition (Row 4), social condition (Row 2) and self-identity (Row 1).
- c. B50 is the respondent who chose accessibility (Row 2) as the main reason, followed by the self-identity (Row 1), social condition (Row 3) and the environmental condition (Row 4).

6. Quadrant IV consists of 2 groups which are:

- a. B19, B20, B26, B27, B30, B32, B37, B38, B41, B42, B45, B46, B50 are respondents who chose the accessibility (Row 2) as the main reason, followed by self-identity (Row 1), social condition (Row 3), and environmental condition (Row 4).
- b. B10, B23, B24, B25 are respondents who choose accessibility (Row 2) as the main reason, followed by social condition (Row 3), environmental condition (Row 4) and self-identity (Row 1).

Based on the grouping, it can be seen that 33 respondents (65%) choose accessibility as the main reason, and 18 respondents (35%) choose the self-identity as settlement perception in RT 03 RW 09 Tulusrejo Village.

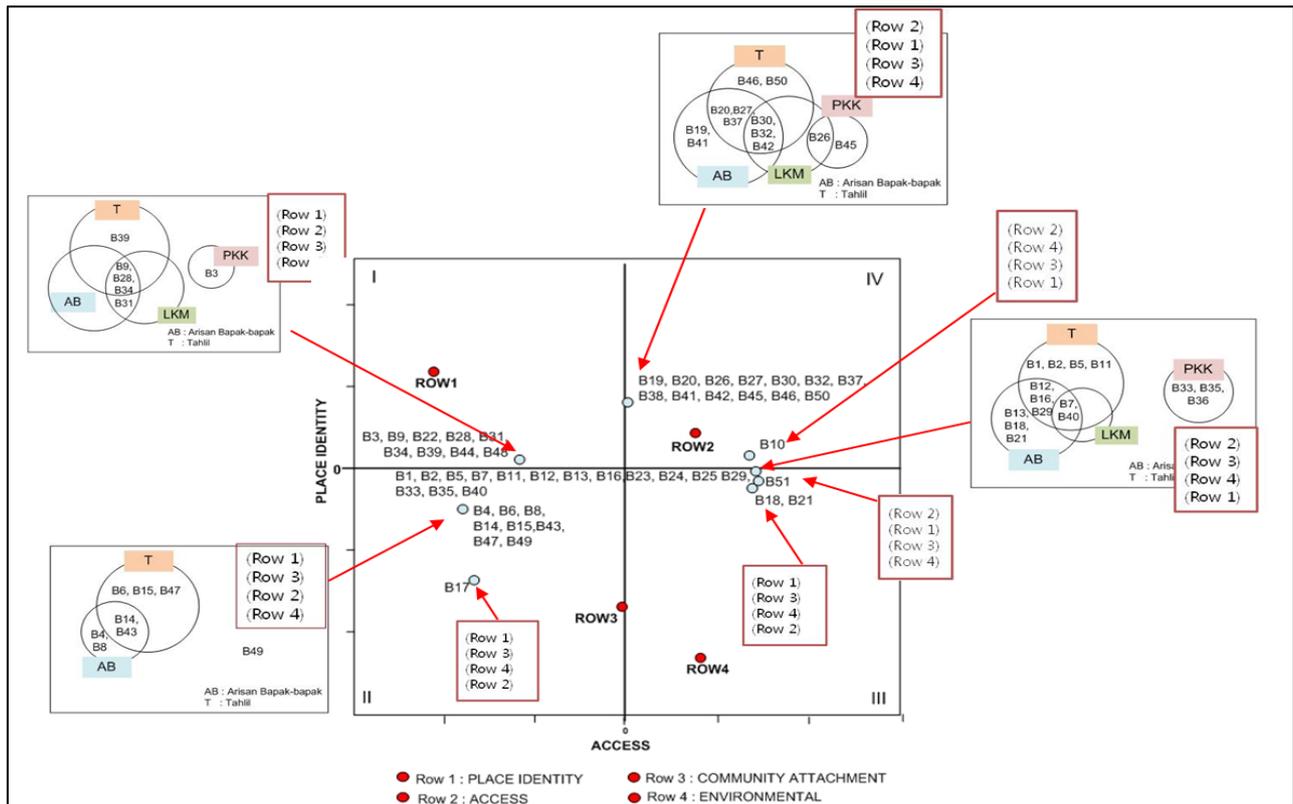


Figure 1. Multidimensional Scaling Map of Settlement Perceptionon residing in RT 03 RW 09 Tulusrejo Village

The Method of Relationship between Citizens Density and Settlement Perception: Chi-Square Test

The result of the chi-square value in RT 3 is greater than 0.05 (0,254), it can be concluded that H0 is accepted, which means that there is no significant relationship between acitizens density in the institution and the perception of settlements that they think about. This also means that a person's participation does not correlate with the perception of residence they think / feel.

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