

CHAPTER V - GOVERNANCE PROCESS

Disaster management processes in the most typhoon-affected region in the Philippines

5.1. Introduction

Bryson, Crosby, and Stone (2006) broadly defined cross-sector collaboration as the process of "linking or sharing of information, resources, activities, and capabilities by organizations in two or more sectors to achieve jointly an outcome that could not be achieved by the organization in one sector separately." Cross-sector collaboration acknowledges the limitations and strengths of every sector and the cooperation between and among them complements the functions of each sector. A more specific view on collaborative governance focusing on the inter-relationship between and among government officials and by emphasizing the cyclical nature of collaboration is offered by Ansell and Gash (2008).

This study focuses on the governance process attributed by the existing institutional frameworks in the Philippines, which mainly utilizes the theory of Bryson et al., (2006) on cross-sector collaboration as its framework of analysis. The review of literature points to the important relationships of the initial condition (previous performance), aspects of governance process – initial agreement, leadership, trust, planning and managing conflict - and outcome of collaboration in terms of the relationships with political and professional constituencies (existing relationships). In doing so, linear relationships among the variables were examined.

This Chapter presents the descriptive statistics (Chapter 5.2), followed by the analysis of the structural model. Chapter 5.3 discusses the results of the evaluation of the outer model to ensure that the indicators used are all valid and reliable. Chapter 5.4 shows the result of the analysis on the validity of the structural model based on R², Q², VIF, and Model Fit Analysis. Chapter 5.5 presents the

regression analysis where a discussion on the previous performance of the network is discussed prior to the actual assessment of the hypotheses.

Generally, previous performance as used in this study is based on the self-assessment of the Regional Disaster Risk Reduction Management Council or disaster management network members on their execution of the disaster response targets. Hence, previous performance refers to the initial conditions of the cross-sector collaboration. On the other hand, existing relationship pertains to the characteristics of the connection among network members and therefore serves as the outcome of the collaborative efforts in disaster management.

Lastly, from the findings of this study, analysis and conclusion are presented in the last part of this Chapter.

5.2 Descriptive Statistics

This research intended to gather data from the fifty-six (56) agencies that are members of the Disaster Risk Reduction and Management (DRRM) Councils of Region X, Province of Misamis Oriental and Cities of Cagayan de Oro and Iligan. Hence, a complete enumeration was done. Unfortunately, only forty-four agencies are able to participate by answering the questionnaire. The other twelve (12) agencies failed to return their answered questionnaires. Thus, this study utilizes the data from the representatives of the forty-four (44) agencies who are members of the DRRM Council.

Moreover, the sets of respondents were chosen according to their cluster membership in the DRRM Council. Primarily, the agencies and organization involved in the disaster response as stipulated in the DRRM plan of Region X were mainly considered. The basic assumption is that the member-agencies of the DRRM Council/network who belong in the response clusters have the

sufficient experience and knowledge about the disaster response condition of the country, particularly of the Region, on the basis of their experiences for the past five years (2010-2015).

Table 5.1 below shows the profile of the respondents in terms of the Local Government Unit where they belong, the position they occupy and the agency where they are respectfully affiliated. As indicated in table 5.1, 15.9% of the respondents are from Region X, 25% are from the Province of Misamis Oriental, 31.8% are from Cagayan de Oro City and 27.3% are from Iligan City. In terms of the position they occupy, 20.5% of the respondents are head of offices while 79.5% are the focal persons on DRRM. The forty-four (44) respondents practically represent the entire population identified for this research.

The validity of the data does not only rely on the number and/or characteristics of the respondents but also on the kind of questions being asked. As the questions for this research were tested, the results as shown in Table 4.21 below, reveal that the number of the item is 71 and the value of Cronbach's Alpha analysis is .894. This value implies that the questionnaire utilized in gathering primary data is valid and reliable.

On the other hand, further analysis was made to improve the reliability of the questionnaire. It revealed that the value of Cronbach's Alpha can be improved to .913 if item 5 on initial agreement, items 5, 10, 13, 15 on leadership and item 2 on trust will be excluded in the analysis. Such exclusion can be made as the value of these items under "Cronbach's Alpha if the item is deleted" column exceed the .894 (Cronbach's Alpha value). Also, the value of these items under the "Corrected Item-Total Correlation" column is close to zero (0). Cronbach's Alpha analysis shows validity and reliability on the tool utilized for this research.

Table 5.1. Respondent's Profile

Item	Indicators	Frequency	Percentage
1	Local Government Unit		
	RegionX	7	15.9
	Province of Misamis Oriental	11	25.0
	Cagayan de Oro City	14	31.8
	Iligan City	12	27.3
2	Position		
	Head of the Office	9	20.5
	Focal Person on DRRM	35	79.5
3	Affiliation		
	1. Armed Forces of the Philippines (AFP)	1	2.3
	2. Department of Agrarian Reform (DAR)	1	2.3
	3. ECOWEB	1	2.3
	4. Group Foundation Inc.	1	2.3
	5. Habitat for Humanity	1	2.3
	6. National Housing Authority	1	2.3
	7. Philippine Coast Guard	1	2.3
	8. DRRM Office	2	4.5
	9. Local Agriculture's Office	2	4.5
	10. Philippine National Police (PNP)	2	4.5
	11. Philippine Red Cross	2	4.5
	12. Department of Health (DOH)	3	6.8
	13. Department of Interior and Local Government (DILG)	3	6.8
	14. Department of Social Welfare and Development (DSWD)	3	6.8
	15. Local Budget Office	3	6.8
	16. Local Engineer's Office	3	6.8
	17. Local Planning and Development Office	3	6.8
	18. Local Veterinary Office	3	6.8
	19. Bureau of Fire Protection (BFP)	4	9.1
20. Department of Education (Dep.Ed)	4	9.1	

Table 5.2. Reliability Statistics

Cronbach's Alpha	N of Items
.894	71

5.3 The Outer Model: Validity and Reliability of the Indicators

The analysis of the outer model ensures that the model with its variables and indicators are worthy to be measured considering that these are valid and reliable. Thus, analysis of outer model

measures constructs validity utilizing convergent validity and discriminant validity as its indicators among others.

Table 5.3. Discriminant validity - Heterotrait-Monotrait Ratio of Correlations (HTMT)

Endogenous Variables	Existing relationships	Initial Agreement	Leadership	Managing Conflict	Performance	Planning	Trust
Existing relationships							
Initial Agreement	0.050						
Leadership	0.113	0.585					
Managing Conflict	0.034	0.153	0.264				
Performance	0.063	0.328	0.412	0.489			
Planning	0.089	0.398	0.462	0.683	0.510		
Trust	0.115	0.511	0.691	0.224	0.513	0.630	

As shown in Table 5.3, the highest HTMT value among the variables is 0.630. Hence, it is lower than the established 0.85 or 0.90 value. Moreover, the same findings hold for HTMT inference criterion which was defined by running the bootstrapping routine. The bootstrapping routine showed the values of the variables under the confidence interval and confidence bias interval corrected. All the values are significantly different from 1. Therefore, discriminant validity is established for the outer model utilized in this study.

The values for both reliability and validity tests in Table 5.4 are all acceptable. Considering that this study is exploratory in nature, the values lower than 0.70 under the indicator reliability is deemed valid and reliable. The same also with internal consistency reliability and convergent validity where the respective values are all higher than 0.60 and 0.50. Such figures imply high levels of internal consistency reliability and confirm the convergent validity of the latent variables. Furthermore, the values on Cronbach's Alpha are all

greater than 0.60 which strengthens the validity and reliability of the variables. Significantly, to increase the values of the outer loading and Average Variance Extracted (AVE), indicators with lower scores were deleted.

Table 5.4. Factor Analysis

Latent Variable	Indicators	Outer Loadings	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
Initial Agreement	1. Altruism	0.880	0.826	0.828	0.707
	2. Increasing the legitimacy	0.800			
Leadership	1. Motivating and inspiring others	0.845 0.848	0.885	0.885	0.659
	2. Empowering people	0.826			
	3. Collaborating and influencing	0.720			
	4. Creativity and innovation				
Trust	1. Dependability	0.780	0.794	0.795	0.660
	2. Competence	0.844			
Managing Conflict	1. Personal style	0.798	0.836	0.839	0.723
	2. Official processes	0.900			
Planning	1. Objectives and Strategies	0.990	0.946	0.946	0.814
	2. Implement the Plan	0.932			
	3. Evaluation	0.827			
	4. Needs assessment	0.851			
Performance	1. Search and Retrieval of dead bodies	0.752	0.828	0.833	0.628
	2. search and rescue operations	0.698			
	3. Deployment of trained and equipped responders in affected areas.	0.912			
Existing relationship		1.000	1.000	1.000	1.000

5.4 The Inner Model: R square, Q2, VIF, and F2

Table 5.5 Assessment of the Structural Model

Endogenous Variables	R Square	Predictive Relevance (Q2)	Collinearity Statistics (VIF)
Existing relationship	0.067	-0.123	1.000
Initial agreement	0.072	0.068	1.000
leadership	0.307	0.257	1.000
Managing conflict	0.146	0.023	1.000
Planning	0.584	0.273	1.000
Trust	0.399	0.324	1.000

Prior to regression analysis, the structural model of this research is assessed using the values of R², Q², and Collinearity Statistics (VIF) to further ensure that the structural model is valid. Primarily, the value of R² ranges between 0 and 1, the higher level, the higher predictive accuracy. According to Chin (1998) and Henseler et al. (2009), R² value greater than 0.67 indicate a high predictive accuracy, a range of 0.33 - 0.67 indicated a moderated effect, R² between 0.19 and 0.33 indicate low effect, while the R² value below 0.19 considered unacceptable (the exogenous variables unable to explain the endogenous dependent variable). While the Q² value of greater than zero for a particular reflective endogenous latent variable indicates the path model's predictive relevance for a specific dependent construct (Hair et al. 2016). Moreover, multicollinearity is a problem that occurs with regression analysis when there is a high correlation of at least one independent variable with a combination of the other independent variables. In multiple regression, the variance inflation factor (VIF) is used as an indicator of multicollinearity. Hence, the ideal value of VIF is 1.000 while a value less than 6 or 10 are acceptable under favorable conditions.

As revealed in Table 5.5, the structural model has low predictive accuracy based on the values of R² and Q². Further, the

R2 values of the existing relationship, initial agreement, and managing conflict are considered unacceptable which suggest that the independent variable (previous performance) is unable to explain the endogenous dependent variables. However, R-squared values are usually low in studies related to human behavior and relationships as human behavior are harder to predict (Kelley et al., 2018). Hence, despite the low predictive capacity of the structural model, important conclusions about the relationships between the variables can still be derived from the statistically significant predictors. As Frost (2017) puts it, regression models with low R-squared values can be perfectly good, models for several reasons. Therefore, (high or low) R-squared, is not sufficient by itself.

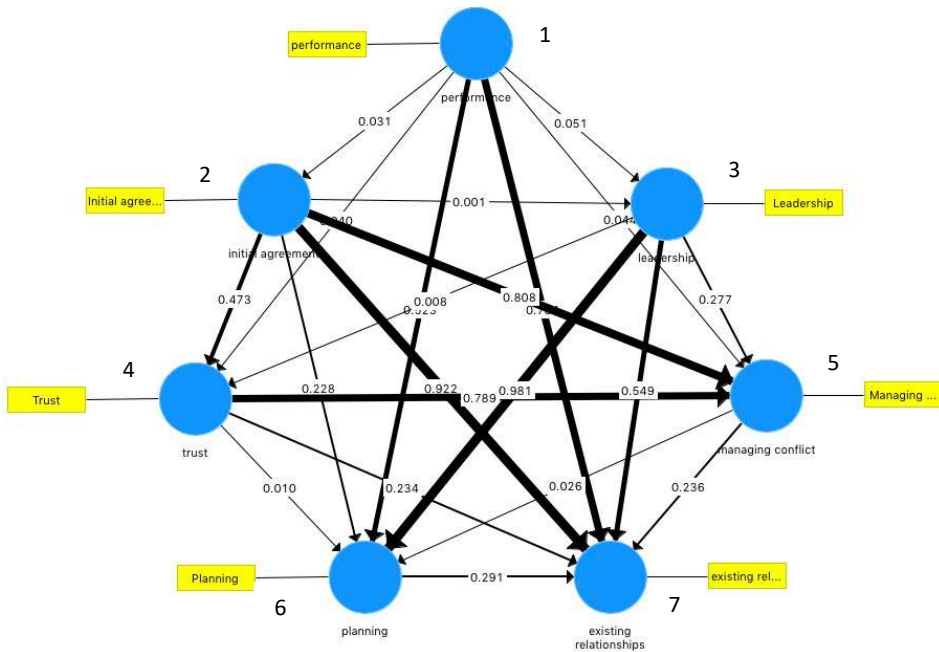


Figure 5.1. The structural model showing the corresponding p-values

Meanwhile, the effect size (f^2) of the variable is also used to assess the structural model. The f^2 values of 0.02, 0.15, and 0.35 for the significant independent variables represent weak, moderate and substantial effects, respectively (Chin 1998). For this research the effect sizes of the hypothesized relationship among the variables are shown in Table 5. 6 together with the p-values for the regression analysis.

On the other hand, despite the low predictive capacity, the structural model is deemed fit for this study based on the result of the Model Fit Analysis (see Table 5.6). Model Fit Analysis is utilized to examine if the model fits the measurements of the constructs utilized in this study. With partial least squares (PLS), the model fits analysis for this study considers the following indicators: SRMR, d_ULS, d_G and NFI. The result of SRMR is 0.061 which is lesser than .10 or .08 and implies that the model is fit. Moreover, the results of exact model fit tests (d_ULS and d_G) are 0.423 and 0.416 respectively. Such values are higher than the .05 p-value for both tests which also suggest that the model is fit. Lastly, the value for NFI is .961 which is closer to 1 and therefore implies a better fit for the model. On the basis of these tests, the structural model in Figure 5.2 is deemed fit for this study.

Table 5.6 Model Fit Analysis

Indicators	Suggested Value	Actual Value	Assessment
SRMR	< .10 or .08	0.061	The model is fit.
d_ULS	> .05	0.423	The model is fit.
d_G	> .05	0.416	The model is fit.
NFI	less than or closer to 1	0.961	The model is fit.

5.5 Hypotheses Testing: Regression analysis (PLS-SEM)

Table 5.7 indicates the result of the effect size and regression analysis based on the value of p among path coefficients. Table 5.7 shows that among the 21 hypothesized relationship in this study, only 7 have a significant relationship. Accordingly, previous performance

of the disaster management network has a significant relationship on the initial agreement, leadership and managing conflict in the network. However, the effect size of previous performance to initial agreement, leadership and managing conflict is weak. On the other hand, initial agreement is significantly associated with leadership only, leadership with trust, trust with planning, and managing with planning. Table 5.7 shows that the effect size among these significant relationships is moderate, except for managing conflict which shows a substantial effect on planning. These relationships are elaborated in the subsequent parts of this chapter.

Table 5.7 Hypotheses Testing: Summary of the Path Analysis Evaluation

Latent Variables (Hypothesized Relationships)	Effect size (f^2) > 0.02	p-value of path coefficient < 0.05	Assessment of Hypothesis
1. Previous performance – existing relationships	0.002	0.769	Rejected
2. Previous performance – initial agreement	0.078	0.031	Accepted
3. Previous performance – leadership	0.076	0.047	Accepted
4. Previous performance – managing conflict	0.104	0.048	Accepted
5. Previous performance – planning	0.011	0.521	Rejected
6. Previous performance – trust	0.075	0.064	Rejected
7. Initial agreement – existing relationship	0.000	0.917	Rejected
8. Initial agreement – leadership	0.259	0.001	Accepted
9. Initial agreement – managing conflict	0.000	0.807	Rejected
10. Initial agreement - planning	0.023	0.212	Rejected
11. Initial agreement - trust	0.018	0.446	Rejected
12. Leadership – existing relationship	0.011	0.537	Rejected
13. Leadership – managing conflict	0.015	0.244	Rejected
14. Leadership - planning	0.000	0.979	Rejected
15. Leadership - trust	0.221	0.007	Accepted
16. Trust – existing relationships	0.045	0.215	Rejected
17. Trust – managing conflicts	0.001	0.789	Rejected
18. Trust - planning	0.203	0.012	Accepted
19. Managing conflict – existing relationships	0.021	0.256	Rejected
20. Managing conflict – planning	0.509	0.032	Accepted
21. Planning – existing relationships	0.045	0.290	Rejected

5.5.1 Previous Performance (Initial Condition)

The network-level output or network performance is analyzed based on the available performance evaluation or Accomplishment Report 2012-2015 prepared by the Region X Office of the Civil Defense (OCD). Targets were identified in the DRRM Plan under response and each item was evaluated based on the reports of the responsible agencies. However, as of this writing, the accomplishment report is yet undone due to incomplete data from different agencies. Hence, the available data from the unfinished Accomplishment Report was utilized for this study. Moreover, pertinent typhoon-related reports in Region X were also considered. Lastly, data were also generated from the respondents on how they perceived the performance of the DRRM Council where they belong on the basis of the targets for disaster response.

As far as the 2012-2015 Accomplishment Report is concerned, the major target impact for disaster response is to save lives and reduce damage to properties. The Regional DRRM plan stipulates that 85% of total affected individuals needing assistance should be provided with proper intervention. The availability of funds and manpower, as well as the presence of the private sector and volunteers in the disaster-affected areas, significantly contributed to the attainment of this target. However, the rating for this target is not yet established by the Regional DRRM Council. The fast turn-over of focal persons in each member agency in the regional and local government level is identified as factors hindering the overall performance of the DRRM Council and therefore suggests that capacity building should be regularly done.

From the major impact, outcomes were made as well as outputs and activities. One outcome is to enhance search and rescue and retrieval management system or at least 85% of the people needing assistance were searched and rescued. The Regional DRRM Council reported that 92% of the total number of people needing

assistance were facilitated. The Council identified that the incidents covered in this item are all local in nature and there were difficulties in accessing remote areas. The only problem is that there is a delay in the submission of the after-operation report from the concerned agency.

Moreover, one of the outputs was to mobilize and deploy quickly trained and equipped responders. The target was 100% of the affected areas were deployed with trained and equipped retrieval teams. The Council rated that 83% of such target was achieved considering that the LGUs have Local DRRM Offices who can effectively coordinate response actions. However, there are Local DRRM Offices who are affected by the local political dynamics and most of the Local DRRM Offices in Region X are occupied by designated personnel only as compared to the mandated permanent personnel (JMC 2014-1).

“Many of our challenges in the City are due to the lack of political will among leaders to effectively implement disaster-related initiatives for the advantage of the public.”- City Health Office

Furthermore, specific activities were set. First, conduct a pre-emptive, voluntary and forced evacuation where the specific target was that during all-weather disturbances, 85% of the disaster-affected residents should be evacuated. The Council reported that the awareness of the people of the risks that they possess as well as the coordination with the local partners led to the 95% of people needed to be evacuated were assisted except for those residents who resisted the evacuation.

Second, the activation of the Incident Command System (ICS) was mandated by the National DRRM Council through Memorandum Circular No.4, series of 2012. The target was 85% of disaster incidents have activated the ICS. However, only 25% of the incidents have activated the ICS since only 25% of the LGUs were

trained in ICS. The Council suggests that ICS should be in the DRRM Plan and Annual Investment Plan (AIP) of the LGUs.

Third, the conduct of actual search and rescue (SAR) where only 78% of the 85% target of the people needing assistance were searched and rescued. The lack of proper communication and delayed reporting of incidents were the identified problems in achieving this target. The rest of the outcomes, outputs, and activities still lacks data from the implementing agencies for the accomplishment report.

Generally, based on the data available in the Accomplishment Report of the Region X, most of the items were not attained due to several organizational factors that significantly affected the inability of the network to attain the targets. This ineffectiveness of the network to achieve goals is supported by the Evaluation Report of the Tropical Storm Washi response operations in 2011.

The Evaluation Report revealed that the preparation and capacities of both Iligan and Cagayan de Oro Cities were insufficient. Some of the problems encountered in Cagayan de Oro and Iligan City were related to inadequate social services such as scarcity of drinking water, shelter, food and NFI; poor management of relief goods at the local DRRMC command posts and coordination centers; and lack of coordination between LGUs and cluster leads, among others.

On the other hand, the survey among the respondents on how they perceived their performance during disaster response revealed that majority of the member-agencies (respondents) believe that their performance is relatively good. On the basis of the disaster response targets stipulated in the DRRM plan, the respondents believe that on each item in Table 5.7, they did their best despite the several shortcomings they encountered. Hence, the mean scores are high ranging from 3.50 to 4.90.

Table 5.8 Performance Assessment of Disaster Management Networks in Region X Philippines

Disaster Response Services	N	Region X	Misamis Oriental	CDO	Iligan	Ave Mean
1. Extending assistance to many individuals and provided them with appropriate intervention. <i>Impact: Percentage of affected individuals needing assistance provided with appropriate intervention</i>	44	4.5714	4.3636	4.2857	4.1667	4.3182
2. search and rescue operations <i>Outcome 1. Percentage of people needing assistance search and rescue</i>	44	4.7143	4.4545	4.1429	4.1667	4.3182
3. Deployment of trained and equipped responders in affected areas.	44	4.4286	4.0909	4.0714	3.8333	4.0682
4. Search and Retrieval of dead bodies <i>Outcome 2. Percentage of dead bodies searched and retrieved</i>	44	4.5714	4.0909	4.0000	3.8333	4.0682
5. Providing relief assistance to affected families inside and outside of evacuation areas/centers <i>Outcome 3. Percentage of affected families provided with relief assistance inside and outside evacuation centers</i>	44	4.4286	4.5455	3.9286	3.9167	4.1591
6. Providing proper evacuation/camp management in evacuation centers. <i>Output 3.1. Percentage of evacuation center with proper evacuation/camp management</i>	44	4.1429	4.3636	3.9286	3.8333	4.0455
7. Preventing the outbreak of disease inside and outside of evacuation centers	44	4.1429	4.3636	3.7143	3.8333	3.9773
8. Providing mental health and psycho-social services to the affected individuals with psychosocial concerns inside and outside evacuation centers. <i>Output 3.4. Percentage of affected individuals with psychosocial concerns inside and outside evacuation centers provided with mental health and psychosocial services</i>	44	4.1429	4.0909	3.6429	4.0000	3.9318
9. Providing continuing assistance to the affected families <i>Output 3.3. Percentage of disease outbreak inside and outside evacuation centers prevented</i>	44	4.2857	4.2727	3.6429	3.6667	3.9091
10. Education services for the children are immediately ready <i>Output 4.1. Percentage of children with education services restored immediately</i>	44	4.0000	3.9091	3.5000	3.7500	3.7500
11. Providing emergency livelihood opportunities to the affected families <i>Output 4.2. Percentage of affected families with emergency livelihood opportunities</i>	44	4.0000	3.8182	3.5000	3.5833	3.6818
12. Restoration of basic lifelines. <i>Output 4.3. Percentage of basic lifelines restores immediately</i>	44	4.1429	4.0000	3.6429	3.5000	3.7727
13. Clearing the affected areas from the debris and wastes <i>Output 4.4. Percentage of disaster-affected areas with debris and wastes cleared within 1 week</i>	44	4.2857	4.2727	3.7143	4.0000	4.0227
14. Ensuring that the affected families are sheltered in a safe and more durable facility while waiting for their permanent shelter <i>Output 4.5. Percentage of affected families sheltered in a safe and more durable facility while waiting for their permanent shelter</i>	44	4.1429	4.0909	3.7857	3.7500	3.9091

Meanwhile, when asked what should be done to improve their performance, the following statements were given:

We should have close coordination among stakeholders so that our response is not primarily anchored on the decision of the politicians but to the decision of the majority. – DOH, Iligan

The delayed mobilization for me is the biggest challenge. There should be full cooperation and active involvement in every disaster operation and mobilization of resources. Specialized manpower. – Philippine Red Cross, CDO

Usually, our resources for response is insufficient to the overwhelming impact of the situation. This happens because there are some commitments in the Council that was not delivered. I hope next time, agencies involved will have more flexibility and initiative in the delivery of our services. – Provincial DSWD

All the members of the Council should be united and work as one. And for the members also on the City Council that they should base their decision for the betterment of the people, not because they have political allies – CSWD CDO

Prepare planning, coordination with a stable response structure among collaborating agencies is very vital. – DAR Region X.

It is the people who are victims they tend to complain about everything. We need more rehearsals. – AFP Region X

There was a poor camp management due to lack of facilities in the evacuation centers. There should also be proper consolidation and validation of data particularly on dead bodies and injured persons. More importantly, we should be culturally sensitive in the inventory and profiling of all IDPs and affected communities. - ECOWEB Region X

Generally, the challenges faced by the Region X DRRM network is due to the lack of collaboration between agencies which are very apparent on two aspects: lack of commitment of the member-agencies to submit reports and the failure to relay proper communication; and political dynamics in affairs of the member-

agencies and network which hampers the delivery of services during disasters.

The existence of political dynamics pertains to the temporary status of DRRM focal person which is a non-implementation of the JMC 2014-1. Also, the executive-legislative conflicts too highly affect the disaster planning and implementation of the disaster-related activities and hamper basic service delivery in the LGU.

In the assessment made by the Commission on Audit (COA) in 2014, it revealed that the lack or absence of coordination between and among LGUs, 21 national government agencies, civil society organizations, volunteers and the private sector resulted to the unutilized funds, which is 96% of the multi-donor funds as of 2012.

Thus, disaster management in the Philippines lies heavily on the Local Government Units with its Local Chief Executive whose authority during disasters are shared with the Local Legislative body. Moreover, the absence of a close coordination and increased collaborative capacities among agencies within the LGUs and Regional Offices leads to an ineffective and insufficient disaster response initiatives.

5.5.2 Hypotheses Testing: Independent and Dependent Variables

5.5.2.1 The significant relationship between previous performance and initial agreement, leadership and managing conflict

The summary of path analysis presented in Table 5.7 (and as shown in Figure 5.2) reveals that the previous performance of the disaster management network in the Region is statistically significant with the initial agreement, leadership and managing conflict of the network.

As discussed, the previous performance of the network is perceived to be good by the member-agencies (see Table 5.8).

Subsequently, the data shows that previous performance has a significant relationship with the initial agreement of the network which refers to the altruism and the desire to increase the legitimacy of the member agencies. As expressed by the Head of the Planning and Development Office of the Province of Misamis Oriental, Mr. Stanley Uriarte, *“the members of the Provincial Disaster Risk Reduction and Management Council became more dynamic in their respective mandates. They attend and actively participate in the meetings, planning, and decision-making of the Council.”* Ms. Tsini Sais of the Cagayan de Oro City Social and Welfare Department explained in an interview on September 28, 2017, that *“as a social worker, we are working hard to collaborate more with the Barangay Health offices and other related-offices to ready and more effective in responding in times of disasters.”*

Moreover, the significant relationship between the previous performance to the leadership of the network is validated in the statement given by the Head of the Office of the Civil Defense, Ms. Caneda on September 23, 2016. Ms. Caneda explained that

“the experiences of the network with the previous typhoons led to the improvements in various policies and practices. For instance, in 2013, procurement of goods during disasters were facilitated with the release of the Joint Memorandum Circular No 2013-1 to guide the Local Government Units (LGUs) in the transparent and accountable use of the disaster management funds. Also, the Joint Memorandum Circular 2014-1 or the implementing guidelines for the establishments of Local Disaster Risk Reduction Management (DRRM) offices in LGUs was released to address various leadership concerns in the implementation of Republic Act 10121 in 2010.”

Additionally, the Head of Iligan City DRRM Office, Mr. Bendijo mentioned that *“the experiences of the City in past typhoons inspired them to improve the mechanisms in the Office and re-consider the priorities of the DRRM Council.”*

Managing conflicts too became cushy after the previous experiences and performance of the member-agencies. The representative of the Department and Interior and Local Government of Cagayan de Oro explained that

“disagreements are undeniably present, yet with our shared experiences in the past disasters, it is easier for us to understand the concern of other member agencies. I can say that our familiarity with each other’s mandates despite the changing representatives every now and then have helped the Council to arrive at a common decision to settle the conflicts and misunderstandings.”

These data suggest that generally the previous performance of the disaster management network significantly affects the aspects of governance processes. Therefore, disaster management has greater chances to be effective and successful if the previous performance of the network boosts the motivation of the member-agencies, improves leadership capacities and able to facilitate in managing the conflicts in the network.

On the other hand, the inter-relationship between and among the aspects of the governance process is also noteworthy to evaluate. The succeeding parts of this chapter present such analysis.

5.5.2.2 Initial agreement and leadership

The initial agreement which refers to the altruism and the desire to increase the legitimacy of the office is significantly associated with leadership. In an interview with Mr. Garcia, representative of the Department of Education in Region X, he shared that

“We, in our agency understood the complexity and relevance of our mandate related to disaster management. In doing so, we have created manuals and guidelines for the schools at all levels to follow in terms of disasters. With such manuals, the classrooms will be utilized efficiently where the teachers are able to protect and aid the students and their families.”

Ms. Rina Mantos of CSWD Iligan City expounded in an interview on September 25, 2017, that

“as the lead agency in disaster evacuation and camp management, the amendment to the procurement processes during disasters is a big help to us in mobilizing our resources in order to provide the basic needs of the victims. We can now explore strategies that we may adopt in order to improve the delivery of our mandate.”

Hence, the issuance of the mentioned new policies (Joint Memorandum Circular No 2013-1 and Joint Memorandum Circular 2014-1) motivated the member agencies to harness its potentials in fulfilling their respective disaster-related mandates. As the representative of the Bureau of Fire Protection of Cagayan de Oro, Mr. Saison, stated,

“during disasters, our agency plays a crucial role in addressing the needs of the victims, just like the other agencies and somehow, it feels good that as we work hard with what we have, there are changes in the processes that address some of the concerns such as access to the resources.”

As revealed, the member-agencies of the disaster management network have a high level of altruism that despite the challenges, they are able to explore ways of improving the delivery of their mandates. Therefore, the altruistic tendencies of agencies and institutions to provide better public services, as well as their desire to increase their respective legitimacy, contributes to better disaster leadership.

5.5.2.3 On leadership and trust

Table 5.7 also shows that leadership which refers to creativity and innovation, collaboration, motivation and empowering people has a statistically significant relationship with trust which refers to competence and dependability. Generally, leadership in the disaster management network should be effective in order to pull out the necessary resources to ensure that member-agencies are getting what

they need especially in times of disasters. The representative of the Region X Philippine Coast Guard, Mr. Pimentel shared that

“leadership in the disaster management council is well-defined but not always easy because of the various problems that the lead agency needs to address. Fortunately, over time, leadership in the Council was able to sustain the active participation of the members which led to us becoming familiar with the mandate of other agencies that somehow we can easily assist them whenever our agency has the means to do so.”

There were several challenges that the DRRM network have faced since the implementation of RA10121 in 2010. However, the respondents affirmed that the Regional and City Council’s leadership was able to facilitate the various concerns that have occurred. For instance, the common issue on the validity and reliability of the information being shared during disasters which led to doubt and miscommunication between agencies was addressed by institutionalizing the regular meetings before, during and after the disaster to update and share correct and real-time information with the network. The Mr. N. Colocar of the DILG Misamis Oriental articulated that

"sharing of information thru council meetings especially in times of disasters or by sending either email if possible and using handheld radios helped us in sending and receiving information that is necessary to come up with appropriate actions as we deliver our responsibility."

With this, the competence, as well as the dependability between and among agencies, are enhanced. Meanwhile, the representative of the City Engineers’ Office of Iligan City shared that

“We know that communication is vital in different aspects of our life, but this can’t be perfectly managed during a disaster when all the communication line have been cut off. Miscommunication normally arises. What we did was we establish the command center wherein all communication /messages been transmitted.

More importantly, we monitored the feedback system in order to ensure that member-agencies get the accurate information.”

Therefore, leadership capabilities particularly in creating strategies to address challenges in times of disaster strengthen the trust between agencies lead to an effective exchange of reliable information that is vital towards an efficient disaster response.

5.5.2.4 On trust and planning

The significant relationship between trust and planning suggests that the dependability and competence of each member agencies are shared in the disaster management council which lead to the efficient planning of the network. In a statement given by Mr. J. Retuya of DOH Cagayan de Oro in an interview on October 20, 2017, he explained that

“we have always believed that all the member-agencies are doing the best that they can in fulfilling their respective mandates just like we do. and as we are given an opportunity to air our concerns and thoughts during the Council meeting and planning sessions, we get to discuss and eventually understand each other. As a result, I think we made a better disaster management plan.”

Also, the reliable exchange of information between and among agencies facilitates the planning activities of the Council despite the inability of the member-agencies to attend disaster planning of the Council. The representative of the DAR in the Region X cited that

“our mandate on disaster management is only a portion of what our office is bound to deliver. To ensure that we deliver our disaster-related obligations, I was the focal person, attends meetings and maintains an open communication with the Office of the Civil Defense and other member-agencies in our Cluster. In doing so, I am updated on the matters discussed in the Council and able to submit the required documents from our end especially in times where I am unable to attend the meetings.

Generally, the data shows that the trust between and among the members of the Council in terms of competence and dependability among its member-agencies transcends the complexity and challenges attached to disaster management planning. Moreover, the Republic Act 10121 provides a guide on how disaster funds should be utilized. Hence, the DRRM Councils in the country is steeped in the planning of disaster-related activities. However, the effective allocation of resources among each member-agency depends on an efficient planning. Therefore, with stronger trust shared in the Council, the consensus in the allocation of resources and other decision-making processes is most likely to achieve.

5.5.2.5 On managing conflict and planning

The significant relationship between managing conflict and planning suggest the importance of effective mechanisms in managing conflict towards a more emergent and efficient disaster planning. As discussed, conflicts and disagreements are inevitable in any collaborative set-up. In Region X, the representative of National Housing Authority, Ms. J. Garcia, narrated in an interview on November 5, 2017 that

“during disasters many individuals representing their respective agencies wanted to be on the top of the response and relief operations but when faced by several bureaucratic procedures, they tend to beg off, leaving the operations in limbo. As a result, a misunderstanding arises between partner-agencies. Good thing that the Council has created an atmosphere where issues are discussed and resolved.”

The statement of Ms. Garcia is supported by the Mr. D. Jamito, representative of the Department of Agriculture from the Province of Misamis Oriental. Mr. Jamito shared that

“the misunderstanding in the Council is usually caused by either different interpretation of the mandates or a simple miscommunication between partner agencies. To resolve,

discussions are made until all issues and concerns are ironed out. Sometimes, close door meetings are held to discuss and resolve the conflict.”

On the same vein, the representative of the Habitat Foundation, Ms. Gonzales described that conflicts are resolved “professionally”. Ms. Gonzales recalled that *“whenever there are differences, we discuss it among ourselves for a perfect solution. Usually, disagreements are discussed by clusters like shelter, health, water, and sanitation.”*

According to the representative of the Philippine National Police of Cagayan de Oro, Mr. F. Valderama, because differences in the Council are settled and resolved, it provides advantages in terms of decision making as well as disaster management planning. *“The Council always sees to it that conflicts are settled first prior to the actual meeting. As a result, a consensus is achieved.”* Hence, the capacity of the network to resolve conflicts out of coordinating failures creates strong ties and facilitates the planning processes of the disaster management network.

5.6 Discussion

Cross-sector collaboration brings significant advantages to all parties involved. If done well, public value is enhanced. However, failed collaborative efforts bring lessons that are of great advantage for future collaborations if adhered (Akintoye and Main, 2011). This advantage of collaboration is perennial as many of the collaborative efforts fail due to inappropriate strategic decisions and sometimes due to the leaders themselves (Archer and Cameron, 2010).

The findings revealed that previous performance of the network is significantly associated with the initial agreement, leadership and managing conflict which validates the theory of Bryson, Crosby and Stone (2006) that sector failure facilitates cross-sector collaboration in terms of improving the initial agreement of

the network as a way of making up for the shortcomings of particular sectors. The findings of Ojo and Abolade (2014) are also supported as they stressed that conflict management system based on the previous performance ensures a conducive environment in the process of collaboration. Lessons from sector failure serve as the basis for increasing informal and formal agreements in collaboration as well as enhancing the motivation mechanisms available (Bryson, Crosby and Stone, 2015). In doing so, leadership in the network has greater potential to evolve.

The significant relationship of initial agreements in terms of altruism and desire to increase the legitimacy of the organization with the leadership in the disaster management network supports the earlier studies of Lawrence and Lorsch (1967), Kapucu (2006); Ansell and Gash (2008); and Tang and Tang (2014). In the context of disaster management, public managers are necessitated to have the ability to assess the damages rapidly, restore disrupted communications lines, utilize uncharacteristically flexible decision making, and expand coordination and trust of emergency response agencies (Kapucu and Van Wart, 2008). Poor communication misguided and poorly executed leadership by the federal and state government and insufficient coordination with various stakeholders as well as insufficient preparation among communities lead to collaborative failures (Menzel et al., 2006; Walters and Kettl 2005; Wise, 2006). Hence, the findings of this study support the theory of Lawrence and Lorsch (1967) in understanding collaborative disaster management which leads to the analysis of the factors that influence the behavior of public managers such as the nature of the task being performed, and motivation mechanisms institutionalized in the network.

Forging initial agreements by providing incentives and proper motivation mechanisms streamline leadership complexities and improve inter-organizational network coordination in emergency management response operations (Kapucu, 2006; Ansell and Gash,

2008; Tang and Tang, 2014). The studies of Mazmanian and Tang (2009) and Tang and Tang (2014) in the field of collaborative management discussed the importance of the right incentives as motivation. Incentives and other motivation schemes should be implemented according to the right sequence and manner to be effective (Tang and Tang, 2014). Wright et al., (2014) elucidated that self-sacrifice as an aspect of public service motivation makes an individual commit to organizational change which could lead to a successful collaboration. Therefore, providing the right kind of motivation demands a careful understanding of what the organization needs and what inspires its members.

Moreover, the findings indicated that as leadership is significantly associated with the motivations in the initial agreement, leadership expands trust in the governance process. Generally, trust refers to a person's confidence in the reliability of another person with respect to certain outcomes while the shared confidence held by the members an organization is called inter-organizational trust (Giddens 1990, Zaheer et al. 1998, and Rashid and Edmondson, 2011). Interdependencies among agencies and organizations through interactive processes such as face to face dialogues increases trust, builds social capital and can develop into collaborative culture which substantially increase the speed of decision making and can lead to successful collaborations (Ansell and Gash, 2008, Mazmanian and Tang, 2009; Paraskevopoulos, 2010; Kapucu, Arslan, & Demiroz, 2010; Emerson et al., 2012; Shaw and Goda, 2004; and Shimada, 2015).

Effective response operations require collaborations and trust between government agencies at all levels and between the public and nonprofit sectors (Kapucu, 2015). This research found that the capacity of the public managers in terms of creativity and innovation, collaboration, motivation and empowering people which enhances the competence and dependability in the network supports the notion of Fountain (2013) that strategic leadership particularly relationship

skills are necessary since many strategies, priorities, and goals of the government inherently lie across agencies. This finding affirms the conclusion of Sarkar and Sarma (2006) that members particularly lead agencies should be qualified and capacitated to hold authority and exercise leadership during disaster operations.

Significantly, the data shows that trust in terms of dependability and competence is significantly associated with collaborative planning. The findings suggest that as the dependability and competence of the network is enhanced by the leadership, then trust enriches the planning process and output. These findings do not fully agree to the findings of Lester and Krejci (2007) who postulated that the planning process should be participated by the leaders of the institutions involved in the disaster operations to ensure the successful result. However, this research supports the findings of Kapucu and Van Wart (2006) in the disaster response operations during the World Trade Center attack, Hurricane Andrew, and Katrina, when they postulated that the problems on poor or nonexistent planning come along with incompetent managers. Thus, this research suggests that with good leadership, trust enhances the planning process of the network.

Furthermore, this study revealed that managing conflict in terms of personal style and official processes is significantly associated with collaborative planning. Bryson et al (2006) elucidated the factors that influence the sustainability of the collaboration process: type of collaboration, power imbalances among members, and competing for institutional logics within the collaboration. This study supports the findings of Huxham and Vangen (2005) that the power imbalances among collaborating partners causes mistrust and it has the tendency to worsen in cases of difficulty among partners in agreeing on a shared purpose but with tactics such as strategic planning and scenario development collaborations will likely to succeed (Bryson et.al 2006). Lastly, this research substantiates the findings of Kapucu (2006) that trust and

communication, as well as contingency planning, should be enhanced and tested to improve disaster collaborative efforts.

5.7 Conclusion

Given these findings, this study enriches the existing understanding of cross-sector collaboration which Bryson et al., (2006) refer to as an ideal but difficult and complicated approach towards the successful outcome. With its focus on the influences of the initial conditions to the aspects of governance process - leadership, initial agreement, trust, planning and managing conflict and its impact on the outcome of collaboration, this study reaffirms the previous studies conducted on cross-sector collaboration and disaster governance emphasizing the relevance of the aspects of governance processes particularly leadership in collaborative disaster management (Fung, 2015; Tang and Mazmanian, 2008; Lester and Krejci, 2007; and Kapucu, Arslan and Demiroz, 2010). This study also joins the theoretical discussion on the relationship between the impact of initial condition to the collaborative process where institutional design and sector failure, sets the basic ground under which collaboration takes place (Ansell and Gash, 2008).