

The Confirmatory Factor Analysis Of Lorong Community Empowerment Dimension In Forming Makassar Healthy City, Indonesia

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ABSTRACT

Healthy Cities movement has been long globally developed aiming to solve various healthy issues in the context of a city or region. In Indonesia, this movement is officially, effectively and systematically implemented since the issuance of Joint Law between the Ministry of Home Affairs and Ministry of Health 2005. The emphasized approach is more on the city area widely, while the more specific approach is on grassroot level which is rarely done, such as lorong which can be different from the other cities. The empowerment of lorong community was reviewed further. The objective of this research was to perform Confirmatory Factor Analysis of lorong community empowerment dimension in forming Makassar Healthy City. This research was done quantitatively through analytical survey approach to see the dimension of lorong community empowerment of Makassar City. This research was conducted on two sub-districts which are Rappocini Sub-District under Kassi-kassi Public Health Center working area and Ujung Tanah Sub-District under the Patingalloang Public Health Center working area. The research population was obtained from the number of households in Lorong area. Total lorong in two sub-districts is 160 lorong, and from the 160 lorong, there was 3494 households. Thus the research population was 3494 households. The result of the research found strong dimensions in forming the community empowerment, including relationship, structure, power, share meaning, communication of change, motivation, integration, culture and community economy development dimensions. Each dimension has sub-dimension

which affects or forms the dimension of lorong community dimension. Further implementation of such result becomes urgent to measure the effectiveness of this model application.

Keywords: CFA, community empowerment, lorong, healthy cities

INTRODUCTION

Healthy Cities movement has been long globally developed aiming to solve various healthy issues in the context of a city or region. In Indonesia, this movement is officially, effectively and systematically implemented since the issuance of Joint Law between the Ministry of Home Affairs and Ministry of Health in 2005 [1, 2]. Indonesia has its own concept regarding Healthy Cities which is different from the other countries, in which its emphasizes applies on the national applied order and can be chosen based on the regional potential and agreement between the government and community.

In the context of city, Healthy Cities are relatively implemented. This is indicated by the activeness of Regional Apparatus Organization and Healthy Cities Forum in implementing the programs aiming to forming clean, safe, comfortable and healthy cities. However, on the smaller scale, such as lorong/alley, it is still very limited and the community empowerment must be established in such community. Community empowerment is one of the principals and characteristics of healthy cities development [3-5]. Community empowerment concludes the community values in building new paradigm in people-centered, participatory, empowerment, and sustainable development. Community empowerment is very important to guarantee the program sustainability. Furthermore, community empowerment also creates the sense of responsibility and belonging towards the community development. Lorong Community empowerment certainly has different characteristics from the other community group.

Research on community empowerment has been done numerously both globally and Indonesia locally. For example, a previous research was conducted by Hempstead, Green [6] on community empowerment partnership on Africa-America women in the program of breast health education. Relevant research in Indonesia is conducted by Ganing, Abu (10) regarding the community empowerment through Total Community-Based Sanitation. However, the previous studies have not been much discussed community empowerment model, particularly on lorong context which has characteristics of densely populated area, and slum. In addition, its correlation with the effort in forming healthy city is relatively less reviewed.

The objective of this research was to perform Confirmatory Factor Analysis on the dimension of lorong community empowerment in forming Makassar Healthy City.

Materials and Methods

Research Design

This research was conducted quantitatively through analytical survey approach based on the dimension of lorong community empowerment of Makassar Healthy City.

Research Site and Period

This research was conducted on two sub-districts which are Rappocini Sub-District under Kassikassi Public Health Center working area and Ujung Tanah Sub-District under the Pattingalloang Public Health Center working area. It was conducted on August to September.

Research Population and Sample

The research population was obtained from the number of households in Lorong area. Total lorong in two sub-districts is 160 lorong, and from the 160 lorong, there was 3494 households. Thus the research population was 3494 households. The number of sample:

$$\text{Sample size} = \frac{z^2 \times p(1-p)}{e^2}$$

$$n = \frac{2.58^2 \times 0.5(1-0.5)}{0.05^2}$$

$$n = \frac{1.164}{0.0025}$$

$$n = \frac{666}{1.190}$$

$$n = 560$$

Therefore, the samples obtained in this research were 560 households which each was divided into the total lorong in two sub-districts as follow

Table 1. The Distribution of Respondents Based on the Sub-District

Sub-District	N	Percentage (%)
Ujung Tanah	199	36
Rappocini	361	64
Total	560	100

Then, from the two sub-districts, each was distributed to several sub-villages in the sub-district.

Table 2. The Distribution of Respondents Based on the Sub-Villages

Sub-District	Sub-Villages	n	Percentage (%)
Ujung Tanah	Pattingalloang	57	10
Ujung Tanah	Pattingalloang Baru	90	16
Ujung Tanah	Cambaya	12	2
Ujung Tanah	CambaBerua	39	7
Rappocini	Banta-bantaeng	19	3
Rappocini	BontoMakkio	110	20
Rappocini	Mapala	76	14
Rappocini	Tidung	40	7
Rappocini	Kassi-kassi	85	15
Rappocini	Karunrung	32	6
Total		560	100

Research Instrument

The research instrument was in the form of questions list/questionnaire, and camera as research documentation.

Data Processing & Data Analysis

Data processing used Statistical Package for Social Science (SPSS) and used IBM Amos. The data processing goes through the editing process by checking the questionnaire from the respondents' answer to ensure that each question was answered. Coding was done to embed the value of each predetermined answer, for example for positive questions (Very Appropriate: 4, Appropriate: 3, Inappropriate: 2, Very Inappropriate: 1) Data entry was carried out after giving the coding value to all respondents' answers which were then entered into the master table in Microsoft Excel to calculate the total and score on each respondent's answer. Data Cleaning was carried out to check all incoming data and ensure that there is no missing data with a reference to the number of samples of 560 households. Data tabulation was done by grouping the test data into tables for analysis.

Data Analysis

Data analysis used Univariate test to see the distribution and frequency of respondents' characteristics and respondents' answers, then a Confirmatory Factor Analysis using AMOS was carried out. In this process, each indicator was eliminated if the results of the analysis were minus (-) numbers. Therefore, the results of the Confirmative Factor Analysis described the magnitude of the effect of indicators on latent variables.

Results and Discussion

Respondents' Characteristics

Table 3. Respondents' Characteristics

Respondents' Characteristics	Total	
	N = 560	%
Gender		
Male	270	48.2
Female	290	51.8
Respondents' Age (years old)		
Teenagers: 11-19	24	4.3
Adult: 20-60	491	87.7
Older: >60	45	8.0
Respondents' Occupation		
PNS	34	6.1
Entrepreneur	245	43.8
Retired	35	6.3
Housewife	177	31.6
Has not worked yet/did not work	69	12.3

Confirmatory Factor Analysis Result

a. Relationship

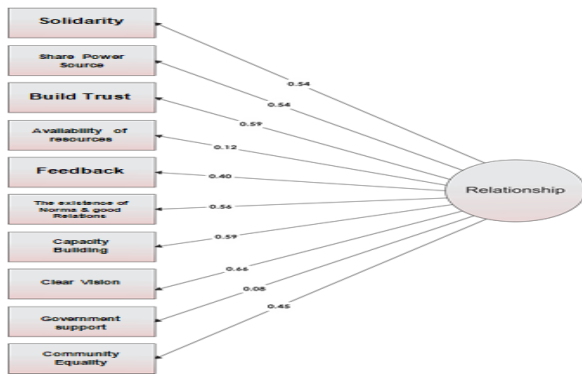


Figure 1: Confirmatory Factor Analysis Relationship

Based on the results of the analysis, it found that the indicators that have a big effect in describing/forming relationships are a clear vision (.66), then building trust (.59) and capacity building (.59). These three dominant can describe the relationship/community relations in empowering the lorong community. By establishing a vision or direction of community development goals, all group members can unite their potential and resources. Building trust is a key principle of community relations and capacity building is indispensable to ensure the sustainability of the program and the development of the community as a whole.

b. Structure

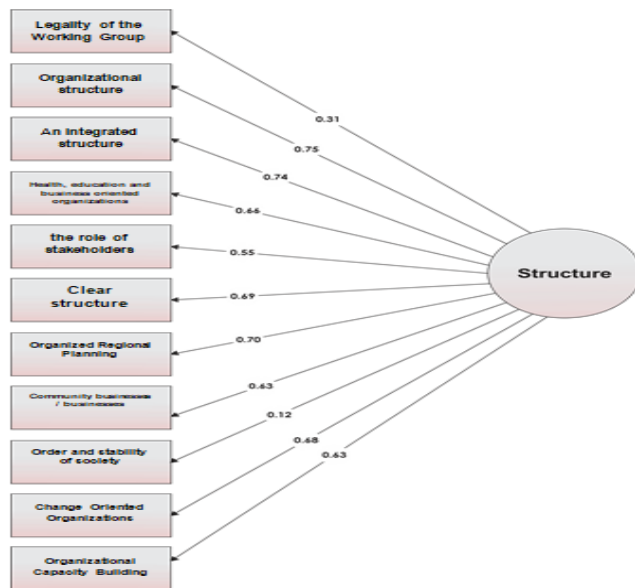


Figure 2: Confirmatory Factor Analysis Structure

Based on the results of the analysis, it found that the indicators that have a big effect in describing/forming variable structures are organizational structures (.75), then integrated structures (.74) and organized regional planning (.70). These three can be categorized as indicators that dominate effect in describing the structural variables in the empowerment of lorong communities. In the structure dimension, organizational structure is very important to determine the people involved. Structure can also assist lines of communication and coordination. The organizational structure is expected to work together in a synergy and integrated so that those involved in the structure form one unit[7]. Lorong as an area, the emphasis is on regional planning or settings to

look at health and environmental problems and other aspects that can help in the development of lorong as a whole.

c. Power

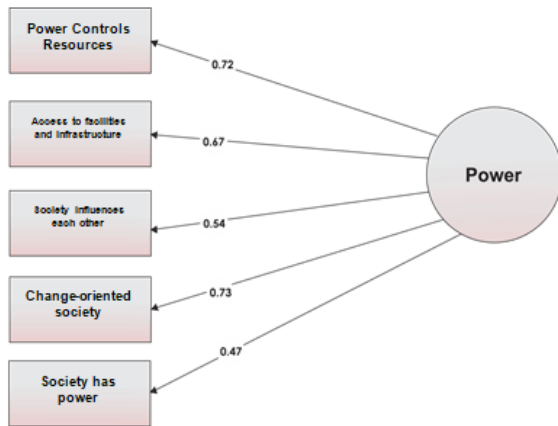


Figure 3: Confirmatory Factor Analysis Power

Based on the results of the analysis, it found that the indicators that have a big effect in describing/forming the power variable are people who are oriented towards change (.73), people have the power to control resources (.72) and access to advice and infrastructure (.67). These three can be categorized as indicators that dominate/have a dominant effect in describing the power variable in the empowerment of lorong communities. Power is related to the authority to control human resources, budget and policies.

d. Shared Meaning

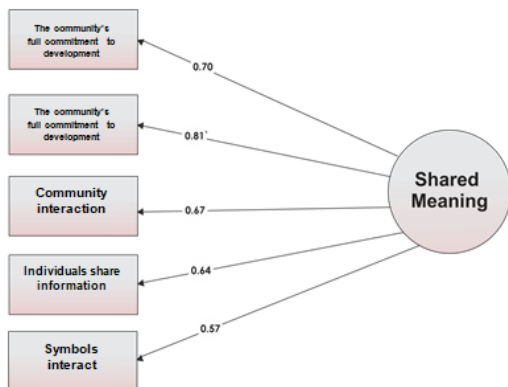


Figure 4: Confirmatory Factor Analysis Shared Meaning

Based on the results of the analysis, it found that the indicators that have a big effect in describing/forming shared meaning variables are community interaction (.81), full community commitment to development (.70) and individuals sharing information (.67). These three can be categorized as indicators that dominate/have a dominant effect in describing the shared meaning variables in the empowerment of lorong communities.

e. Communication of Change

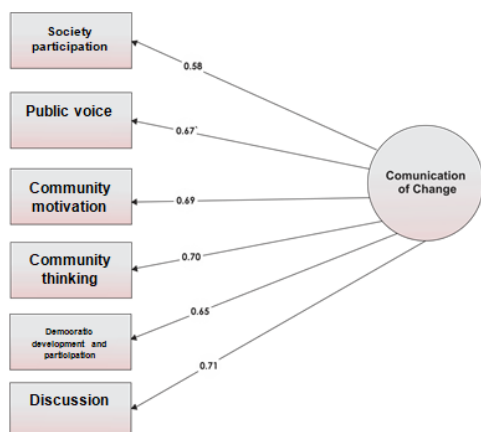


Figure 5: Confirmatory Factor Analysis of Communication of Change

Based on the results of the analysis, it found that the indicators that have a big effect in describing/forming communication variables are deliberation in decision making (.71), community thinking in decision making (.70) and community motivation (.69). These three can be categorized as indicators that dominate/have a dominant effect in describing the communication of change variable/change-oriented communication in empowering lorong communities. This shows that the decision-making process in community by means of deliberation is the strongest dimension in the communication change process. This communication can relate to problems related to solving various problems in community empowerment efforts[8].

f. Motivation

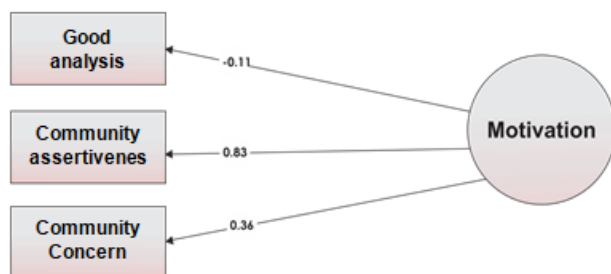


Figure 6 Confirmatory Factor Analysis Motivation

Based on the results of the analysis, it found that the indicators that have a big effect in describing/forming the motivation variable are community assertiveness (.83), and community concern (.36). Both are considered as indicators that dominate/have a dominant effect in describing motivation in empowering lorong communities. Strong community motivation can accelerate community development efforts. Communities can actively develop their territory based on their potential and resources.

g. Integration Variable

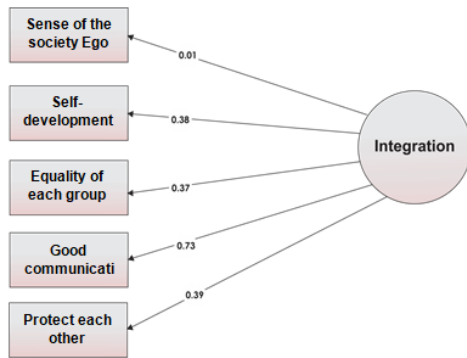


Figure 7: Confirmatory Factor Analysis of Integration

Based on the results of the analysis, it found that the indicators that have a big effect in describing/forming the integration variable are good communication (.73), mutual protection (.39) and self-development (.38). These three can be categorized as indicators that dominate/have a dominant influence in describing variable integration/community integration in empowering lorong communities.

h. Influence of Culture

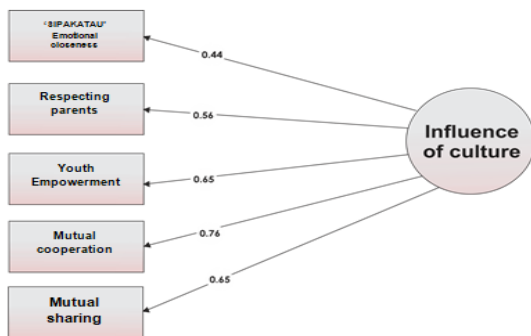


Figure 8: Confirmatory Factor Analysis of Influence of Culture

Based on the results of the analysis, it found that the indicators that have a big effect in describing/forming the influence of culture variables are mutual cooperation (.76), empowerment of young people (.65) and sharing (.65). These three can be categorized as indicators that dominate/have a dominant effect in describing the influence of culture variables in the empowerment of lorong communities. This culture[9] can also dig the health values in community regarding the perception of illness [10-12].

i. Community Economy Development

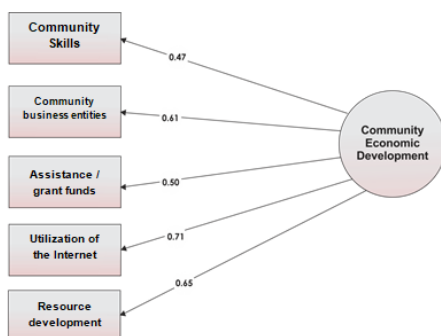


Figure 9: Confirmatory Factor Analysis of Community Economy Development

Based on the results of the analysis, it found that the indicators that have a big effect in describing/shaping community development variables are internet utilization (.71), resource development (.65) and lorong business entities (.61). These three can be categorized as indicators that dominate/have a dominant influence in describing the variable of community economic development in empowering lorong communities. The development of the lorong starts from what the lorong has.

j. Community Empowerment Variable

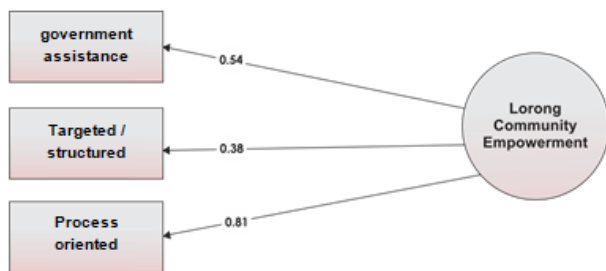


Figure 10: Confirmatory Factor Analysis of Community Empowerment

Based on the results of the analysis, it found that the indicators that have a big effect in describing/forming community empowerment variables are process-oriented (.81), government assistance (.54). Both are indicators that dominate/have a dominant effect in describing the empowerment of lorong communities.

Empowerment of lorong communities can help solve various health problems, for example various infectious, non-communicable diseases, nutrition and stunting, environmental problems and various social problems in the community. Lorong as a setting can be handled comprehensively by involving various sectors and elements of the community [13-25].

Conclusion and Recommendation

This study found strong dimensions in forming community empowerment, which are the dimensions of relationship, structure, power, share meaning, communication of change, motivation, integration, culture and community economic development. Each dimension has sub-dimensions that affect or form the dimensions of lorong community empowerment. The follow-up implementation of these findings is urgent to measure the effectiveness of the application of this model.

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