

Community Resilience in Heritage Tourism Kampung Kajoetangan

Rulliannor Syah Putra¹, Happy Ratna Santosa², Sarah Cahyadini²

¹Master Student, Department of Architecture, Institut Teknologi Sepuluh November, Indonesia-60111

²Lecturer, Department of Architecture, Institut Teknologi Sepuluh November, Indonesia-60111

Email address: rulliannorsyahputra @ gmail.com

Abstract— As a historical area, Kampung Heritage Kajoetangan is the center of economic activity during the Dutch colonial era, which until now, the atmosphere of the past with typical Dutch colonialism still leaves a strong impression because it leaves many memories of the Dutch colonial era. This Kampung has become an icon of the Kampung Heritage in Malang Raya which is located in the center of Malang City which has the main problem is the change in the function and meaning of the Kampung, from a Kampung with a low-accessibility residential function to a Tourism Kampung with an open concept for Tourisms, this has an impact on the community's adaptation process. Kampung Kajoetangan is required to be able to face unwanted situations and be able to survive difficult situations. So, this research is needed to understand the level of community resilience of the Heritage Tourism Kampung Kajoetangan, but first to see how the attachment between the community and their place of residence is. The research instrument used a questionnaire to test the validity and reliability then descriptive statistical analysis. The result of this research is the level of community resilience of Heritage Tourism Kampung Kajoetangan.

Keywords— Heritage Tourism Kampung Kajoetangan, Place Attachment, Resilience.

I. INTRODUCTION

Kampung Heritage is a historical area in which there are the remains of objects and buildings from the legacy of its predecessors and in it, studying customs and customs, ways of life, culture and art, and past history (Khakim, 2019). Heritage Tourism Kampung Kajoetangan is a historical Kampung, many Dutch heritage remains such as cooking utensils, *ontel* (ancient) bicycles, windows, lights, telephones, cameras, and other furniture whose authenticity is still preserved.

Kajoetangan Heritage Kampung has a strong character of the atmosphere of the past, several very iconic Dutch colonial heritage buildings such as the Namsim house, 1870 house, the house of the head, the house of *jengki*, the house of kebaya, the house of *nyik aisyah*, *mbah ndut*, the chimney house, to the cafe house has always been an attraction and prima donna for Tourisms. Apart from the building, there are several other historical tours such as the Tomb of Eyang Honggo Kusumo, who was the teacher of the Koran, the son of the first Regent of Malang, the Tandak Grave which is the tomb of Indonesian soldiers, Trowongan Semeru made in the Netherlands, and Krempyeng Market.

Besides, it has several historical stories that occurred in this Kampung such as the meeting of the Central Indonesian National Committee (KNIP) in 1947 which took place at the Society Concordia Building which was attended by high-

ranking Indonesian State officials namely Ir Soekarno, Moh Hatta, Sutan Syahrir, Adam Malik, Bung Tomo, Ki Hajar Dewantara and other national figures. On this basis, the Malang City Government through the Decree of the Head of the Malang City Culture and Tourism Service Number: 171 of 2018 concerning the Stipulation of the Tourism Awareness Group (Pokdarwis) together with this the Malang City Government determined Kajoetangan Kampung to be a tourism Kampung to improve the socio-economic welfare of the Kampung community at the same time preserving the historical heritage of Kajoetangan.

Most of the people of Kajoetangan Kampung are native Malang people who have lived and settled from birth, even some people have lived in Kajoetangan Kampung for generations. According to Amiranti (2002), people's attachment to their place of residence occurs because of the suitability of individual needs and goals with their physical settings, the choice to stay or go, low mobility, existing social networks & physical settings, the length of time they reside in a place. So, to move requires "force" to return to conditions that are suitable or ideal for the community.

The change in the function and meaning of this Kampung makes Kajoetangan Kampung have a dual function, namely as a settlement as well as a heritage Tourism destination for commercial functions. The condition of the settlement which initially had low social accessibility became a settlement that had a tourism function and was open to Tourisms so that this for the community provided its challenges and pressures that could cause stress, this could affect the resilience of the Kampung community.

The community is required to be able to change their way of thinking to accept change and be able to adapt or position themselves well to unpleasant life events. According to Masten (2007), this is related to resilience which generally leads to positive adaptation patterns during or after facing difficulties or risks. Resilience is an idea that refers to a dynamic system for surviving or recovering from disturbances. Therefore, it is necessary to conduct this research to understand the level of community resilience in the Heritage Tourism Kampung Kajoetangan

II. LITERATURE REVIEW

The literature review discussed in the study is Place Attachment and Resilience. A place can be interpreted as a space that has the meaning of the results of the process of community activity. Nurhijrah (2015) explains that a place is a

space that has a social process and cultural meaning. Meanwhile, according to Giuliani (2003), attachment is considered as a person's tendency to form emotional bonds as a fundamental human trait. Thus, a person's attachment to place (place attachment) means someone who is committed to the environment and the surrounding community (Giuliani, 2003).

In the study, the research attachment used 2 variables which were tested from the identity of the place and the dependence of the place. This study uses the variable of place identity because Kampung Heritage is very strong in developing a place identity (Orbasli, 2000), place identity can be read based on one's identity against the physical environment that is lived by each individual's life, the physical environment can be in the form of memories, ideas/ideas, ideas, feelings, behaviors, values, meanings, choices, and concepts from habits and experiences that have a relationship and complexity to the physical environment that is acquired over some time by a person (Prohansky, 1983). Meanwhile, this study also uses a place-dependent variable, according to Stokols & Shumaker (1981). Place dependence describes an individual's perception of the strength of his attachment to a place, namely when activity occurs specifically in a place so that the individual feels a strong attachment to that place.

Place attachment is one of the factors forming community resilience (Carmit, 2018). In general, the resilience of the community is facing charges in the function and meaning of the village is caused by two things, firstly because they have no choice but to stay in their place of residence and secondly because of the attachment to their place of residence. Against this background, there is a difference in the level of resilience.

The definition of resilience according to Ariviyanti and Pradoto (2014) is an indicator of the sustainability of the life of someone who lives in a difficult situation. When someone is in a difficult situation, someone tends to be depressed and in a critical period. Another definition according to Satria and Mutia (2017), resilience is the individual's capacity to respond to everything healthily and productively when facing trauma or difficulties, a person can manage the pressures of daily life and manage a set of negative thoughts that make it possible to seek new experiences and view life as progress. According to Wilde (2011) resilience is a measure of the capacity of a system to cope with shocks and various changes, where when changes occur, they retain the same basic structure and function. The sooner a system returns to its original state, the stronger the resilience system will be.

Meanwhile, according to Ruswahyuningsih and Tina (2015), that resilience is related to a person's ability to be able to rise again and look for positive elements from his environment to be successful in adapting to all circumstances and developing all his abilities, even in a depressed condition. There are 3 forms of resilience according to Maguire and Cartwright (2008), as follows: 1. Resilience as stability, namely resilience as the ability to return to its original state (buffer capacity), 2. Resilience is recovery, namely, resilience related to the ability of the community to 'bounce back' from change or stressors to return to its original state and this is measured by the time it takes for a community to recover from

change. A resilient society can return to a pre-existing state relatively quickly, whereas a less resilient community may take longer or be unable to recover at all. 3. Resilience as transformation is related to the concepts of renewal, regeneration, and reorganization. This perspective focuses on the adaptive capacity of society.

Based on these 3 forms of resilience, they are then described in the questionnaire statement used for research measurement. So that it can be concluded from these definitions that resilience can be achieved if a person can reduce the disturbance or pressure that comes and then be able to adjust to his environment and think positively so that life in the future will be more resilient and advanced.

III. METHODS

The strategy used in this research is quantitative research methods. The quantitative approach seeks to describe the occupants' attachment to the place of residence and the level of community resilience is assessed based on people's perceptions into a numerical scale to make it easier to understand and draw conclusions using a closed questionnaire and first tested with the Validity and Reliability Test.

The research instrument used a questionnaire, which was measured using the Williams and Vaske (2003) questionnaire for place attachments and using the Connor and Davidson Resilience Scale (CD - RISC) for the level of resilience, the questionnaire was tested using the validity and reliability tests first, so that the questionnaire could be valid and reliable when used during field surveys. The validity and reliability test survey used 15 households as respondents, then the data analysis technique used descriptive statistics.

A. Validity Test

Validity can show the extent to which the research measuring instrument can identify the object of research by the objective (valid measure if it successfully measures the phenomenon). A research instrument is said to be valid, if:

- If the product-moment correlation coefficient exceeds 0.3
- If the product moment correlation coefficient > r-table (α ; n-2), n = number of samples
- Value of Sig. $\leq \alpha$
- R Count > R Pearson Table with Sig. 5% or 0.05

B. Reliability Test

Reliability is used to determine the extent to which the measurement results remain consistent if measurements are made twice or more on the same symptoms and measuring instruments. Sujianto (2009) states, if the scale is grouped into 5 classes with the same range, then the alpha stability measure can be interpreted as follows:

- Cronbach's alpha value 0.00 s.d. 0.20, which means less reliable.
- Cronbach's alpha value 0.21 s.d. 0.40, which means somewhat reliable
- Cronbach's alpha value 0.42 s.d. 0.60, which is quite reliable
- Cronbach's alpha value of 0.61 s.d. 0.80, means reliable

- Cronbach's alpha value of 0.81 s.d. 1.00, means very reliable

Sujianto (2009) states that the reliability of a variable construct is said to be good if it has a Cronbach's Alpha value > 0.60. Sujianto (2009) also states that a questionnaire can be said to be reliable if it has an alpha coefficient value > 0.6.

IV. RESULTS AND DISCUSSION

A. General Description

Heritage Tourism Kampung Kajoetangan is a research object area located in Klojen District, Kauman Kampung, precisely in the center of Malang City, East Java, Indonesia. This Kampung is very strategic for trading purposes, such as in the era of the Dutch in the 1990s along the Kajoetangan road which has become the economic axis of Malang City until now. especially in the corridor of General Basuki Rachmat's main road. Kajoetangan Heritage Kampung has an area of approximately 15.90 hectares with a population of 4,125 people (satellite imagery, 2018) consisting of 4 RWs namely RW 1, RW 2, RW 9, and RW 10. The following is a map of the study area of Heritage Tourism Kampung Kajoetangan.

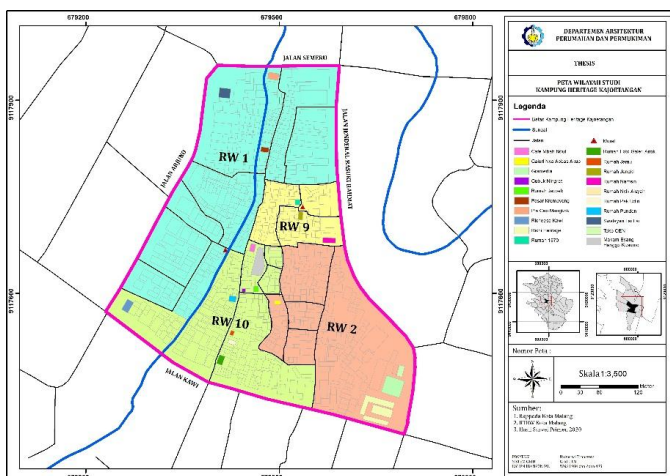


Fig. 1. Heritage Tourism Kampung Kajoetangan's Study Area Map

Indirectly, the people who had lived side by side with the Dutch for a long time made the Dutch architectural style a reference and colonial architecture in the Kajoetangan area was an expansion of the development and culture of colonial architecture in Malang City. And until now the Dutch colonial heritage has witnessed that the Kajoetangan area is a historic area and currently provides an opportunity for the Malang City Government to preserve this colonial heritage by establishing Kajoetangan Kampung as a Heritage Tourism Kampung.

B. Place Attachment

Validity and Reliability Test

Based on the validity test that has been carried out using the SPSS application, if the R count is greater than the Pearson table R with a significance of 5% or 0.05, the statement on the questionnaire can be said to be valid. 11 item statements are tested for validity and the results are all valid statements,

meaning that R count > R Pearson table. This shows that all place attachment questionnaire statements, both place identity and place dependence for interviews, can be continued for the next process because they have been declared valid.

Meanwhile, the results of the reliability test of the 11 statement items were all very reliable with the largest reliability statistical value of 0.973 and the smallest value of 0.970, meaning that each statement of the research instrument was very stable and consistent so that it was compiled in the form of a questionnaire.

The Relationship between Residents and Their Place of Residence in the Heritage Tourism Kampung Kajoetangan

The criterion score is calculated to determine the rating scale, which is to determine the lowest and highest limits on a scale. The criterion score for each scale is calculated by paying attention to the value of the scale and the number of respondents for each scale. The following table is the criterion score obtained from the 5 Likert scales of each RW.

TABLE I. Respondents Critical Score RW 01, RW 02, RW 09, RW 10

No	Formula	Rating Scale	Scale	Answer Scale Value (s)
RW 01				
1	1x36	1-36	STK (very weak)	1
2	2x36	37-72	TK (weak)	2
3	3x36	73-108	N (neutral)	3
4	4x36	109-144	K (strong)	4
5	5x36	145-180	SK (very strong)	5
RW 02				
1	1x28	1-28	STK (very weak)	1
2	2x28	29-56	TK (weak)	2
3	3x28	57-84	N (neutral)	3
4	4x28	85-112	K (strong)	4
5	5x28	113-140	SK (very strong)	5
RW 09				
1	1X13	1-13	STK (very weak)	1
2	2X13	14-26	TK (weak)	2
3	3X13	27-39	N (neutral)	3
4	4X13	40-52	K (strong)	4
5	5X13	53-65	SK (very strong)	5
RW 10				
1	1X28	1-28	STK (very weak)	1
2	2X28	29-56	TK (weak)	2
3	3X28	57-84	N (neutral)	3
4	4X28	85-112	K (strong)	4
5	5X28	113-140	SK (very strong)	5

From the table I, calculations are carried out to find a scale that matches the results of the answers obtained during the survey using the place attachment questionnaire, Following is table II results of one of the RW 01 tables on the questionnaire scale attached to the place.

The calculation of the scale of the response to the engagement between the occupants and their residence RW 01 Heritage Tourism Kampung Kajoetangan shows the total results of each scale with an average of 129.5 which falls into the interval scale 4 or "Strong". The results of the calculation of the answer scale in the study are based on the concept and definition of place attachment by (Halpenny, 2006). Value 4 that the occupant and place of residence:

TABLE II. Place Attachment RW 01 Heritage Tourism Kampung Kajoetangan.

No	Statement	Scale Results (Ci)										Total (ΣC)	Appropriate Scale
		C1=f x s1		C2=f x s2		C3=f x s3		C4=f x s4		C5=f x s5			
		f	C1	f	C2	f	C3	f	C4	f	C5		
1	I feel this Kampung is a part of me	0	0	0	0	16	48	12	48	8	40	136	K
2	This Kampung is very precious to me	0	0	0	0	18	54	11	44	7	35	133	K
3	I am very emotionally attached to this Kampung	0	0	0	0	14	42	22	88	0	0	130	K
4	I know this Kampung very strongly.	0	0	0	0	6	18	28	112	2	10	140	K
5	This Kampung means a lot to me.	0	0	3	6	15	45	18	72	0	0	123	K
6	This Kampung is the best place to do what I love.	0	0	6	12	14	42	16	64	0	0	118	K
7	There is no other place that compares to this Kampung	0	0	4	8	10	30	20	80	2	10	128	K
8	I feel more satisfied visiting this Kampung than in other Kampung.	0	0	4	8	14	42	15	60	3	15	125	K
9	Doing something in this Kampung is more important to me than doing something in another Kampung.	0	0	6	12	13	39	17	68	0	0	119	K
10	I will not change to another Kampung to do the activities I do in this Kampung	0	0	0	0	9	27	27	108	0	0	135	K
11	I feel comfortable living in this Kampung	0	0	0	0	11	33	20	80	5	25	138	K
Total											1425		
Average											129.5	K	

Notes:

- *Ci = the result of each scale
- *f = frequency of occurrence of answers
- *si = the scale value of the answer
- *ΣC = total result of each scale

- Having a positive emotional bond with the environment in which he lives.
- Feeling depressed if separated from the environment where he lives
- Feeling emotionally benefited from the environment in which he lived
- Know the environment in which he lives well so that he can interact and behave well with the environment in which he lives
- Having emotional, cognitive, and functional ties to the environment in which he lives



Fig. 2. 1870 House

The conclusion from the results of the analysis that has been carried out is that RW 01 is in a strong category, RW 02 is in a strong category, RW 09 is in a very strong category and

RW 10 is in the very strong category, which means that the people of Heritage Tourism Kampung Kajoetangan can be said to have an attachment. which is very strong with the place where he lives, this result illustrates that the people of Heritage Tourism Kampung Kajoetangan have no desire to move even though the Kampung is developed into a Tourism Kampung.

C. Community Resilience

Test the Validity and Reliability of Community Resilience

25 statement items were tested for their validity and the results of all statements were valid, meaning that R count > R Pearson table. This shows that all questionnaire statements at the level of resilience for interviews can be continued for the next process because they have been declared valid.

Meanwhile, the reliability test results of the 25 statement items are all very reliable with the largest reliability statistical value of 0.969 and the smallest value of 0.961, meaning that each statement of the research instrument is very stable and consistent so that it is compiled in the form of a questionnaire. Then the calculation is carried out to find a scale that matches the results of the answers that have been obtained during the survey using the community resilience questionnaire, following the results of one of the RW 02 tables of the community resilience questionnaire scale.

Based on the results of the above analysis, it can be concluded that each RW has been classified according to the respondent's perception in the field regarding community resilience. The results of the calculation of the answer scale in the study are based on the level of community resilience according to Twigg (2007) as follows.

TABLE III. Community Resilience Level RW 02

No	Statement	Scale Results (Ci)										Total (ΣC)	Appropriate Scale
		C ₁ =f x s ₁		C ₂ =f x s ₂		C ₃ =f x s ₃		C ₄ =f x s ₄		C ₅ =f x s ₅			
		f	C ₁	f	C ₂	f	C ₃	f	C ₄	f	C ₅		
1	Able to adapt to change	15	15	7	14	3	9	3	12	0	0	50	TK
2	Close and secure relationships	11	11	10	20	5	15	2	8	0	0	54	TK
3	I give it to fate	14	14	6	12	6	18	2	8	0	0	52	TK
4	I can face everything that comes	4	4	12	24	5	15	7	28	0	0	71	N
5	I have past successes giving confidence to new challenges	8	8	9	18	11	33	0	0	0	0	59	N
6	I see things in terms of humor	22	22	6	12	0	0	0	0	0	0	34	TK
7	I can handle strong pressure / stress	19	19	4	8	4	12	1	4	0	0	77	N
8	I tend to bounce back after illness or difficulty	4	4	16	32	8	24	0	0	0	0	60	N
9	Something happened for a reason	10	10	11	22	5	15	2	8	0	0	55	TK
10	I do my best for everything	6	6	12	24	6	18	4	16	0	0	64	N
11	I can achieve my goals	11	11	9	18	7	21	1	4	0	0	54	TK
12	When things seem hopeless, I don't give up	12	12	11	22	3	9	2	8	0	0	51	TK
13	I know where to go for help	17	17	7	14	4	12	0	0	0	0	43	TK
14	When under pressure, I focus and think clearly	14	14	7	14	7	21	0	0	0	0	49	TK
15	I prefer to be a leader in problem solving	24	24	4	8	0	0	0	0	0	0	32	TK
16	I'm not easily discouraged by failure	16	16	6	12	4	12	2	8	0	0	48	TK
17	Think of yourself as a strong person	4	4	17	34	4	12	3	12	0	0	62	N
18	I am capable of making decisions in difficult situations	23	23	2	4	3	9	0	0	0	0	36	TK
19	I can handle unpleasant feelings	17	17	4	8	6	18	1	4	0	0	47	TK
20	Must act on hunch	24	24	4	8	0	0	0	0	0	0	32	TK
21	I have a strong sense of purpose	16	16	2	4	5	15	5	20	0	0	55	TK
22	I can control my life	8	8	14	28	4	12	3	12	1	5	65	N
23	I like challenges	15	15	6	12	7	21	0	0	0	0	48	TK
24	I work towards my goals	7	7	5	10	14	42	2	8	0	0	67	N
25	I am proud of the achievements I have achieved	12	12	4	8	9	27	3	12	0	0	39	TK
Total												1304	
Average												52.1	TK

Notes:
 *Ci = the result of each scale
 *f = frequency of occurrence of answers
 *si = the scale value of the answer
 *ΣC = total result of each scale



Fig. 3. Community Social Activities

Table IV explains characteristics of the community resilience of the Heritage Tourism Kampung Kajoetangan as a whole that the community resilience RW 02 is the most vulnerable area with the level 2 category that the community has little awareness of risk issues and willingness to deal with these risks. Meanwhile, RW 01 is in the level 3 category or the

community can develop and implement solutions even though the intervention is long-term. The highest level of resilience or entry into a safe culture is found in RW 09 and RW 10, which can adapt quickly to changes in the function and meaning of the village community to feel comfortable with new circumstances.

TABLE IV. Characteristics of Community Resilience.

Classification Society	Characteristics	RW
Level 1	- There is no awareness of risk issues or motivation to address them. Activities or actions are limited to critical situations.	-
Level 2	- There is little awareness of risk issues and willingness to tackle them. The capacity to act (knowledge and skills, human, material, and other resources) is still limited. Interventions tend to be one-time, separate, and short-term.	RW 02
Level 3	- Has been able to develop and implement solutions. The capacity to act has increased using multiple and long-term interventions	RW 01
Level 4	- Coherence and integration. Interventions are broad, covering all major aspects of the problem, and interventions are linked to one another, a coherent long-term strategy	-
Level 5	- Stakeholders have lived in a "safety culture" where risk reduction is integrated into all relevant policies, plans, practices, attitudes, and behaviors.	RW 09 and RW 10

V. CONCLUSION

Changes in the function and meaning of a village that started from a settlement with low accessibility to a settlement with high accessibility resulted in the community having to adapt. The people's habit of living in conditions like an ordinary village without any tourist activities demands that people can face challenges and be able to deal with stress. As a result of this change the community resilience is disrupted, the community resilience needs to be considered because community resilience is used to respond in the face of pressure. The results of the analysis show that there are 3 categories of community resilience characteristics, RW 02 is an area that has a vulnerable level of resilience, the community has little awareness of risk issues and a willingness to deal with risk, RW 02 people tend to find it difficult to adapt to change and feel they don't belong. close kinship and make it safe. For the RW 01 area, it is included in category 3 or neutral, meaning that the community has been able to cope with changes even though it requires a long intervention. RW 09 and RW 10 fall into the highest category, namely 5, meaning that the community has been able to adapt very well to environmental changes. The importance of providing understanding to the community about the importance of resilience and building a strong personality in dealing with environmental problems.

REFERENCES

- [1] Amiranti. S, (2002), "Kerja Manajemen Aspek Non Fisik dalam Perkembangan Permukiman", *PPs-Arsitektur, Perumahan & Pemukiman*, ITS, Surabaya
- [2] Ariviyanti. Nur & Pradoto. Wisnu, 2014, "Faktor-Faktor Yang Meningkatkan Resiliensi Masyarakat Dalam Menghadapi Bencana Rob Di Kelurahan Tanjung Emas Semarang". *Journal of Engineering*, Vol. 3 No. 4, 2014
- [3] Giuliani. Maria Vittoria, 2003, "Theory of Attachment and Place Attachment", Italia, *Italian National Research Council*, 137-170.
- [4] Halpenny. Elizabeth A, 2006, "Pro-environmental behaviors and park visitor: The effect of place attachment", Edmonton, Canada, University of Alberta.
- [5] Khakim. Moch. Nurfahrul Lukmanul. 2019 et.al. *Urgensi Pengelolaan Pariwisata Kampung Heritage Kajoetangan Malang*. Volume 4 No.1 ISSN 2503-5307.
- [6] Maguire B, Cartwright S. 2008. *Assessing A Community's Capacity to Manage Change: A Resilience Approach To Social Assessment*. Canberra (AU): Commonwealth of Australia.
- [7] Masten. A.S, (2007), "Resilience in Developing Systems: Progress and Promise as the Fourth Waves Rises, Development and Psychopathology". 19. 921-930.
- [8] Nurhijrah, 2015, "Kerangka Penelitian Place Attachment pada Tempat-tempat Bernilai Budaya. Bandung", *Temu Ilmiah IPLBI*, E 089.
- [9] Orbasli, A, 2000, *Tourists in Historic Towns: Urban Conservation and Heritage Management in Liam,C, 2007, Sea Seal Steam and Emigration: The Imaging of a Heritage Tourist Town in The Republic of Ireland*, Geography Spring. 92.
- [10] Prohansky, Harold M. Fabian, Abbe K. Kaminoff, Robert. 1983. *Place Identity: Physical World Socialization of The Self*. New York, Amerika Serikat. University of New York.
- [11] Rapaport, Carmit et.al. 2018. *The relationship between community type and community resilience*. ELSEVIER. International Journal of Disaster Risk Reduction.
- [12] Ruswahyuningsih. M.C & Afiatin. Tina, 2015, "Resiliensi pada Remaja Jawa", Gadjah Mada, *Journal of Psychology*, Vol 1 No 2.
- [13] Satria. Budi & Sari. Mutia, 2017, "Tingkat Resiliensi Masyarakat Di Area Rawan".
- [14] Stokols, Daniel. Shumaker, Salli Ann. 1981. *The Psychological Context of Residential Mobility and Well Being*. Irvine, California. University of California.
- [15] Sujianto, Agus Eko. 2009. *Analisis Statistik dengan SPSS 16.0*. Jakarta. Prestasi Pustaka.
- [16] Twigg. J, (2007), "Characteristics of a Disaster-resilient Community A Guidance Note Characteristics of a Disaster-resilient Community: A Guidance Note", *Version 1 John Twigg for the DFID Disaster Risk Reduction Interagency Coordination Group*.
- [17] Wilde, B. (2011), "Strategic Planning on The Coast: The Benefits of Applying Systems and Resilience Approaches", *Paper presented at the 2011 NSW Coastal Conference*, New South Wales.
- [18] William. Daniel R and Vaske. Jerry J, 2003, "The Measurement of Place Attachment: Validity and Generalizability of a Psychometric Approach", Colorado, *Rocky Mountain Research Station*.