







Inter-community Relations Factor on the Empowerment of the Aisle Community in Makassar City: A Structural Equation Model

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Abstract

BACKGROUND: There are several important factors in building community empowerment, one of them is the inter-community relationship. However, further research is rarely done on this dimension. The dimension of the relationship includes community structure, community strength, community motivation, community communication, community integrity, community participation, and community development.

AIM: This study aimed to find the best model in developing a healthy aisle in Makassar City.

METHODS: This research was conducted in two sub-districts in Makassar City, those are Rappocini District and Ujung Tanah District. The research samples involved were 560 households in Lorong. Data analysis was performed using multivariate analysis through the structural equation model test.

RESULTS: The results of this study found that clear vision (CR = 3.219 and $p = 0.01$), capacity development (CR = 3.166 and $p = 0.02$), norms existence (CR = 3.143 and $p = 0.02$) on inter-community relationship significantly affected the aisle community empowerment. Availability of educational media (CR = 7.074 and $p = 0.00$) significantly affected the condition of the healthy aisle in Makassar City.

CONCLUSION: Inter-community relationship is the best model in developing a healthy aisle in Makassar City through solidarity, shared motivation, shared trust, clear vision, resources shares, capacity building, norms in society, government support, and community development. This study recommends that in order to maximize a clear vision for the aisle community working group, the government should carry out legality regarding the aisle community structure.

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Introduction

Healthy environmental sanitation is something that is difficult to find, especially in slum areas and dense urban settlements in Indonesia [1]. In general, the poor in Indonesia do not have access to basic sanitation or defecate in the open or in rivers and waterways [2]. Several dimensions of urban poverty can be seen in low-income levels, poor health conditions, low education, vulnerability, slum dwellings, and powerlessness [3]. The responsibility of the community on the development is essential [4], [5]. These responsibilities include areas that are often marginalized, such as the aisle as a micro setting [6], [7], [8], in various aspects including healthy aisle [9]. The community has the power, ability, organization/institution, cooperation, intellectual ability, and commitment [10]. In addition, community also has

good strength from the physical, material, economic aspects. One area of the city that is frequently neglected from the attention of the city government is the aisle. The term aisle is very strongly attached to Makassar City. By utilizing the healthy aisle community in Makassar City, it can encourage the improvement of the community economy. Therefore, when their economy is fulfilled, then the community can access all the facilities they want in the human development index (education, health, and economy) [11].

In the city of Makassar there are alley settlements in 14 sub-districts and alley settlements can be categorized as slums or not slums depending on the five aspects, namely environmental conditions, population conditions, building conditions, basic facilities, and infrastructure conditions, and socioeconomic conditions [12]. Slums or slums are

settlements or housing for urban poor people who are densely populated, located on the sides of dirty roads or alleys, and are part of the city as a whole [13].

The main problem of this research is the condition of the aisle in Makassar, namely dirty, poor sanitation, crowded, narrow. In addition, the people who live in the Aisle are the most densely populated and the number of poor people is quite large, so that this area is prone to fire disasters but at the same time becomes an area that is prone to flooding every rainy season [14].

Healthy aisle in Makassar City is the creation of a healthy, comfortable, and clean aisle environment through community efforts [9]. This definition was developed from healthy regencies/cities in Indonesia [15], [16], [17], [18]. The aisle community empowerment which is oriented to economy, social, and health can be an effective strategy in responding to the current challenges. However, the empowerment of the aisle community also requires a special strategy in understanding the conditions and characteristics of the community. According to Palutturi *et al.* (2021), there are several considerations in community empowerment, those are inter-community relationships, community structure, community strength, community motivation, community communication, community integrity, community participation, and community development [9].

The focus of this study is the inter-community relationship in community empowerment with the purpose to find the best model for the effect of the inter-community relationship on the condition of healthy aisle in Makassar City.

Methods

This research was conducted through a quantitative study. This research was conducted in 2 sub-districts in Makassar City, those are Rappocini Sub-District and Ujung Tanah Sub-District in 2020. The population was obtained from the number of families in the aisles. The total of aisle in the two sub-districts is 160 aisles. Among these aisles, there were 3494 family units. Thus, this research identified a total of 3494 families. Table 1 shows that there were 560 people who were the samples of this study spread over two sub-districts, namely, Ujung Tanah and Rappocini.

Table 1: Distribution of respondents based on the Sub-District

Sub-District	n	Percentage
Ujung Tanah	199	36
Rappocini	361	64
Total	560	100

Data were collected using a household questionnaire on 560 respondents which were tested and validated by the research team. The data collected includes government support, clear vision, capacity

development, norms existence, feedback, resources, build trust, share resources, solidarity, capability equality, cleanliness, drainage, garbage transport, utilization of aisle, security system, no smoking area, integrated health post, availability of educational media, working group, and healthy aisle. Data are collected by enumerators who have received training from the research team to maintain the quality of data collection.

Data analysis was conducted using multivariate analysis with the structural equation model (SEM) test using the Statistical Package for Social Science and IBM Amos.

Results

Table 2 shows that the gender is female (51.8%) then dominated by the respondent's occupation, namely housewives (60.7%). Most of the respondents were adults between 20 and 60 years (87.7%).

Table 2: Characteristics of respondents

Characteristics of respondents	n	%
Sex		
Male	270	48.2
Female	290	51.8
Age (Years)		
11–19	24	4.3
20–60	491	87.7
>60	45	8.0
Occupation		
Government employees	34	6.1
Entrepreneur	245	43.8
Retired	35	6.3
Housewife	177	31.6
Not working	69	12.3
Total	590	100

In this case, the inter-community relationship refers to the community condition in the form of solidarity, shared motivation, shared trust, shared vision, resources shares, capacity building, and the existence of norms in society, government support, and community development. Some of these factors were tested in terms of whether they are able to build good healthy aisle conditions in a situation with a certain relationship level in the community.

SEM

Based on the model in Figure 1, the best model results found that there was a significant inter-community relationship in empowering the aisle community toward a healthy aisle in Makassar City. The calculations are presented as Table 3.

Based on the results of the standardized estimate parameter presented in Table 3, it shows that the C.R. or critical ratio value indicates that the higher the value, the more significant it is. Based on these results, clear vision (CR = 3.219 and $p = 0.01$) on inter-community relationships significantly affected the community empowerment, capacity development (CR = 3.166 and

p = 0.02) on inter-community relationships significantly affected the community empowerment, and Norm existence (CR= 3.143 and p=0.02) on inter-community relationship significantly affected the empowerment of aisle community. In addition, the results presented in Table 2 also indicated that the availability of educational media (C.R.=7.074 and p=0.00) significantly affected the condition of the healthy aisle in Makassar City, and the use of aisle also significantly affected the healthy aisle conditions in Makassar City.

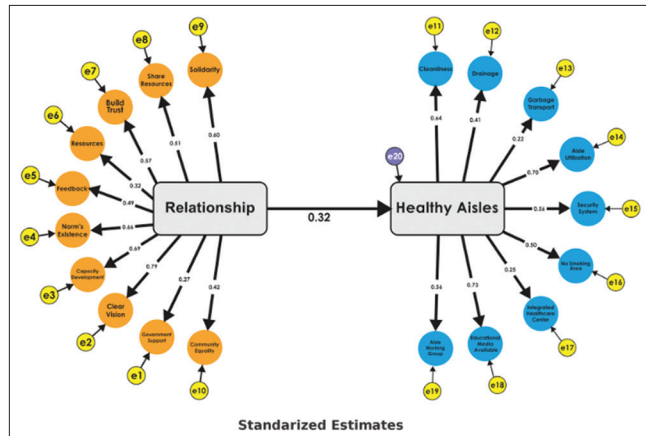


Figure 1: Structural Equation Model (SEM): Relationship in aisle community empowerment on healthy aisle in Makassar City

Model accuracy index

The structural equation model has several types of model fit. The most popular ones are CMIN, Goodness of Fit Index (GFI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA). The results of the determination of the factor relationship model in the empowerment of the aisle community are explained in Table 4.

The analysis results of kai-square value (CMIN) obtained 378.8 (p>0.05), indicating that there was no significant difference between the data and model used. In the other words, the model we used has represented the data.

Based on Table 5 the Goodness of Fit Model Accuracy Index obtained was 0.794 (<0.9), indicating that the data is included in the marginal fit group. The value of the CFI is also at a value of (0.721 < 0.9) which means the data is included in the marginal fit group. Meanwhile, the RMSEA value of 0.097 which is above 0.08 is considered a good fit.

Based on Table 6, the results of the Akaike Information Criteria obtained was 456.8 (>10), thus it can be concluded that the standardized estimate model (a) Relationship in the empowerment of Aisle Community in Makassar City has fulfilled the description.

Discussion

The results showed that if the inter-community relationship has a clear vision in the efforts of community empowerment, then it will have a significant impact. In addition, such a clear vision also affected the achievements achieved, so that it can be directed and measured. In this case, sustainable community empowerment activities are clear visions for the future [19], [20]. A clear vision requires encouragement/support from the local government and the private sector so that the community has a vision that is directed towards future regional planning [21]. Community empowerment challenges that involve all elements of society in addition to providing a clear vision in this regard must offer community capacity-building. This capacity-building aimed to increase the rationality and the understanding of the community in terms of education concerning the vision design [22].

Another challenge encountered in community empowerment is the existence of social norms that can be an obstacle but also can be a strength or distinctive characteristic in the empowerment of the aisle community. The community's tendency of thinking conventionally due to their lack of knowledge forces

Table 3: Regression weight standardized effect of the effect of the relationship in aisle communities empowerment on healthy aisle in Makassar city

Parameter	Variable	Estimation	S.E.	C.R.	p	Label
Healthy Aisles	Relationship	0.730	0.312	2.340	0.019	
Government support	Relationship	1.000				
Clear vision	Relationship	1.883	0.585	3.219	0.001	
Capacity Development	Relationship	1.324	0.418	3.166	0.002	
Norms Existence	Relationship	1.325	0.422	3.143	0.002	
Feedback	Relationship	1.100	0.373	2.952	0.003	
Resources	Relationship	0.968	0.383	2.529	0.011	
Build trust	Relationship	1.162	0.379	3.061	0.002	
Share resources	Relationship	0.908	0.305	2.976	0.003	
Solidarity	Relationship	1.333	0.432	3.086	0.002	
Capability equality	Relationship	0.958	0.340	2.818	0.005	
Cleanliness	Healthy Aisle	1.000				
Drainage	Healthy Aisle	0.418	0.095	4.396	***	
Garbage Transport	Healthy Aisle	0.234	0.096	2.429	0.015	
Utilization of Aisle	Healthy Aisle	1.134	0.165	6.884	***	
Security system	Healthy Aisle	0.916	0.158	5.812	***	
No smoking area	Healthy Aisle	0.822	0.157	5.240	***	
Integrated Health Post	Healthy Aisle	0.345	0.125	2.769	0.006	
Availability of Educational media	Healthy Aisle	1.599	0.226	7.074	***	
Working Group	Healthy Aisle	1.180	0.204	5.778	***	

them to maintain norms that actually become an obstacle to their development. This can be overcome through a consistent approach and other efforts that can be made to share knowledge/experience through socialization and training so that it can increase the public awareness [23]. The management of the Healthy Aisle program in Makassar City has limited Human Resources but the budget is sufficient [24].

Table 4: Kai-square model accuracy index (CMIN) of relationship factor in aisle community empowerment in Makassar city

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	39	378.844	151	0.000	2.509
Saturated model	190	0.000	0		
Independence model	19	986.947	171	0.000	5.772

There are three key factors that can be considered in community empowerment, namely joint strategy, shared resources, and shared accountability [25]. Hence, it can be concluded that the activities of the alley community who seek to find common strengths in achieving the goals of empowerment are a major influence in establishing sustainable empowerment. Actually changing society is something that is difficult to do so the right strategy to form a conscious society is to develop community capacity, instill understanding in the community and make people consciously empower themselves and their environment [26]. The existence of norms and good relations in the community is a similarity that is upheld in the community, thanks to the similarity, the sense of mutual respect, please help is very high, then through the similarity of these entities community empowerment will be dynamic [22], [27].

Table 5: Model fit index of GFI, CFI, and RMSEA of relationship factor in aisle community empowerment in Makassar city

Model	CFI	RMR	GFI	AGFI	RMSEA	PGFI
Default model	0.721	0.024	0.794	0.741	0.097	0.631
Saturated model	1.000	0.000	1.000			
Independence model	0.000	0.066	0.499	0.444	0.173	0.449

GFI: Goodness of fit index, CFI: Comparative fit index, RMSEA: Root mean square error of approximation

To solve this problem, the community's capacity needs to be improved through various trainings and community assistance, as well as a healthy hallway institution is very much needed to ensure the sustainability and management of the program in the future. For resource management in this study, in addition to the involvement of the research team, it was also assisted by representations in the alley community.

Table 6: AIC of relationship factor in the aisle community empowerment in Makassar city

Model	AIC	BCC	BIC	CAIC
Default model	456.844	468.067	576.775	615.775
Saturated model	380.000	434.676	964.283	1154.283
Independence model	1024.947	1030.414	1083.375	1102.375

AIC: Akaike information criterion

Conclusion

Inter-community relationship is the best model in developing a healthy aisle in Makassar City through solidarity, shared motivation, shared trust, clear vision,

resources shares, capacity building, norms in society, government support, and community development. It is clear that in the development of aisle community in Makassar City has a dominant effect as the basis for empowering the aisle community. It is suggested that in the efforts to improve human development, especially for the aisle community in Makassar City, the utilization of aisle components need to be considered by providing legality to the aisle working group so that the aisle community has a clear vision to orient healthy aisle into more complex aisle in overcoming urban problems.

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