

Strategic Planning Based on The Impact of Social Support and Social Trust On COVID-19 Risk Response in Formal and Informal Workers

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Abstract. The COVID-19 pandemic has occurred throughout the world, and also in Indonesia. The government try to reduce the spread of COVID-19 by implementing various policies such as the large-scale social restriction (PSBB) policy, as well as other related policies. However, this policy has not been effective in view of the level of the spread of COVID-19 which has not decreased. Lack of public awareness is the cause of the spread of COVID-19 in Indonesia. For this reason, this study examines the effect of social support and social trust on the efficacy response to COVID-19 using the structural equation modeling (SEM) method. This factor was chosen because social support is an important aspect of the life of Indonesian society. This research was conducted on formal and informal workers, because workers are still required to have activities outside the home. The results show that social support and social trust are more influential on formal workers than informal workers. Strategy recommendations are compiled based on literature studies. After that, the weighting was done by using a relationship matrix. The results of the relationship matrix are seven prioritized strategies for formal workers, and three prioritized strategies for informal workers.

Keyword: COVID-19, Social Support, Social Trust, Response Efficacy, Formal and Informal Workers, Structural Equation Modelling, Relationship Matrix

Abstrak. Pandemi COVID-19 terjadi di seluruh dunia, dan juga di Indonesia. Selain menyebabkan korban jiwa, pandemi ini juga menyebabkan kerugian di berbagai sektor. Pemerintah berupaya mengurangi penyebaran COVID-19 dengan menerapkan berbagai kebijakan seperti kebijakan pembatasan sosial berskala besar (PSBB), serta kebijakan terkait lainnya. Namun kebijakan ini belum efektif dilihat dari tingkat penyebaran COVID-19 yang belum menurun. Kurangnya kesadaran masyarakat menjadi penyebab tingkat penyebaran COVID-19 di Indonesia. Untuk itu penelitian ini meneliti pengaruh dari dukungan sosial dan kepercayaan sosial pada respons efikasi terhadap COVID-19 menggunakan metode structural equation modeling (SEM). Faktor tersebut dipilih karena dukungan sosial merupakan aspek penting di kehidupan masyarakat Indonesia. Adapun penelitian ini dilakukan pada pekerja formal dan informal, karena pekerja masih diharuskan beraktivitas di luar rumah. Hasil menunjukkan bahwa dukungan sosial dan kepercayaan sosial lebih berpengaruh pada pekerja formal dibandingkan pekerja informal. Rekomendasi strategi disusun berdasarkan studi literatur. Setelah itu, pemberian bobot dilakukan menggunakan relationship matrix. Hasil dari relationship matrix tersebut adalah tujuh strategi untuk diprioritaskan bagi pekerja formal, dan tiga strategi yang di prioritaskan bagi pekerja informal.

Kata Kunci: COVID-19, Social Support, Social Trust, Response Efficacy, Formal and Informal Workers, Structural Equation Modelling, Relationship Matrix.

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1. Introduction

The first case of the coronavirus disease (COVID-19) was discovered in Wuhan City, Hubei Province, China, in December 2019. The virus first surfaced when many cases of patients hospitalized with a unique sickness defined by pneumonia and respiratory failure brought on by the novel coronavirus were reported (SARS-CoV-2) [1]. In Indonesia, Coronavirus Disease (COVID-19) was first detected on March 2, 2020 and announced directly by President Joko Widodo. As of October 4, 2020 there were 303,498 confirmed cases, and 21.1% of them were active cases, which was 63,894 cases. Meanwhile, 3.7% of confirmed cases died, or 11,151 cases [2].

In preventing the transmission of the virus, the World Health Organization (WHO) advises the general public to follow several basic precautions, namely wearing masks, washing hands, using hand sanitizers, maintaining social distancing, and staying at home [3]. The policy of maintaining social distancing was chosen by the Indonesian government as an effort to overcome the coronaviruses, the policy regarding social distancing or PSBB (Large-Scale Social Restrictions) applies nationally which is determined directly by President Joko Widodo [4]. Although PSBB and other regulations regarding social distancing are considered a policy that can only be implemented before the vaccine is available. However, this also causes a negative impact on mental health. In other words, the COVID-19 pandemic is not only a risk of death but is also associated with community psychological pressure [5].

Judging from the development of the increase in COVID-19 cases in Indonesia, it can be said that PSBB and similar regulations in various regions have yet effectively suppressed the spread of COVID-19. Public health expert from the Faculty of Medicine, Padjadjaran University, Panji Hadisoemarto, said the PSBB had not been effective because people did not comply with health protocols such as maintaining social distancing, reducing outdoor activities, wearing preventive attributes such as masks, and practicing good hygiene and sanitation [6].

Therefore, Doni Monardo, as the Head of the Covid-19 Handling Task Force, suggested to influential elements in the community not to be fixated on sanctions made by the government, but also to make social sanctions or customary sanctions to increase public awareness of the importance of health protocols. In addition, because 33% of the population said that it was difficult to implement a health protocol, the researchers wanted to focus on workers.

Another thing is because in a situation like this, workers are still required to do things that support their work, such as going to the office, and other activities that should be avoided during the COVID-19 pandemic.

Based on the sector, workers are divided into formal and informal workers, where educational background is a significant difference. In addition, this research was conducted in the areas of Jakarta, Bogor, Depok, and Tangerang because based on BPS data, there were 1.3 million commuters from the cities of Bogor, Depok, Tangerang and Bekasi who operate in Jakarta. A total of 85.47% or 1.1 million people aim to work [7].

Population cooperation is an important thing to end the pandemic. The World Health Organization (WHO), states that it is important to communicate risk and work with diverse communities to develop effective programs to protect and prepare for COVID-19 [8]. According to Francis Fukuyama, trust that is widespread in society (social trust) will facilitate all activities in the community [9]. Social trust is a trust that refers to people who trust each other between members of the social community with one another [10]. In addition, social support is also needed to reduce public psychological pressure due to the COVID-19 pandemic, because based on research conducted by Prati and Pietrantonio, suggested that having enough social support is beneficial for psychological health [11]. The care and assistance one receives from others is referred to as social support [12]. From the description of the background above, the researcher wants to know how big the impact of social support and social trust on the COVID-19 virus risk response to formal and informal workers, because someone who has a good risk response will carry out activities related to the risk response [13].

Model testing was conducted to examine the impact of social support and social trust as variables moderating the stages of risk response during the COVID-19 pandemic on formal and informal workers. The method used in this test is the Structural Equation Modeling (SEM) method, this is because the SEM method can be used to carry out joint testing, namely: structural models between independent and dependent constructs, as well as measurement models that measure the relationship value (loading) between indicator variables and construct (latent variable). In the final stage, strategic recommendations are given to the relevant agencies to be able to increase one's self-awareness in carrying out activities as a response to COVID-19 risk based on the most influential factors.

2. Literature Review

2.1. Formal and Informal Workers

Formal employment is an employment field whose existence is regulated and protected by labor regulations such as civil servants, State-Owned Enterprises (BUMN), and employees of private companies [14].

Work that is carried out in formal employment usually has general or specific rules that are made to regulate the course of work in the formal employment field. Formal workers receive stronger legal protection, formal employment contracts, and are in an organization that is legally incorporated, as regulated in the Manpower Law and Trade Union Law, as well as various government regulations (PP) and ministerial regulations (Permen) on labor. The informal sector

is a commercial and non-commercial business, which does not have a formal structure in its organization and operations. These businesses are not registered, do not pay taxes and do not comply with applicable laws and regulations [15]. Based on the Hussmanns' framework [16], describe examples of some groups of workers working in the informal sector and informal workers working outside the informal sector:

- Workers who are employed in the informal sector, including workers who are self-employed in their own company, employers in informal companies, workers in the informal sector, family workers who work for informal companies, members of informal producer networks / informal cooperatives.
- Informal workers who work outside the informal sector, in particular: workers in the formal sector who are not protected by social protection, are not legally registered, or do not get worker rights such as paid annual salary or sick leave, unprotected paid domestic workers and deprived of workers' rights, and family members employed in formal companies.

2.2. Social Support and Response Efficacy

Social support refers to emotional, informational, or practical help from another significant person, such as family members, friends, or coworkers. In addition, support can actually be received from other people [17]. Another definition of social support is "personal perception of general support or certain supportive behavior (available or adopted) by people in their social networks, which enhances activity or can protect them from the harmful effects of negative outcomes" [18].

In addition, certain types of behavior are considered favorable, emotional support (love, warmth, trust, compassion, approval, acceptance, etc.), material support (time, money, other material resources, etc.). resources, etc.). forms, needs), informational support (e.g., providing information or advice) and assessment support (e.g., providing feedback and validating reviews) [19].

Hypothesis 1 (H1): Public support has a positive impact on response efficacy

Hypothesis 2 (H2): Individual support has a positive impact on response efficacy.

2.3. Response Efficacy and Activities

One of the variables that theoretically relates to self-efficacy is response efficacy, which is theoretically based on the notion of expected value [20]. Individuals with higher feedback effectiveness have higher expectations of positive outcomes and are more likely to engage in specific behaviors. Response efficacy includes a component of self-efficacy. A belief in an individual's ability to perform a particular action. Actions are the result of individual final decisions based on the gathering of information received regarding risks [21]. Neal and Griffin [22], define safety behaviors are actions taken to keep oneself safe, to assist other vulnerable

individuals, or to create a safe environment. Kwon [23], describes Safety behaviors are behaviors that are self-defense behaviors to prevent dangerous situations, and behaviors is the result of people's thoughts to ensure their own and other peoples' safety. COVID-19 safety behaviors are those adopted by the public to protect themselves and others from the risks of COVID-19. Basic measures to prevent COVID-19 include face masks, antibacterial/disinfectant products, and antibacterial soap. This encourages significant buy and intake of those products [24].

Hypothesis 3 (H3): Response efficacy has a positive impact on sanitation activity in response to a viral risk.

Hypothesis 4 (H4): Response efficacy has a positive impact on distancing activity in response to a viral risk.

Hypothesis 5 (H5): Response efficacy has a positive impact on purchasing activity in response to a viral risk.

2.4. Social Trust

This trust refers to the perceived honesty and fairness, which fosters relationships between individuals that must be maintained by meeting these standards on an ongoing basis [25]. Research on social trust identifies four key components of organizational trust, culture, organizational arrangements, economic and social outcomes, organizational performance [26]. Organizational leaders are particularly interested in the connection between trust and organizational success. Trust is seen as an element created for better performance and crisis management [27]. When short-term sacrifices are required but the long-term advantages are less favorable, such as in crisis conditions, the implementation apparatus of policy must be deployed without trust in swaying [28]. According to the literature study, researchers separated trust into two categories: public trust, especially belief in the general public or in government; and personal trust, primarily belief in friends and family.

Hypothesis 6 (H6): Social trust will moderate the impact of public support on response efficacy.

Hypothesis 7 (H7): Social trust will moderate the impact of individual support on response efficacy.

Hypothesis 8 (H8): Social trust will moderate the impact of response efficacy on sanitation activity.

Hypothesis 9 (H9): Social trust will moderate the impact of response efficacy on distancing activity.

Hypothesis 10 (H10): Social trust will moderate the impact of response efficacy on purchasing activity.

2.5. Relationship Matrix

The Relationship Matrix is part of the House of Quality. This matrix uses a 9-3-1 scale to define the relationship between customer follow-up and technical requirements at strong, medium, and weak levels. For this scale, the following symbols are used, Strong (H) = 9, Average (M) = 3 and Weak (S) = 1. Each customer sequence is tailored to the respective technical requirements. Establishing this relationship requires the expertise of a researcher or an expert in the field. Often the strongest relationship being determined leaves about 60-70% of the matrix blank [29]. Some experts suggest that QFD analysis should ideally fill 50% or less of the relationship matrix and generate random samples [30]. The technical specifications highlighted in this matrix are those that affect customers the most. Technical criteria with customer effect must be given high attention during the design phase to ensure that products and services live up to customer expectations.

3. Methodology

3.1. Data Collection

This study uses primary data, where data is obtained from a questionnaire distributed through the Google Forms platform. Altogether 400 samples were collected. In the collection, it is also seen the needs of respondents per region as seen from the population ratio.

Table 1 Number of Collected Samples

Region	Total Samples		
	Population (million)	Formal Workers	Informal Workers
Jakarta	10,5	87	87
Bogor	5,8	48	48
Depok	2,4	20	20
Tangerang	1,6	13	13
Bekasi	3,9	32	32
Total	24,2	200	200

3.2. Questionnaire Statement

This statement consists of 20 types of statements that will measure 7 latent research variables. The assessment of this statement uses a 5-Point Likert Scale.

Table 2 Questionnaire Statement

No.	Variable	Indicators	Code
1.	Public Support	My society provides me with infection-prevention products needed to overcome COVID-19.	PS1
2.		My society provides me with information about infection prevention needed to overcome COVID-19.	PS2
3.		My society provides me with emotional support (encouragement) to overcome COVID-19.	PS3
4.	Individual Support	People around me provide me with infection-prevention products needed to overcome COVID-19.	IS1
5.		People around me provide me with information about infection prevention needed to overcome COVID-19.	IS2

6.		People around me provide me with emotional support (encouragement) to overcome COVID-19.	IS3
7.	Response Efficacy	I know well how to protect my health from COVID-19.	RE1
8.		I can control myself well to do things to protect my health from COVID-19.	RE2
9.		I am willing to try to do things to protect myself from COVID-19..	RE3
10.	Sanitation Activity	To prevent COVID-19 infection, I always wear a mask when I leave my house to run errands.	SA1
11.		To prevent COVID-19 infection, I wash my hands frequently.	SA2
12.	Sanitation Activity	To prevent COVID-19 infection, I cover my mouth and nose with my sleeve when I cough.	SA3
13.	Distancing Activity	To prevent COVID-19 infection, I refrain from outside activities and stay indoors.	DA1
14.		To prevent COVID-19 infection, I practice physical distancing.	DA2
15.	Purchasing Activity	To prevent COVID-19 infection, I bought facial masks.	PA1
16.		To prevent COVID-19 infection, I bought antimicrobial and disinfecting products.	PA2
17.		To prevent COVID-19 infection, I bought antimicrobial soap.	PA3
18.	Social Trust	I trust my government to strive to overcome COVID-19.	ST1
19.		I trust our people to strive to overcome COVID-19.	ST2
20.		I trust people around me to strive to overcome COVID-19.	ST3

3.3. Data Processing

In this study, Structural Equation Modeling (SEM) was used to test H1-H5. Additionally, H6-H10 were put to the test using the relaxation effect test technique suggested by Harish Sujan and Weitz [31]. The moderator's mean-based cluster groups were subjected to the first step, the K-means cluster analysis, and then the multiple group SEM test.

3.4. Research Model

In this study, there are 7 latent variables, namely, individual support, public support, response efficacy, sanitation activity, distancing activity, purchasing activity, and social trust. There are 3 exogenous variables, namely individual support, public support, and response efficacy. In this study, there is also a moderator variable, namely, social trust. Each variable has three measurement indicators, except for distancing activity which only has two measurement indicators.

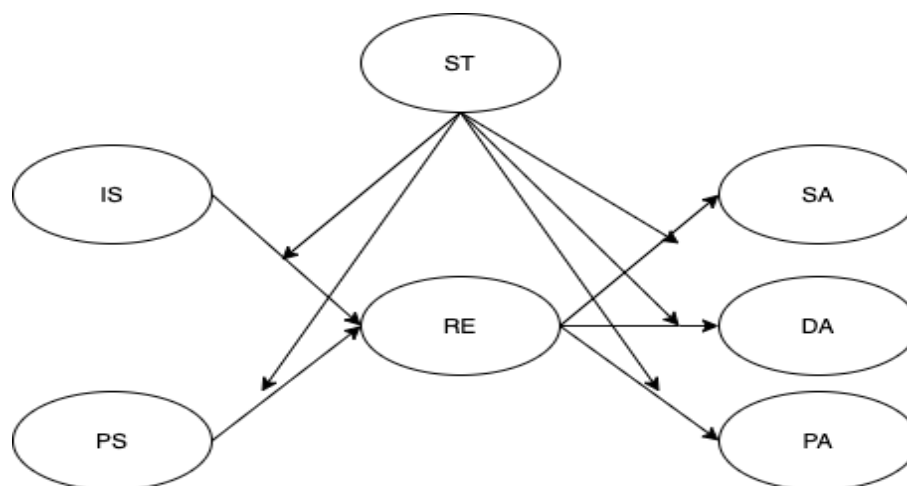


Figure 1 Research Model

4. Results and Discussion

4.1. Formal Workers Model

A. Structural Model 1

At this stage, a structural model test is carried out before moderation to test hypotheses 1-5.

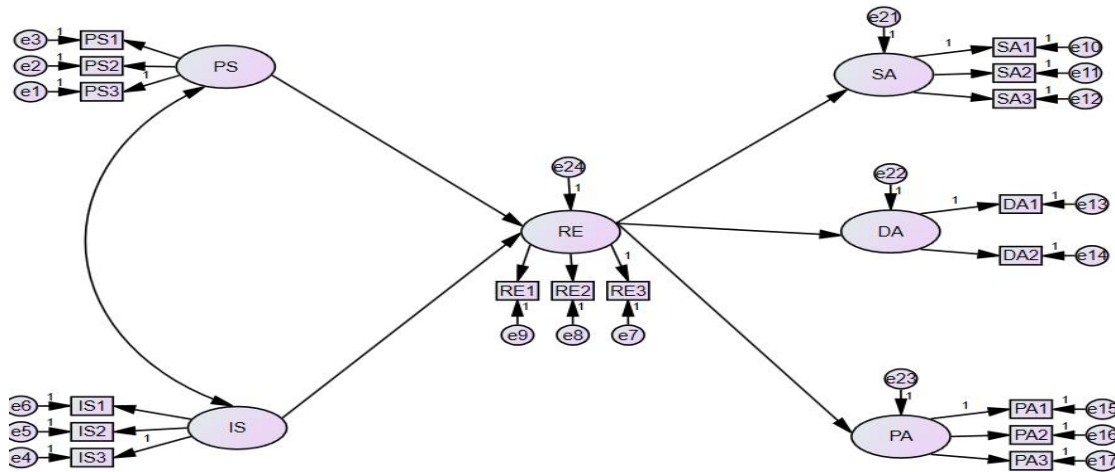


Figure 2 Initial Research Model

Table 3 Fit Index Model 1 (Formal Workers)

Match Criteria	Terms	Result	Information
CMIN/DF	≤ 2	1,553	good fit
GFI	> 0.9	0,903	good fit
AGFI	> 0.9	0,868	marginal fit
NFI	> 0.9	0,892	marginal fit
RFI	> 0.9	0,87	marginal fit
IFI	> 0.9	0,959	good fit
TLI	> 0.9	0,949	good fit
CFI	> 0.9	0,958	good fit
RMSEA	< 0.08	0,053	good fit
AIC	default < saturated	255,446	good fit
CAIC	default < saturated	427,378	good fit
ECVI	default < saturated	1,284	good fit
PGFI	> 0.5	0,667	good fit
PNFI	> 0.5	0,741	good fit
PCFI	> 0.5	0,769	good fit

B. Structural Model 2 (Moderation Effect)

At this stage, a structural model test is carried out after moderation to test the 6-10 hypothesis. The first step to testing this second model is to perform a K-means cluster analysis to divide groups with high social trust (ST) from groups with low social trust (ST). At this stage, the K-means cluster analysis is conducted to divide groups with high social trust (ST) and groups with low social trust (ST). For formal worker respondents, the group with high social trust (ST) consisted of 168 (84%) people, with an average social trust (ST) value of 4.49. Furthermore, the group with low social trust (ST) consisted of 32 (16%) people with an average social trust (ST) value of 3.41. After that, the two groups were tested using multigroup SEM.

Table 4 Fit Index Model 2 (Formal Workers)

Match Criteria	Terms	Result	Information
CMIN/DF	≤ 2	1,463	good fit
GFI	> 0.9	0,851	marginal fit
AGFI	> 0.9	0,799	marginal fit
NFI	> 0.9	0,818	marginal fit
RFI	> 0.9	0,781	marginal fit
IFI	> 0.9	0,934	good fit
TLI	> 0.9	0,919	good fit
CFI	> 0.9	0,932	good fit
RMSEA	< 0.08	0,048	good fit
AIC	default < saturated	490,546	good fit
CAIC	default < saturated	2,478	good fit
ECVI	default < saturated	0,629	good fit
PGFI	> 0.5	0,68	good fit
PNFI	> 0.5	0,775	good fit
PCFI	> 0.5	1,463	good fit

From Table 4 above, it can be seen that all the fit criteria described above meet the requirements, so it can be said that this model has a good level of compatibility.

4.2. Informal Workers Model

A. Structural Model 1

In table 5 below, some of the suitability criteria described above have not met the requirements, so it can be said that this model has a bad fit. Furthermore, the model re-specification was performed by linking the covariance between the error variables with the value officiation indices > 10.

Table 5 Fit Index Model 2 (Informal Workers)

Match Criteria	Terms	Result	Information
CMIN/DF	≤ 2	2,488	bad fit
GFI	> 0.9	0,857	marginal fit
AGFI	> 0.9	0,806	marginal fit
NFI	> 0.9	0,837	marginal fit
RFI	> 0.9	0,804	marginal fit
IFI	> 0.9	0,8496	marginal fit
TLI	> 0.9	0,873	marginal fit
CFI	> 0.9	0,894	marginal fit
RMSEA	< 0.08	0,086	bad fit
AIC	default < saturated	361,144	bad fit
CAIC	default < saturated	533,076	good fit
ECVI	default < saturated	1,815	bad fit
PGFI	> 0.5	0,633	good fit
PNFI	> 0.5	0,695	good fit
PCFI	> 0.5	0,753	good fit

The next step is to re-test the degree of fit to ensure that the model has a good degree of fit.

Table 6 Fit Index Model 1 Respecification (Informal Workers)

Match Criteria	Terms	Result	Information
CMIN/DF	≤ 2	1,625	good fit
GFI	> 0.9	0,911	good fit
AGFI	> 0.9	0,869	marginal fit

Match Criteria	Terms	Result	Information
NFI	> 0.9	0,902	good fit
RFI	> 0.9	0,872	marginal fit
IFI	> 0.9	0,96	good fit
TLI	> 0.9	0,946	good fit
CFI	> 0.9	0,959	good fit
RMSEA	< 0.08	0,056	good fit
AIC	default < saturated	266,982	good fit
CAIC	default < saturated	477,6	good fit
ECVI	default < saturated	1,342	good fit
PGFI	> 0.5	0,619	good fit
PNFI	> 0.5	0,69	good fit
PCFI	> 0.5	0,733	good fit

B. Structural Model 2 (Moderation Effect)

At this stage, a structural model test is carried out after moderation to test the 6-10 hypothesis, as in the formal model. K-means cluster analysis is conducted to divide groups with high social trust (ST) from groups with low social trust (ST). For informal worker respondents, the group with high social trust (ST) consisted of 134 (67%) people, with an average social trust (ST) value of 4.28. In addition, the group with low social trust (ST) consisted of 66 (33%) people with an average social trust (ST) value of 2.81. After that, the two groups were tested using multigroup SEM.

Table 7 Fit Index Model 2 (Informal Workers)

Match Criteria	Terms	Result	Information
CMIN/DF	≤ 2	1,463	good fit
GFI	> 0.9	0,851	marginal fit
AGFI	> 0.9	0,799	marginal fit
NFI	> 0.9	0,818	marginal fit
RFI	> 0.9	0,781	marginal fit
IFI	> 0.9	0,934	good fit
TLI	> 0.9	0,919	good fit
CFI	> 0.9	0,932	good fit
RMSEA	< 0.08	0,048	good fit
AIC	default < saturated	490,546	good fit
CAIC	default < saturated	2,478	good fit
ECVI	default < saturated	0,629	good fit
PGFI	> 0.5	0,68	good fit
PNFI	> 0.5	0,775	good fit
PCFI	> 0.5	1,463	good fit

4.3. Hypothesis Analysis on Formal and Informal Worker Model

A. H1-H5 Analysis

The p-value analysis was carried out to see whether there was an influence between the two variables. The following is an analysis of the p-value in the first model of formal workers and informal workers.

Table 8 H1-H5 Analysis

Hypothesis	Formal Workers		Informal Workers		
	p-value	Significance	p-value	Significance	
H1	PS → RE	***	Yes	0,303	No
H2	IS → RE	***	Yes	0,001	Yes
H3	RE → SA	***	Yes	***	Yes
H4	RE → DA	***	Yes	***	Yes
H5	RE → PA	***	Yes	***	Yes

B. H6-H10 Analysis

Analysis was carried out on the second model to test the 6-10 hypothesis. This model is divided into two groups, namely groups with high social trust (ST) and groups with low social trust (ST). When the absolute value of the composite dependability between the standardize path coefficient of the two groups was 1,965 or more, the path coefficient was deemed statistically different, and if it met this requirement, a moderating effect was present.

Table 9 H6-H10 Analysis

Hypothesis	Formal Workers		Informal Workers		
	C.R.	Significance	C.R.	Significance	
H6	ST → (PS → RE)	3,421	Yes	2,768	Yes
H7	ST → (IS → RE)	3,284	Yes	0,785	No
H8	ST → (RE → SA)	4,771	Yes	-1,701	No
H9	ST → (RE → DA)	3,528	Yes	-0,833	No
H10	ST → (RE → PA)	4,721	Yes	-2,294	Yes

After that, the comparison of the results of the hypothesis analysis on formal and informal workers is shown in Table 10.

Table 10 Hypothesis Analysis of Formal and Informal Worker Models

	Hypothesis		Formal Workers	Informal Workers
H1	Public support has a positive impact on response efficacy.	PS → RE	Accepted	Rejected
H2	Individual support has a positive impact on response efficacy.	IS → RE	Accepted	Accepted
H3	Response efficacy has a positive impact on sanitation activity in response to a viral risk.	RE → SA	Accepted	Accepted
H4	Response efficacy has a positive impact on distancing activity in response to a viral risk.	RE → DA	Accepted	Accepted
H5	Response efficacy has a positive impact on purchasing activity in response to a viral risk.	RE → PA	Accepted	Accepted
H6	Social trust will moderate the impact of public support on response efficacy.	ST → (PS → RE)	Accepted	Accepted
H7	Social trust will moderate the impact of individual support on response efficacy.	ST → (IS → RE)	Accepted	Rejected
H8	Social trust will moderate the impact of response efficacy on sanitation activity.	ST → (RE → SA)	Accepted	Rejected
H9	Social trust will moderate the impact of response efficacy on distancing activity.	ST → (RE → DA)	Accepted	Rejected
H10	Social trust will moderate the impact of response efficacy on purchasing activity.	ST → (RE → PA)	Accepted	Accepted

4.4. Strategic Planning

At this stage of strategy design, the tools used are relationship matrix. The relationship matrix itself is part of the house of quality. In the making, weighting of values and determining the value of importance are carried out by experts who have experience in related institutions. Based on the measured variable path coefficient of each exogenous latent variable, the customer wants for formal workers are obtained, namely:

- The exogenous public support latent variables are represented by the PS1, PS2, and PS3 variables.
- The moderating variable of social trust is represented by the variables ST1 and ST2.

Meanwhile, for informal workers the customer wants, are the moderating variable of social trust is represented by the variables ST1 and ST2.

Furthermore, brainstorming and literature studies are conducted to determine technical needs that can meet the needs of the community from the customer wants above. Researchers also validate technical requirements to experts before carrying out the next stage. Table 11. below are the technical requirements that will be used in a relationship matrix.

Table 11 Technical Requirements

No.	Technical Requirements
1.	Correcting false news about COVID-19 in the mass media [32].
2.	Optimization of COVID-19 case data updates on various platforms [33].
3.	Provide the latest information about COVID-19 from journals / research that have been validated and packaged in language that is easily understood by the public [34].
4.	Providing information regarding the availability of isolation and treatment rooms related to COVID-19 [35].
5.	Issue consistent policies related to efforts to reduce the spread of COVID-19 [36].
6.	Increased scheduling of social assistance distribution to be on time [37].
7.	Be firm with people who do not comply with the COVID-19 health protocol [38].
8.	Validation of beneficiary data [39].
9.	Improved applications regarding mental health (pedia health, and similar tele health apps owned by the government [40].
10.	Delivering information about how to prevent COVID-19 through intermediaries (community leaders, religious leaders, business leaders, etc) [41].
11.	Increase education related to COVID-19 in people with low education [42].

Some technical requirements are not included in the informal worker model because they are adjusted. After making strategy recommendations based on literature studies, strategy validation and filling of relationship matrix values are carried out. Validation is carried out by experts in related fields. The relationship matrix is also divided into two, namely for formal and informal workers. Figure 3 shows a relationship matrix for formal workers and Figure 4 for informal workers.

		Direction of Improvement		Functional Requirements										
Relative Weight	Customer Importance	Customer Requirements		Correcting the wrong news about COVID-19 in the mass media	Optimizing updating of COVID-19 case data on the website	Provide the latest information about COVID-19 from journals/research that has been validated and packaged in language that is easily understood by the public on various platforms	Provide information regarding the availability of isolation and treatment rooms related to COVID-19 on the website	Issuing consistent policies related to efforts to reduce the spread of COVID-19	Improved scheduling of distribution of social assistance so that it is timely	Be firm with people who do not comply with the COVID-19 health protocol	Validation of beneficiary data	Improvements to applications regarding mental health (sehatpedia)	Convey information on how to prevent COVID-19 through community leaders, religious leaders, business leaders, etc	Improving education related to COVID-19 in people with low education
				22%	5	Information about COVID-19	●	●	●	●	●	●	○	○
22%	5	Material support during COVID-19	●	●	●	●	●	○	○	○	○	○	○	○
17%	4	Emotional support during the COVID-19 pandemic	●	●	●	●	●	●	○	○	○	○	○	○
22%	5	Trust in government	●	●	●	●	●	●	○	○	○	○	○	○
17%	4	Trust in society	●	●	○	○	○	○	○	○	○	○	○	○
Importance Rating Sum (Importance x Relationship)			900	900	795,7	795,7	665,2	430,4	665,2	534,8	300	639,1	560,9	
Relative Weight			13%	13%	11%	11%	9%	6%	9%	7%	4%	9%	8%	
Technical Competitive Assessment														

Figure 3 Relationship Matrix Formal Workers

		Direction of Improvement		Functional Requirements							
Relative Weight	Customer Importance	Customer Requirements		Issuing consistent policies related to efforts to reduce the spread of COVID-19	Improved scheduling of distribution of social assistance so that it is timely	Validation of beneficiary data	Be firm with people who do not comply with the COVID-19 health protocol	Convey information on how to prevent COVID-19 through community leaders, religious leaders, business leaders, etc	Improving education related to COVID-19 in people with low education	Correcting the wrong news about COVID-19 in the mass media	
				56%	5	Trust in government	●	●	●	●	○
44%	4	Trust in society	○	○	○	●	●	●	●		
Importance Rating Sum (Importance x Relationship)				633	633	633,3	900	566,7	900	900	
Relative Weight				12%	12%	12%	17%	11%	17%	17%	
Technical Competitive Assessment											

Figure 4 Relationship Matrix Informal Workers

After that, the resulting priority order of recommendations is shown in Table 12.

Table 12 Formal Worker Strategy Recommendations Priorities

No.	Relative Weight	Recommendations
1.	13%	Correcting false news about COVID-19 in the mass media.
2.	13%	Optimization of COVID-19 case data updates on various platforms.
3.	11%	Provide the latest information about COVID-19 from journals / research that have been validated and packaged in language that is easily understood by the public.
4.	11%	Provide information regarding the availability of isolation and treatment rooms related to COVID-19.

5.	9%	Delivering information about how to prevent COVID-19 through an intermediary for community leaders, religious leaders, business leaders, etc.
6.	9%	Issue consistent policies related to efforts to reduce the spread of COVID-19.
7.	9%	Be firm with people who do not adhere to the COVID-19 health protocol.
8.	8%	Increase education related to COVID-19 in people with low education.
9.	7%	Validate beneficiary data.
10.	6%	Increased scheduling of social assistance distribution to be on time.
11.	4%	Improved applications regarding mental health (Sehat Pedia)

Table 13 shows the recommended strategies for informal workers.

Table 13 Informal Worker Strategy Recommendations Priorities

No.	Relative Weight	Recommendations
1.	17%	Correcting false news about COVID-19 in the mass media.
2.	17%	Increase education related to COVID-19 in people with low education.
3.	17%	Be firm with people who do not adhere to the COVID-19 health protocol.
4.	12%	Increased scheduling of social assistance distribution to be on time.
5.	12%	Validate beneficiary data.
6.	12%	Issue consistent policies related to efforts to reduce the spread of COVID-19.
7.	11%	Delivering information about how to prevent COVID-19 through intermediaries (community leaders, religious leaders, business leaders, etc).

5. Conclusion

This study was conducted on both formal and informal workers with the intention of examining the impact of social support and social trust on the risk response to COVID-19. The results show that for formal workers, individual support and public support have a positive effect on the efficacy of a person's response which results in output in the form of sanitation activities, distance keeping, and purchases related to goods needed to support activities during COVID-19 such as masks, anti-microbial soap, and disinfectant. However, in informal workers public support had no effect on their efficacy response. Individual support has a positive effect on the efficacy of responses to informal workers, which leads to carrying out sanitation activities, maintaining distance, and purchasing items needed during the COVID-19 pandemic. Social trust also moderates the effect of the relationship of each variable on formal workers. In informal workers social trust only moderates the effect of public support on the efficacy response, as well as the efficacy response to the purchase of goods needed during the COVID-19 pandemic. After designing a strategy using a relationship matrix, 7 main strategic recommendations for formal workers were generated, namely, rectifying false news about COVID-19 in the mass media, optimizing data updates on COVID-19 cases on various platforms, providing the latest information about COVID-19 from journals / research that has been validated and packaged in language that is easy for the public to understand, provides information regarding the availability of isolation and treatment rooms related to COVID-19, delivers information about how to prevent COVID-19 through community leaders / religious leaders / business intermediaries, issues consistent policies related to efforts to reduce the spread of COVID-19, and be firm with people who do not comply with the COVID-19 health protocol. Meanwhile, there are 3 priority recommendations for informal workers, namely, rectifying false news about COVID-19 in the mass media, increasing education related to COVID-19 in people with low education, being strict with people who do not comply with the COVID-19 health protocol. Only the variables related

to social support and individual support are included in this study to determine the effect of response efficacy. In further research, it can be carried out using other, more complex variables. In further research, it can also be seen the influence of a habit / culture.

REFERENCES

- [1] Y. C. Liu, R. L. Kuo, and S. R. Shih, "Covid-19: The first documented coronavirus pandemic in history," *Biomed. J.*, pp. 1–6, 2020.
- [2] "Peta Sebaran | Satgas Penanganan Covid-19," 2020. <https://covid19.go.id/peta-sebaran> (accessed Oct. 04, 2020).
- [3] "Technical guidance publications." <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance-publications> (accessed Oct. 06, 2020).
- [4] D. Herdiana, "Social Distancing Indonesian Policy Response to the Corona Virus Disease 2019 (Covid-19)," *J. Ilmu Adm. Media Pengemb. Ilmu dan Prakt. Adm.*, vol. 17, no. 1, pp. 93–110, Jun. 2020.
- [5] R. Teguh, F. F. Adji, V. Wilentine, H. Usup, and S. Abertun, "Dampak Psikologis Pandemi COVID-19 Terhadap Mahasiswa di Kalimantan Tengah," *Teknol. Inf.*, no. June, 2020.
- [6] "9 Faktor yang Memengaruhi Kepatuhan Masyarakat Terhadap Upaya PSBB Halaman all - Kompas.com." <https://www.kompas.com/sains/read/2020/04/23/163100023/9-faktor-yang-memengaruhi-kepatuhan-masyarakat-terhadap-upaya-psbb?page=all> (accessed Oct. 07, 2020).
- [7] R. Hussmanns, "Defining and measuring informal employment," *Int. Labour Organ.*, pp. 21, 2004.
- [8] "Technical guidance publications." <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance-publications> (accessed Oct. 06, 2020).
- [9] F. Fukuyama, "Social Capital Disrupted? Francis Fukuyama: The Great Disruption," *Arena Mag*, pp 49-51, 44 December-January, 1999.
- [10] G. S. Cheema and V. Popovski, *Building trust in government: Innovations in governance reform in Asia*, vol. 8, no. 5. 2010.
- [11] G. Prati and L. Pietrantonio, "The relation of perceived and received social support to mental health among first responders: A meta-analytic review," *J. Community Psychol.*, vol. 38, no. 3, pp. 403–417, Apr. 2010.
- [12] S. E. Estroff, C. Zimmer, W. S. Lachicotte, and J. Benoit, "The influence of social networks and social support on violence by persons with serious mental illness," *Hosp. Community Psychiatry*, vol. 45, no. 7, pp. 669–679, 1994.
- [13] J. Buckworth, "Promoting self-efficacy for healthy behaviors," *ACSM's Heal. Fit. J.*, vol. 21, no. 5, pp. 40–42, 2017.
- [14] "Badan Pusat Statistik," BPS. <https://www.bps.go.id/publication/2019/12/04/eab87d14d99459f4016bb057/statistik-komuter-jabodetabek-2019.html> (accessed Dec. 17, 2020).
- [15] Suradi, "Peranan Sektor Informal Dalam Penanggulangan Kemiskinan," *Informasi*, vol. 16, no. 03, pp. 221–234, 2011.
- [16] R. Hussmanns, "Defining and measuring informal employment," *Int. Labour Organ.*, p. 21, 2004.
- [17] P. A. Thoits, "Mechanisms linking social ties and support to physical and mental health," *J. Health Soc. Behav.*, vol. 52, no. 2, pp. 145–161, Jun. 2011.
- [18] M. K. Demaray and C. K. Malecki, "The relationship between perceived social support and maladjustment for students at risk," *Psychol. Sch.*, vol. 39, no. 3, pp. 305–316, May 2002.

- [19] C. H. Tardy, "Social support measurement," *Am. J. Community Psychol.*, vol. 13, no. 2, pp. 187–202, Apr. 1985.
- [20] R. J. Hill, M. Fishbein, and I. Ajzen, "Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research.," *Contemp. Sociol.*, vol. 6, no. 2, p. 244, Mar. 1977.
- [21] J. Wilson, "Responding to Natural Disasters with Social Media: A Case Study of the 2011 Earthquake and Tsunami in Japan, 2008.
- [22] A. Neal and M. A. Griffin, "Safety Climate and Safety Behaviour," *Aust. J. Manag.*, vol. 27, no. 1_suppl, pp. 67–75, Jun. 2002.
- [23] S. A. Kwon, H. J. Yoo, and E. Song, "Korean consumers' recognition of risks depending on the provision of safety information for chemical products," *Int. J. Environ. Res. Public Health*, vol. 17, no. 4, Feb. 2020.
- [24] G. D. Smith, F. Ng, and W. Ho Cheung Li, "Covid-19: Emerging compassion, courage and resilience in the face of misinformation and adversity," *J. Clin. Nurs.*, vol. 29, no. 9–10, pp. 1425–1428, May 2020.
- [25] R. Caferra, A. Colasante, and A. Morone, "The less you burn, the more we earn: The role of social and political trust on energy-saving behaviour in Europe," *Energy Res. Soc. Sci.*, vol. 71, p. 101812, 2020.
- [26] F. Murtin, L. Fleischer, and V. Siegerink, Trust and its determinants: Evidence from the Trustlab experiment," 2013.
- [27] F. Murtin, L. Fleischer, V. Siegerink, and A. Aassve, "Trust and its determinants: evidence from the trustlab experiment," *OECD Stat. Work. Pap.*, vol. 02, pp. 1–74, 2018.
- [28] OECD, "Leading under pressure: From surviving to thriving before, during, and after a crisis. - PsycNET," OECD, 2013.
- [29] V. J. Nordin, "The voice of the customer," *For. Chron.*, vol. 78, no. 3, pp. 343–345, 2002.
- [30] E. A. and C. C., "Quality Function Deployment in Continuous Improvement," *Six Sigma Proj. Pers. Exp.*, no. July, 2011.
- [31] N. Sujana, H., Weitz.B.A. and Kumar, "Learning Orientation, Working," vol. 58, no. 3, pp. 39–52, 1994.
- [32] Z. Barua, S. Barua, S. Aktar, N. Kabir, and M. Li, "Effects of misinformation on COVID-19 individual responses and recommendations for resilience of disastrous consequences of misinformation," *Prog. Disaster Sci.*, vol. 8, p. 100119, 2020.
- [33] N. Sujana, H., Weitz.B.A. and Kumar, "Learning Orientation, Working," vol. 58, no. 3, pp. 39–52, 1994.
- [34] Z. Barua, S. Barua, S. Aktar, N. Kabir, and M. Li, "Effects of misinformation on COVID-19 individual responses and recommendations for resilience of disastrous consequences of misinformation," *Prog. Disaster Sci.*, vol. 8, p. 100119, 2020.
- [35] "Coronavirus Disease (Covid-19) Situation Reports." <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports> (accessed Oct. 01, 2020).
- [36] "Technical guidance publications." <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance-publications> (accessed Oct. 06, 2020).
- [37] "Advice for the public." <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public> (accessed Oct. 05, 2020).
- [38] J. A. M. Gondim and L. Machado, "Optimal quarantine strategies for the Covid-19 pandemic in a population with a discrete age structure," *Chaos, Solitons and Fractals*, vol. 140, p. 110166, Nov. 2020.
- [39] WHO, "Water, sanitation, hygiene, and waste management for SARS-CoV-2, the virus that causes Covid-19," *Interim Guid.*, no. 29 July, pp. 1–11, 2020.

- [40] WHO, "Pesan dan Kegiatan Utama Pencegahan dan Pengendalian Covid-19 di Sekolah," 2020.
- [41] A. Adetunji and F. Oyekan, "Organization Behavior: The Attitude of Religious Leaders in the Phase of Organization Behavior: The Attitude of Religious Leaders in the Phase of Pandemic," no. June, 2020.
- [42] A. Adetunji and F. Oyekan, "Organization Behavior: The Attitude of Religious Leaders in the Phase of Organization Behavior: The Attitude of Religious Leaders in the Phase of Pandemic," no. June, 2020.