



RELATIONSHIPS BETWEEN PERCEPTIONS, PROBLEMS AND SOLUTIONS RELATED TO THE SHOPHOUSE PHENOMENON IN BANDA ACEH CITY

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ABSTRAK

Pertumbuhan rumah toko di Kota Banda Aceh cenderung cepat. Fenomena ini tidak dapat dipisahkan dari konsekuensi Banda Aceh sebagai ibu kota provinsi. Namun, pertumbuhan rumah toko yang tidak terkendali cenderung memiliki dampak negatif terhadap lingkungan perkotaan. Oleh karena itu, penelitian ini bertujuan untuk memperoleh pengetahuan baru mengenai persepsi yang dimiliki, masalah yang dihadapi, dan solusi yang diharapkan oleh warga terkait rumah toko di Kota Banda Aceh. Penelitian ini dilakukan dalam dua tahap. Pada tahap pertama, digunakan metode penelitian kualitatif. Data dikumpulkan menggunakan survei dengan pertanyaan terbuka dan dianalisis menggunakan metode analisis konten (data teks). Pada tahap kedua, digunakan metode penelitian kuantitatif. Data dikumpulkan menggunakan survei dengan pertanyaan tertutup dan dianalisis menggunakan metode analisis kuantitatif. Kedua metode pengumpulan data dilakukan berdasarkan survei online. Hasil penelitian menunjukkan tiga dimensi persepsi warga terkait rumah toko di Kota Banda Aceh, yaitu: Ketidakhadiran Regulasi, Akibat Pembangunan, dan Upaya Efisiensi. Hasil penelitian juga menunjukkan empat dimensi masalah yang dihadapi oleh warga, yaitu: Gangguan Lingkungan, Gangguan Pergerakan, Penurunan Kenyamanan, dan Penurunan Estetika. Berkaitan dengan solusi yang diharapkan oleh warga, terdapat dua dimensi, yaitu: Penataan Ulang Peraturan dan Pengelolaan Fasilitas Umum. Hasil penelitian juga menunjukkan hubungan yang kuat antara dimensi persepsi "Kekurangan Peraturan" dengan dimensi masalah "Gangguan Pergerakan" dan dimensi solusi "Penataan Ulang Peraturan".

Kata-kata kunci: Permasalahan, Persepsi, Regulasi, Rumah Toko, Solusi

ABSTRACT

The growth of shophouses in Banda Aceh City tends to be fast. This phenomenon cannot be separated from the consequences of Banda Aceh being a provincial capital. However, the uncontrolled growth of shophouses tends to have negative impacts on the urban environment. Therefore, this study was aimed at gaining new knowledge on perceptions held, problems encountered and solutions expected by residents related to shophouses in Banda Aceh City. This research was conducted in two stages. In the first stage, a qualitative research method was used. Data were collected using a survey with open-ended questions and analyzed using a content analysis method (text data). In the second stage, a quantitative research method was used. Data were collected using a survey with closed-ended questions and analyzed using a quantitative analysis method. Both data collection methods were executed based on online surveys. The results showed three dimensions of the perceptions of residents related to shophouses in Banda Aceh City, i.e.: Lack of Regulation, Development Consequence, and Efficiency Effort. They also showed four dimensions of the problems encountered by residents, i.e.: Environment Disturbance, Circulation Disturbance, Reduced Comfort, and Reduced Esthetic. Related to the solutions expected by residents, there were two dimensions, i.e.: Regulation Rearrangement and Public Facility Management. The results also revealed a strong relationship between the Lack of Regulation perception dimension and the Circulation Disturbance problem dimension and the Regulation Rearrangement solution dimension.

Keywords: Perceptions, Problems, Regulations, Shophouses, Solutions

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1. PENDAHULUAN

The shophouse can be defined as a building typology that accommodates two different functions, i.e. as a place of habitation and as a place of trade. According to Kamus Bahasa Indonesia (Indonesian Dictionary, 2008) a house is a permanent building for habitation activities and a shop is a store in the form of a permanent building where things are sold. Shophouses as a building type were originally brought to Indonesia by Chinese immigrant merchants who built their own settlements for residency as well as doing business (Halim, 2010). Due to the Chinese origin of shophouses, their spatial organization possesses many characteristics of Chinese traditional dwellings (Han & Beisi, 2016). They had a definite measurable geometric pattern: rectangular with a small-width face and extending far toward the back (Erdiono et al., 2012). This was the result of maximizing the occupancy of the narrow strips of available land while accommodating trading needs (Erdiono et al., 2012)..

At present, the high price of urban land makes the shophouse an ideal solution for buildings that need high business space flexibility (Syahrir, 2010; Aranha, 2013). Currently, the shophouse is no longer viewed as a residential entity with a trading area but has become a building fully devoted to commercial activities (Setiawan & Utami, 2016). Because of its flexibility, the shophouse is able to accommodate many different activities from various business sectors, such as retail, automotive, electronics, culinary, education, telecommunications, health, services, banking, technology, and so on. Indirectly, the existence of shophouses also has a significant influence on the development of the informal economy sector, especially in cities of developing countries (Potipituk & Permana, 2014).

A city is a space where many people spend all of their time and as such it has to be a place that can improve their quality of life. One of the approaches to reach this goal is through design, either of individual buildings or at urban scale (Zahrah & Nasution (2014). As Sassi (2016) states, one way of enhancing individual and social wellbeing and quality of life is by good design and good city performance. Hukmia in Herman (2015) asserts that this is because of the two main factors that affect the growth and development of a city, i.e. the population and social economic activities. By optimal investment in shophouses for resale or renting out, shophouses have grown as objects of property speculation by developers (Wahyusih, 2007). In addition to being practical and inexpensive, the shophouse is also able to

accommodate activities at small economical scale. As a result, the number of shophouses has grown rapidly in many cities, including Banda Aceh, one of the provincial capitals in Indonesia.

On the other hand, the existence of shophouses certainly raises issues among the residents as the main 'proprietors' of a city (Rulia, 2012). Spatial arrangement and environmental management should involve the wider community as the main stakeholder, as deep and as early as possible (Silas, 2001). McIntyre (2006) states that the community's or citizen's sense of pride and ownership of the area where they live will be enhanced if they are involved from the beginning. This is because citizen participation positively affects the quality of development (Sirait, 2009). Referring to this statement, shophouses in Banda Aceh City indirectly also have an impact on the urban environment. This can be seen at the level of planning and design as well as on the level of operational activity in the streets and the areas where these shops are located. Hence, based on these empirical conditions, this study aimed to evaluate the phenomenon of shophouse growth in Banda Aceh City and the impact caused by their existence (see Figure 1).



Figure 1: Shophouses and parking areas in several road sections in Banda Aceh City

So far, there are no studies have been conducted that generally describe public opinion about the shophouse phenomenon in Banda Aceh City. Previous research has only focused on examining the factor influencing the spatial distribution of shophouses in Banda Aceh City. Therefore, this study is an important preliminary step toward a more comprehensive understanding of how community perceives and interact with this building typology. The insights obtained are expected to contribute not only to the academic discourse on mixed-use urban form



but also to practical consideration in urban policy and spatial planning. Accordingly, the recommendations generated from this study may serve a valuable input for decision makers and urban planners as well as designers in formulating policies that balance economic activity, livability, design and urban aesthetic in the future development of Banda Aceh city.

2. MATERIAL and METHODS

2.1 Data Collection

This research was conducted by using a qualitative and quantitative mixed-method approach. The first stage started with an explorative (Kumar 2005) qualitative/grounded theory method (Creswell, 2002). Then in the second stage, an explanatory quantitative method (correlational research) (Groat and Wang, 2002) was used. Data were collected by survey using an online questionnaire. Open-ended questions were used to explore the perceptions held, problems encountered and solutions expected by Banda Aceh City residents related to shophouses. In the second stage, data were collected by survey using an online questionnaire consisting of closed-ended questions and using a Likert scale. This stage aimed to see the dimensions of and relationships between perceptions, problems and solutions. The respondents were selected by non-random sampling using accidental sampling restricted to young adults who were or had been living and active in Banda Aceh City.

2.2 Data Analysis

In the first stage, the data obtained in the form of text data were analyzed by using content analysis (Creswell, 2006). The collected text data were analyzed in three stages: open coding, axial coding and selective coding. In the open coding stage, keywords were identified from all respondent's answers. In the axial coding stage, some of the keywords that had been identified were categorized into word groups. The last stage was selective coding to see the correspondence between categories and compile the hypothesis. An example of the text data analysis of the respondents' answers in the open coding stage is: "My opinion about shophouses in Banda Aceh City from the point view of management is that it is not effective because many shophouses function as a warkop (coffee shop). Then, because of the location of the shophouses very close to the road, many vehicles have to be parked in the road, which hinders other road users" (Respondent 23, Bachelor of Law).

Based on the answers, we obtained a number of keywords to represent the respondent's perception of the shophouse phenomenon in Banda Aceh City, in this case 'not effective', 'forces vehicles into the road', and 'inhibits other road users'. After coding of the perception and resulted some keywords, the next step was the axial coding stage, which involved grouping the obtained keywords into more general categories (see Table 1). From the axial coding and selective coding stages, 13 categories and 54 keywords were obtained, as well as the framework used in the next research stage that is a close-ended question surveyed through online questionnaire. In the second stage, closed-ended quantitative questions were proposed using a 5-interval Likert scale between two polar opposites, i.e. 'strongly disagree' and 'strongly agree' (see Table 2).

Table 1: Examples from Axial Coding Stage

No.	KEYWORD	CATEGORY
1	City Status as provincial capital Effect of urbanization Medium- high cost living	Part of City Development
2	Need for regulation Need for design standardization Insufficiently functional	No Policy

Table 2: Examples of Questions with Likert Scale

CATEGORY	
Perception of residents	The growth of the number of shophouses in Banda Aceh City is part of efforts to increase the economy Strongly Disagree 1 2 3 4 5 Strongly Agree
Encountered problem	The existence of shophouses in Banda Aceh City causes congestion and disrupts road use Strongly Disagree 1 2 3 4 5 Strongly Agree
Expected solution	More rules and regulations related to the existence of shophouses in Banda Aceh City are needed Strongly Disagree 1 2 3 4 5 Strongly Agree

In the next step, the collected numerical data were processed quantitatively by using factor analysis and multivariate correlation analysis (Grimm and Yarnold, 1995). In the factor analysis stage, a number of



measurable variables regarding the existence of shophouses in Banda Aceh City (i.e. related to the perceptions held, problems encountered and solutions expected by residents) were compared to each other according to relevance. This stage aimed to determine the principle components, which were then rotated by varimax rotation. From factor analysis, several dimensions related to respondent's perceptions will be identified. These dimensions were analyzed further by regression analysis in order to find correlational relationships and to see causality relations between related dimensions.

3. RESULTS

3.1 Respondent's Profile

The questionnaire was disseminated through various social media. The distribution of both online questionnaires was conducted for 10 days, i.e. from 26 August 2017 to 4 September 2017 and then from 30 October 2017 to 8 November 2017. 129 respondents were obtained in the first stage (Data 1) and 120 respondents in the second stage (Data 2). The respondents came from different educational backgrounds, divided according to five categories (SMA /equivalent, S1, S2, S3 and others).

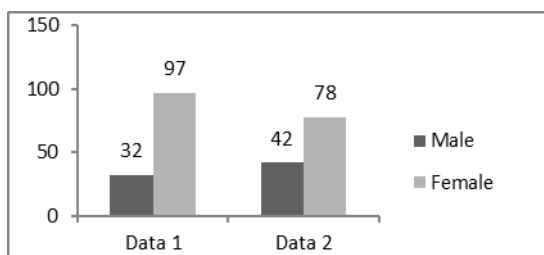


Diagram 1: Number of Respondents

3.2 Perceptions on Shophouses in Banda Aceh City

The data related to perceptions held by residents on shophouses in Banda Aceh City had 20 measurable variables. Initially, data processing was done using factor analysis. The number of factors was determined by Kaiser's stopping rule (Bryant and Yarnold, in Grimm and Yarnold, 1995). From the factor analysis results, 6 principles components were obtained that had an eigenvalue >1, with a cumulative percentage of 68.434%, and the measured variables collected from these data were 39 items with a Cronbach alpha value of 0.8626. However, due to the variation of the results in the measurable variables, the number of dimensions was then calculated using a scree plot (Bryant and Yarnold, in Grimm and Yarnold, 1995). From the results of the scree plot, 3 dominant principles components were obtained, so

the measurable variables were grouped into 3 dimensions (see Figure Table 3).

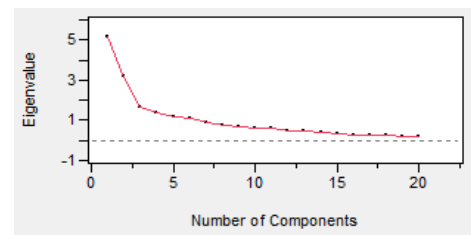


Figure 2: Scree plot eigenvalue component principles of perceptions

Table 3: Factor Analysis of Questions related to Perceptions

Measurable Variable (Dimension)	Lack of Regulation	Development Consequence	Efficiency
Location does not conform to rules	0,79	-0,19	0,16
No minimum land requirement	0,78	-0,06	0,12
Insufficiently functional	0,73	-0,13	-0,20
Bad design	0,70	-0,19	-0,05
Disorganized	0,68	-0,28	0,02
No design standardization	0,65	-0,05	0,00
Exceed plot boundaries	0,64	0,05	0,21
Distribution is uneven	0,64	-0,06	0,02
Bad sanitary facilities	0,61	0,13	-0,18
Development too rapid	0,52	0,19	-0,16
The existence of shophouses is not problematic	-0,43	0,28	0,38
An impact of urbanization	0,06	0,81	-0,02
An impact of modernization	-0,06	0,73	0,20
Tax costs and shophouse rental rates are high	-0,12	0,63	-0,09
Influence of the status of a provincial capital	-0,08	0,58	0,27
Influence of infrastructure development	-0,14	0,50	0,23
An impact of high living costs	0,04	0,43	0,40
Maximize building use	0,01	0,09	0,83
Maximize land use	0,11	0,03	0,80
Increase the economy	-0,08	0,29	0,68

3.3 Problems Identification and Solutions

The data related to problems encountered by residents due to the existence of shophouses in Banda Aceh City contained 13 measurable variables. At this stage, 4 principles components that had eigenvalue > 1 were obtained, with a cumulative percentage of 65.454% (see Table 4). The data related to solutions expected by residents due to problems caused by shophouses in Banda Aceh City contained 6 measurable variables. In this stage, 1 principle component with eigenvalue > 1 was obtained. However, because of the requirement of being able to do factor rotation, at least 2 components of the principle components were needed, so the value of the principle components shown refers to the requirement of a cumulative percentage value > 75%. The cumulative percentage of 76.754% is second-order, so the measured variables from the results of this factor analysis were grouped in 2 dimensions (see Table 5).

**Table 4: Factor Analysis of Questions on Problems**

Measurable Variable (Dimension)	Environment Disturbance	Circulation Disturbance	Reduced Comfort	Reduced Esthetic
Drainage problems cause	0,80	0,27	0,08	-0,09
Prone to flooding	0,74	0,16	-0,03	0,34
Environmental hygiene degradation	0,74	0,21	0,20	-0,02
Fire hazard driver	0,59	0,10	0,10	0,17
Soil quality degradation	0,52	0,12	0,17	-0,49
Traffic jams driver	0,27	0,81	0,06	0,14
Parking problems	0,20	0,80	0,05	0,07
Pedestrian misuse	0,03	0,77	0,01	0,06
Green space reduction	0,22	0,59	0,23	0,39
Inadequate hygiene facilities	0,37	0,50	-0,02	-0,15
Air pollution driver	0,11	0,05	0,90	0,19
Social quality decline	0,16	0,06	0,80	-0,34
Urban image degradation	0,28	0,29	-0,02	0,80

Table 5: Factor Analysis of Questions on Expected Solutions

Measurable Variable (Dimension)	Regulation Rearrangement	Public Facility Management
More rules and order	0,89	0,25
Review regulations	0,88	0,17
Design standardization	0,84	0,30
Provide parking buildings	0,10	0,89
Provide more parking spaces	0,37	0,73
Provide more green spaces	0,57	0,59

4. DISCUSSION

Based on all dimensions, the results show that the main perception of residents on shophouse growth in Banda Aceh City is that there is not enough regulation. However, residents are aware that shophouse growth is a consequence of the development of Banda Aceh City as a provincial capital. In addition, residents also understand that the existence of shophouses is part of an effort to reach efficiency, either in terms of land use or in terms of building use. As Wahyuasih (2007) states, shophouses basically meet a real need. However, the shophouse building structure as it is today is still a source of complexity in the city. Wahyuasih (2007) also asserts that the existence of shophouses does not matter as long as the buildings are scattered. Generally, problems only arise when shophouses are concentrated in one place in the middle of an environment that was not originally planned for a building type with this function. For example, Kamal (2015) mentions that unplanned development of shophouses has a great risk of causing serious environmental damage.

Law of the Republic of Indonesia, No. 28, Year 2002, Article 11, paragraph 2 concerning Buildings states that buildings constructed above and/or underground or underwater, and/or public infrastructure and facilities, shall not disturb the environmental balance, the function of a protected region, and/or function of public infrastructure and public facilities concerned. In Article 13, paragraph (b) it is stated that the distance between a building and the boundaries of the plot and the distance between the road and the page fence at the location concerned should be permissible. According to the residents' perceptions, factor of lack of regulation is a problem that emerges in the development of shophouses. the dominant problems are environment disturbance and circulation disturbance as well as reduced comfort and reduced esthetic. This phenomena is in line with previous study from Wahyuasih (2007), who states that in the development of shophouses the most prominent negative impacts are traffic jams, security disturbance, litter increase, and other visual contamination. At a more complex stage of development, problems arise at city scale, such as irregular spatial use, facility and utility problems, and so on (Imran, 2013).

Zahrah & Nasution (2014) added that the problems arising from the existence of shophouses are generally due to space constraints as a result of the need for green areas and parking lots. In general, they classify the problems related to shophouses into two groups. First is the zero-boundary shophouses with no front yard and second is shophouses with a front yard. In the case of the zero-boundary shophouses with no front yard, there is a clear separation between the shop entranceway, the sidewalk and the circulation area for vehicles, so the space in front of the shophouse becomes more comfortable and can be utilized optimally. Yin & Xiao (2016) assert that pedestrian paths in front of shophouses should be provided for convenience and also to create a friendly business area. In the case of shophouses with a front yard, the yard in front of the shop can be used as a parking area. However, if this parking area cannot be utilized properly, this condition has the potential to cause congestion caused by the tendency of visitors to park their vehicles in the road in front of the shophouse.

Related to traffic circulation, Hukmia in Arief (2015) argues that disrupted circulation in Indonesia generally has three causes, i.e.: 1) the existence of an imbalance between the development of the number of vehicles and the development of road facilities; 2) the lack of awareness of road users or



other street users in the use of roads, often disobeying applicable rules or neglecting traffic signs; and 3) centers of activity being concentrated in places with high traffic intensity. Commercial activities created in shophouse areas act as a strong magnet in attracting visitors. Residents mainly expect Regulation Rearrangement and Public Facility Management related to shophouses in Banda Aceh City to accommodate the problems described above. Zahrah & Nasution (2014) in Urban Design Guidelines for Shophouses derived seven main aspects that must be considered in the development of shophouses, i.e. 1) Building Function and Activity; 2) Vehicle Access, Circulation and Parking; 3) Pedestrian Access and Circulation; 4) Open Space; 5) Horizontal Landscaping; 6) Vertical Landscaping, and 7) Building Design Guidelines.

4.1 Correlational Relationships between Perceptions, Problems and Solutions related to Shophouses in Banda Aceh City.

On the results of the factor analysis, a multivariate correlation analysis was done to all dimensions of perception, problems and solutions. From these results, correlation relationships between the dominant principle dimensions and several specific dimensions were obtained (see Table 6). There is a slightly significant correlation between the Efficiency perception and the Public Facility Management solution (0.19). Slightly significant correlations are also seen between the Environment Disturbance and Reduced Comfort perceptions and the Regulation Rearrangement solution. Their correlation values are (0.16) and (0.15) respectively. Significant correlations are seen between two perception dimensions. The first is the relation between the Lack of Regulation perception and the Environment Disturbance problem (0.31) and the Reduced Esthetic problem (0.25). The second is the relationship between the Development Consequence perception and the Environment Disturbance problem (0.24).

Meanwhile, a very significant correlation exists between the Lack of Regulation perception and the Circulation Disturbance problem (0.54). A significant correlation also exists between the Development Consequence perception and the Reduced Esthetic problem (0.41) as well as between the Circulation Disturbance problem and the Regulation Rearrangement (0.50) and Public Facility Management (0.48) solutions. The dominant correlation relationships are shown in figure 3.

From the diagram it can be seen that there are dominant relationships from two dimensions, first is

the lack of regulation perception dimension and second dimension is the development consequence perception dimension. For the Lack of Regulation perception dimension (which includes the variables: location does not conform to the rules, no minimum land requirement, insufficiently functional, bad design, disorganized, no design standardization, buildings exceed plot boundaries, distribution is uneven, bad sanitary facilities, development too rapid, and the existence of shophouses is not problematic) with the circulation disturbance problem dimension (which includes the variables: cause traffic jams, cause parking problems, cause misuse of pedestrian ways, reduced green space, and inadequate hygiene facilities).

For the development consequence perception dimension (which includes the variables: an impact of urbanization, an impact of modernization, tax costs and shophouse rental rates are high, influence of the status of provincial capital, influence of infrastructure development, and impact of high living costs) with the reduced esthetic problem dimension (which only represents one variable: decrease the visual esthetic of the city; 3) for the circulation disturbance problem dimension (with the abovementioned variables) with two solution dimensions, i.e. regulation rearrangement (which includes more rules and order, review regulations, and design standardization), and public facility management (which includes variables provide parking buildings, provide more parking space, and provide more green areas).

4.2 Causal Relationships between Perceptions, Problems and Solutions related to Shophouses in Banda Aceh City

Based on the correlational relationships described above, there are some dimensions that affect each other. These particular dimensions are causes and effects in relation to other dimensions. From Table 6, the most dominant causality relationship can be seen for one dimension of perceptions, one dimension of problems and one dimension of solutions. A causal relationship is indicated between the Not Enough Regulation perception dimension and the Circulation Disturbance problem dimension. Furthermore, an effect relationship is indicated between the Circulation Disturbance problem dimension and the Regulation Rearrangement solution dimension (see Figure 4). The diagram illustrates that the perceptions held by residents on shophouses in Banda Aceh City basically do not have a direct relationship with the expected solutions. However, their perceptions do have a direct relationship with the encountered



problems. Therefore, there is the need for solution that address these problems. the solutions expected by residents are regulation rearrangement and public facility management.

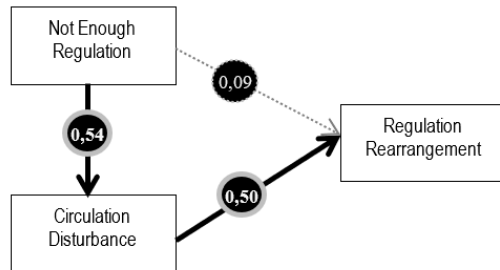


Figure 4: Causal Relationships between Perceptions, Problems and Solutions

stakeholders should contribute to the spatial and environmental management of the city, because citizen participation positively affects the quality of development. Enhancement of individual and social wellbeing and quality of life can be brought about by good design and good city performance.

From the results of this study it can be concluded that the majority of residents find that the growth of shophouses in Banda Aceh city lacks regulation, although they are aware that this is a consequence of Banda Aceh city being a provincial capital. In addition, residents also understand that the existence of shophouses is part of an efficiency effort, both in terms of land use and in terms of buildings use.

Table 6: Regression between Perceptions, Problems and Solutions

Variables	Environment Disturbance	Circulation Disturbance	Reduced Comfort	Reduced Esthetic	Regulation Rearrangement	Public Facility Management
Lack of Regulation	0,31**	0,54***	0,04	0,25**	0,09	-0,17
Development Consequence	0,24**	0,05	0,05	-0,41***	0,03	-0,04
Efficiency Effort	-0,04	-0,09	0,07	0,05	-0,08	0,19*
Environment Disturbance					0,16*	0,11
Circulation Disturbance					0,50***	0,48***
Reduced Comfort					-0,15*	0,12
Reduced Aesthetic					0,10	0,13

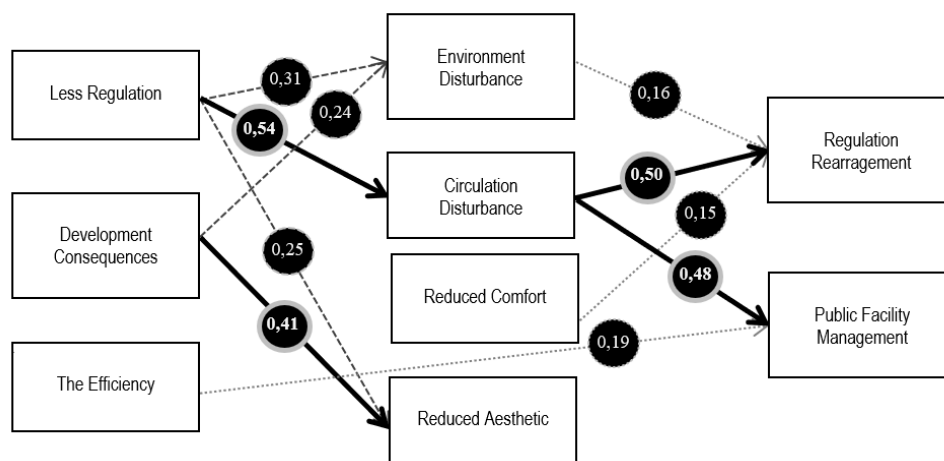


Figure 3: Dominant Relationships between Perceptions, Problems and Solutions

5. CONCLUSION

The existence of shophouses automatically affects their surrounding environment. Even though there are benefits connected with the existence of shophouses in almost every segment of the city of Banda Aceh, negative impacts are unavoidable. These positive and negative impacts of the existence of shophouses are generally experienced directly by the residents of the city. Residents as the main

Nevertheless, the impact of the lack of regulation leads to a problem that is directly felt by the community. The most dominant problem is the disturbance of circulation, especially in areas where there are many shophouses. Therefore, the residents hope for more regulations related to the problems encountered, both from the government and other city developers. These regulations can be in the form of



rules and sanctions, or rearrangement of appropriate policies related to the comfort of the residents in the city, which in its implementation must remain under the supervision of the authorities.

Regulation Rearrangement could be a review of existing regulations as well as a re-formulation of appropriate policies related to the comfort fulfillment of residents. Implementation of these regulations cannot be separated from the cooperation of the residents themselves and the supervision of the authorities. Supervision over the implementation of the regulations is one way to create improved conditions related to the phenomenon of shophouses in Banda Aceh City. According to Kamal in Siagian (2013) the element of oversight plays an important role in each functional organization.

Supervision is an effort to ensure the smoothness of work so that it can be efficient and effective. Supervision also means monitoring all operations to ensure that all work is being carried out in accordance with a predetermined plan. This research and its results are expected to contribute to urban planning and future development considerations. However, it is still has shortcomings due to the limited number of people who can be surveyed online. Therefore, it is desirable to conduct further and deeper research related to regulations and potential solutions to negative impacts caused by shophouses, especially those that affect the comfort of the residents of Banda Aceh city in particular and of Indonesia in general.

6. REFERENCES

- Aminah, Siti (2012). Konflik dan Kontestasi Penataan Ruang Kota Surabaya. *MASYARAKAT: Jurnal Sosiologi*, 20(1), 59-79.
- Aranha, J. (2013). The Southeast Asian Shophouse as a Model for Sustainable Urban Environments. *International Journal of Design & Nature and Ecodynamics*, Vol. 8 No. 4, 325-335.
- Creswell, J.W. (2006). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. California: SAGE Publication, Inc.
- Creswell, J.W. (2002). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. California: SAGE Publication, Inc.
- Erdiono, Deddy. Dkk. (2012). Studi Pengamatan Terjadinya Pola Pergeseran Fungsi Ruang Pada Bangunan Rumah-Toko di Manado. *Media Matrasain* Vol. 9 No. 3.
- Grimm, L.G., and Yarnold, P.R. (1995) *Reading and understanding multivariate statistics*. Washington, D.C.: American Psychological Association
- Groat, L. and Wang, D. (2002) *Architectural research methods*. New York: John Wiley and Sons. Inc.
- Halim, Udaya Pratiwi Mahardika (2010). *Pelestarian Bangunan Bersejarah Peninggalan Etnis Tionghoa di Indonesia*. Skripsi Program Studi Arsitektur, Fakultas Teknik, Universitas Indonesia.
- Han, Wang & Beisi Jia (2016). *Urban Morphology of Commercial Port Cities and Shophouses in Southeast Asia*. Elsevier: *Procedia Engineering*, Vol. 142, 190-197.
- Hukmia. 2015. Pengaruh Aktivitas Komersial Terhadap Lalu Lintas di Koridor Jalan Perintis Kemerdekaan. *Jurnal Perencanaan Wilayah & Kota: Plano Madani*.
- <https://kbbi.web.id> (diakses tanggal 08 September 2017)
- Imran, Suwitno Y. (2013). Fungsi Tata Ruang Dalam Menjaga Kelestarian Lingkungan Hidup Kota Gorontalo. *Jurnal Dinamika Hukum* Vol. 13 No. 3.
- Kamal (2015). Upaya Pemerintah Dalam Penataan Pembangunan Rumah Toko (Ruko) di Kota Pekanbaru (Studi Kasus Pembangunan Kawasan Rumah Toko (Ruko) di Kecamatan Tampan Tahun 2010-2013). *Jom FISIP* Vol. 2 No.1.
- Kamus Bahasa Indonesia (2008). Jakarta: Pusat Bahasa Departemen Pendidikan Nasional.
- Kumar, Ranjit (2005). *Research Metodology: A Step by Step Guide for Beginner*. London: SAGE Publication, Inc.
- McIntyre, Morris H. (2006). *A Literature Review of The Social, Economic and Environment Impact of Architecture and Design*. www.scotland.gov.uk/socialresearch/.
- Potipitu, Chantamon & Ariva Sugandi Permana (2014). Barriers to the Implementation of Environmental Management Measures in the Operation of Shop-House Enterprises in Bangkok Metropolitan Area. *International Journal of Build Environment And Sustainability* 1(1) 2014, 1-8.
- Republik Indonesia (2002). Undang-undang Nomor 28 Tahun 2002 tentang Bangunan Gedung. Sekretariat Kabinet RI, Jakarta.
- Rulia, Anna (2001). Prospek Penerapan Prinsip Sustainable Development Dalam Perencanaan Kota di Indonesia. *Jurnal Eksis* Vol. 8 No. 1, Mar 2012.
- Sassi, Paola (2016). *Built Environment Sustainability and Quality of Life (BESQoL) Assessment Methodology*. Springer International Publishing Switzerland.
- Setiawan, Dedi., & Utami, Tin Budi (2016). *Tipologi Perubahan Elemen Fasad Bangunan Ruko pada*



- Penggal Jalan Puri Indah, Jakarta Barat.
Vitruvian: Jurnal Arsitektur, Bangunan & Lingkungan, Vol. 6 No. 1.
- Silas, J. (2001). Kota Masa Depan dalam Otonomi Daerah. Makalah, ITS, Surabaya.
- Sirait, Jones Hendra, M. (2009). Konsep Pengembangan Kawasan Kota. Jurnal Perencanaan & Pengembangan Wilayah, Vol. 4 No. 3.
- Syahrir (2010). Kajian Perubahan Pemanfaatan Lahan Perumahan Menjadi Perdagangan dan Jasa Komersial di Perumahan Tumbuh I dan Perumahan Tumbuh II Kota Kendari. Program Pasca Sarjana, Magister Teknik Pembangunan Wilayah dan Kota Universitas Diponegoro, Semarang.
- Usman, Azhari (2017). Buat Macet dan Sering Bertabrakan, Dishub Banda Aceh Bongkar Area Parkir di Jalan T. Nyak Makam Banda Aceh. <http://www.modusaceh.co>, 10 Agustus 2017.
- Wahyuasih, Christine (2007). Masalah Dan Dilema Perkembangan Ruko Dalam Arsitektur Lingkungan Perkotaan Dan Permukiman. Universitas Budi Luhur, Jakarta.
- Yin, Shi & Xiao, Yiqiang (2016). Scale Study of Traditional Shophouse Street in South of China Based on Outdoor Thermal Comfort. *Procedia Engineering* Vol. 169, Page 232-239.
- Zahrah, Wahyuni & Achmad Delianur Nasution (2015). Urban Design Guidelines for Shophouse: A Temperature Modificaion Approach. *Procedia Social & Behavioral Science* Vol. 179, 308-317.

Kutipan Artikel

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