

Role of Social Capital on the Resilient Capacity of Cooperatives

Rotchel L. Amigo
Bukidnon State University
rotchelamigo@buksu.edu.ph
ORCID 0009-0000-1038-7315

Chona Patricia R. Echavez
RIMCU, Xavier University
echavez.chona@gmail.com
ORCID 0000-0001-6547-2453
Scopus Author ID: 57204683150

Abstract

This paper is an exploratory study that aims to identify, describe, and compare the level of social capital on two types of cooperatives that have existed for a long time. The factors are determined by examining the structure of the organization and the member's social capital. Furthermore, 120 respondents were interviewed using the survey questionnaire to determine the members' socio-demographic characteristics and ascertain the members' level of social capital. A concurrent mixed method was used in the gathering and analysis of data. This study found that the member-respondents of the cooperatives have shown a high level of social capital in three dimensions: trust, norms, and reciprocity; networks and collective actions; and information and empowerment. However, the result of the T-test shows a significant difference between cooperatives in two dimensions: 1) trust, norms, and reciprocity, and 2) networks and collective actions. An examination of the profile of the organizations and their members revealed that the member's ethnicity, religiosity, close family ties, and neighborliness may have contributed to a significant difference in these dimensions. Furthermore, the factors mentioned were found to impact how the cooperatives respond to, cope with, and mitigate threats, crises, and disasters. Furthermore, between cooperatives, better social capital is associated with better resiliency. This study recommends a more robust network affiliation with cooperatives in Bukidnon, Philippines and other cooperatives in the locale. It also recommends that the cooperatives may conduct routine risk assessments and create innovative ways to sustain the members' social capital.

Keywords: Community-based organizations, cooperatives, organizational structure, social capital

INTRODUCTION

Today, more than ever, communities worldwide are experiencing an increasing number of human and natural disasters. In 2020, for instance, the COVID-19 pandemic impacted on a global scale that claimed millions of lives, followed by an economic crisis that cost people's livelihood. As disasters occur more frequently, people rely on organizations to get by. As such, organizations like cooperatives try their best to survive amid economic and social problems.

Cooperatives are known to first respond to disasters because they are community-based organizations. The earliest known cooperatives can be traced back to biblical times. In the 18th century, cooperatives flourished in Europe and eventually spread worldwide (Claridge, 2021). Among rural

communities, cooperatives have been known to have a significant role in poverty alleviation (Birchall, 2013; Mhembwe & Dube, 2017). Thus, organizations like cooperatives strive hard to remain resilient since communities depend on them during challenging times.

The concept of social capital holds significant importance in examining the role of resilience within organizational behavior and social relationships. Meanwhile, resiliency among organizations is a known positive outcome when members have substantial social capital. Thus, strong networks that rely on trust tend to be more involved in organizational activities. Social capital is prominent in understanding resiliency in social relationships and organizational behavior. As noted, resiliency among organizations is a known positive outcome when members have substantial social capital. Strong networks that rely on trust are more involved in organizational activities.

Social capital is widely studied in various fields and has become prominent in theory and application (Grootaert et al., 2004; Claridge, 2021). It has gained fame in social sciences, disasters, and organizations. In disaster studies, social capital is a resource an individual can use in times of need (Woolcock, 2001; Aldrich, 2012). Further, works of literature abound on the positive outcomes of social capital in organizations, and one of these outcomes is organizational resiliency. Social capital refers to the member's degree of trust, norms, and reciprocity towards the organization (Putnam, 2000). Moreover, studies affirmed that an organization with a substantial stock of social capital could enhance organizational resiliency (Jia, 2018; Krishna, 2002; Tantardini & Kroll, 2016). It is interesting to examine how social capital in cooperatives results in their resiliency as a network of relationships found among cooperatives (Borda-Rodriguez et al., 2016).

In the Philippines, cooperatives are recognized as the government's partners in its social and economic agenda. The cooperative as a tool for economic development was given importance as early as 1973. During this time, the late President Marcos issued Presidential Decree No. 175, which stated the governing of organization, administration, and supervision of Samahang Nayon (Barrio Associations) and Kilusang Bayan, otherwise known today as cooperatives. Samahang Nayon was composed of small farmers within the geographical limits of a barrio - the smallest unit of a political organization during the Marcos administration (*Official Gazette of the Republic of the Philippines*, 1973). Since then, numerous farmers' associations have become cooperatives, eventually contributing to members' economic development and well-being, especially in rural areas.

Interestingly, the Samahang Nayon has existed in some parts of the country until today. One is the *Goldenfields Samahang Nayon*, which was organized in 1973 in the municipality of Kalilangan, province of Bukidnon, Philippines. In the same locale, the *Bayanihan Council* has existed longer. It was organized by migrant farmers in 1965. Eventually, these two associations became cooperatives and registered with CDA as multi-purpose cooperatives operating in the municipality of Kalilangan.

Moreover, these cooperatives were chosen for this study since they have existed for 47 and 55 years, respectively. Since long years of experience manifest resilient capacity, it is noteworthy to study these cooperatives as resilient organizations are becoming less frequent, especially in frequent crises and disasters (Duchek, 2019). This study aimed to contribute to a better understanding of resiliency among cooperatives by looking into their organizational structure and the members' social capital as to how these factors result in organizational resiliency.

Framework of the Study

Cooperatives are legal entities duly registered to operate under the Cooperative Development Authority. As a community-based organization, a cooperative is driven by the members with a shared understanding of empowering themselves, which may not be possible if they work individually. Cooperatives vary in type, size, and purpose. The members collectively agree on the goals they will pursue. Cooperatives follow an organizational system prescribed by the Cooperative Development

Authority (CDA). This ensures that cooperative principles are embedded in all cooperatives' organizational systems.

This paper utilized the social capital theory to explore the cooperative's resilient capacity. The theory of social capital has been widely studied in various disciplines. It has captured the attention of most sociologists like Putnam, Coleman, and Bourdieu. These three theorists led the modern development of the concept of social capital (Claridge, 2018). As a political sociologist, Putnam (1993, p.2) defined social capital as "features of social organization, such as trust, norms, and networks that can improve society's efficiency by facilitating coordinated actions." His theory applies to the organizational context. He stressed that a society characterized by reciprocity is more efficient than a distrustful society. Thus, social capital is based on trust in which members invest to improve their social, political, and economic well-being. He further emphasized that norms and trust are developed in individuals' connections in social networks (Putnam, 2000). Moreover, evidence shows that when people trust one another, they are more willing to engage cooperatively, further generating trust in future interactions. Therefore, social capital is a form of productive engagement grounded on trust (Fukuyama, 2000; Putnam, 1993).

Moreover, Coleman's social capital theory combines functionalism and rational choice theory. He posited that individuals would engage in social relationships as long as benefits are guaranteed. He derived this logic from rational choice theory, whereby rational actions are set in a particular social context, accounting for individuals' actions and the development of the social organization (Field, 2013). With this idea, social capital is a rational choice among members, and the degree to which this relationship of trust (Putnam, 1993) is embedded in the organization impacts its resilience capacity. Consequently, as people run the organizations, most likely, such failure is attributed to some or most of its members. Another influential proponent of social capital is Pierre Bourdieu (1986), who used the term *cultural capital* to refer to collective property. He asserted that social capital is a property of an individual that enables the person to gain power and influence over resources. Thus, the ability to mobilize resources is an essential form of investment, and its absence can positively or negatively affect the individual.

For some theorists, social capital is both a theory and a concept (Lin, 2002). Thus, it could be a tool, and at the same time, its theoretical underpinnings that would explicitly explain the phenomenon of social networks and relationships. Social capital, in theory, means "*quality of relationship*," and in practice, its significance lies on the premise that "*relationships matter*" (Field, 2008). In summary, prominent theorists explain social capital as the significant contribution of members in their degree of relationships (Putnam, 1993), rational actions (Coleman, 1986), mobilization of resources, and positive or negative outcomes of their engagement (Bourdieu, 1986). In this study, resilient factors are explored with the two cooperatives that have survived for a long time until the present time.

The concept of social capital was used to examine the members' contributions. Research reveals that robust social capital can lead to a resilient organization (Jia, 2018; Krishna, 2002; Tantardini & Kroll, 2016). Thus, the social capital index was utilized to ascertain if these organizations have substantial social capital. Furthermore, to determine the level of social capital in the context of membership in the cooperatives, the following dimensions and indicators are used: 1) *Trust, Norms and Reciprocity*; *Trust* is measured according to the member's confidence in the organization to fulfill their obligation, belief in fellow members, and confidence in their leaders. In this study, *Norms* are measured by the members' actions in following procedures and fulfilling their responsibilities as members. On *Reciprocity*, members' responses are measured according to the perceived benefits of being a member and their capacity to return the favor to the cooperative. In the dimension of 2) *Networks and Collective Actions*, *Networks* are measured in terms of membership in groups other than the cooperative and perceived benefits gained as a member. *Collective Actions* is measured by the members' participation in community activities, for 3) *Information and Empowerment*: *Information* is measured by ownership

of information and the technical knowledge gained as the receiver of the information; it also includes the member's capacity to use this knowledge to improve their well-being. *Empowerment* is measured by the member's perceived capacity to decide on their well-being and involvement in the cooperative's activities. These dimensions of social capital are adopted from Grootaert et al. (2004) and modified in this study to fit into the context of members' relationship towards the cooperative.

Objectives of the study

1. To describe the socio-demographic profile of the respondents
2. To compare the level of social capital among members of the two cooperatives in terms of:
 - 2.1. Trust, Norms, and Reciprocity,
 - 2.2. Networks and Collective Action, and
 - 2.3. Information and Empowerment.
3. To determine if there is a significant difference in the level of social capital of members between the cooperatives
4. To examine how social capital contributes to organizational resiliency

METHODOLOGY

To ascertain the social capital of the member respondents, the social capital index was constructed using proxy dimensions and indicators identified by Grootaert et al., adapted in the study of Sealza (2008) and modified for this study. Moreover, indicators of trust, norms, and reciprocity were adapted from the study of Ortega (2011) but modified in this study to fit the context of cooperatives in this study. For descriptive and inferential analyses, the data were processed using Statistical Packages for Social Sciences (SPSS), a software program for complex statistical data analysis.

A member that scores low on the index may be considered relatively poorer in social capital than a member with high scores. This would mean that if most of the respondents have a high level of social capital, it proves that a resilient organization is comprised of members with high social capital. Since this study used quantitative and qualitative approaches, two modes of analysis were considered.

To accurately interpret the obtained data, the following statistical tools were used: Frequency and percentage distributions were employed in describing the socio-demographic and economic profiles of the respondents. To determine the equality of variance, a Levene's test was used. After the conditions were satisfied, the data were subjected to T-test to determine whether there was a significant difference between the closed and open-type cooperatives regarding the member-respondents' level of social capital.

RESULTS AND DISCUSSIONS

This section presents the socio-demographic and economic profiles of the respondents. The section will be further subdivided as follows: 1) Sex and Age distribution; 2) Place of Birth and Civil Status; 3) Ethnicity and Religion; 4) Educational Attainment; 5) Main Occupation; 6) Hectares Cultivated; 7) Income and ARB (Agrarian Reform Beneficiary) profile.

The *Bayanihan Council* had close-type cooperative structure, while *Goldenfields Samahang Nayon* had an open structure. In a close type structure, the membership is limited to a particular group or community. In an open type, the membership is open to all persons regardless of sex, age, and status.

Table 1 shows that among the respondents, there were more (71.1%) males in the *Bayanihan Council*, while in *Goldenfields Samahang Nayon* majority (60.5%) were females. Among *Bayanihan Council* members, the high percentage of males was attributed to the rule of membership, where husbands were considered the household heads. Consequently, an amended membership rule resulted in a growing number of female members (28.9%). Since 2013, married females have been signed in as members if they were the original members' direct descendants instead of the husbands.

Table 1

Sex and Age Distribution of the Respondents

Cooperatives	Bayanihan Council (n=90)		Goldenfields SN (n=38)		Total	
	f	Percentage (%)	f	Percentage (%)	f	Percentage (%)
Sex						
Male	64	71.1	15	39.5	79	61.7
Female	26	28.9	23	60.5	49	38.3
Total	90	100	38	100	128	100
Age in Years	f	Percentage (%)	f	Percentage (%)	f	Percentage (%)
21 – 30	11	12.2	3	8	14	10.9
31 – 40	24	26.7	2	5	26	20.3
41 – 50	16	17.8	4	10.5	20	15.6
51 – 60	25	27.8	6	16	31	24.2
60 >	14	15.5	23	60.5	37	28.9
Total	90	100	38	100	128	100

Similarly, the *Bayanihan Council* has more females (60.5%) than males (39.5%). According to the bookkeeper, most of the female members were wives of the original members. The original members were mostly men since men were farmers, household heads, and recipients of the ARB program. Generally, the *Goldenfields Samahang Nayon's* membership role was less stringent as it accepted members regardless of sex, status, and ethnicity.

In terms of age, the *Bayanihan Council* cooperative had almost equally diverse age groups. A considerable number belong to the 51 to 60-year-old age group (27.8%), followed by the age group of 31 to 40 (26.7%). These findings show that young members were replacing older members. Such findings may mean that most children were still motivated to be members after marriage. However, in *Goldenfields Samahang Nayon*, most members (60.5%) were 60 years old and above. This is an evident consequence of low recruitment while members were aging.

According to one of the management staff of the *Goldenfields Samahang Nayon*, they encouraged people to become members. They even reminded their members to motivate their children to join the cooperative, as low membership had been a concern of the cooperative for a long time. The management considered it a problem but not an immediate concern. They maintained that they could still manage stability in the cooperative even with few members. The cooperative also found support in the CDA articles of cooperation (2008), in which only 15 members are required to organize a cooperative. Thus, despite adopting an open-type membership, the cooperative struggled with low membership.

The low membership of *Goldenfields SN* contradicts the study of Rodriguez et al. (2016), which asserted that membership size is one of the essential factors of resiliency among organizations. Although a former manager reiterated that *Goldenfields Samahang Nayon* might have low membership recruitment, the quality of members is beneficial to the cooperative. Moreover, the management staff and board of directors tirelessly invited their friends and relatives to join the cooperative to recruit

more members. On December 2020, the cooperative reported having three new members. When management staff were asked why only a few were interested in the cooperative, they shared that children whose parents were farmers were likely to go to college than tending the farm.

Table 2

Place of Birth and Civil Status Distribution of the Respondents

Cooperatives	Bayanihan Council (n=90)		Goldenfields SN (n=38)		Total	
	f	Percentage (%)	f	Percentage (%)	f	Percentage (%)
Place of Birth						
Within Kalilangan	72	80	9	23.7	81	63.3
Outside Kalilangan but within Bukidnon	2	2.2	4	10.5	6	4.7
Outside Bukidnon but within Mindanao	1	1.1	6	15.8	7	5.5
Visayas	1	1.1	12	31.6	13	10.1
Luzon	14	15.6	7	18.4	21	16.4
Total	90	100	38	100	128	100
Civil Status	f	Percentage (%)	f	Percentage (%)	f	Percentage (%)
Married	81	90	23	60.5	104	81.2
Widowed	7	7.8	12	31.6	19	14.8
Separated	2	2.2	0	0	2	1.6
Solo Parent	0	0	2	5.3	2	1.6
Single	0	0	1	2.6	1	.80
Total	90	100	38	100	128	100

As for the place of birth, most (80%) of the respondents in the *Bayanihan Council* were born in Kalilangan, while only a few (14%) were born in Luzon. A small percentage represents first-generation migrants, while a large percentage (80%) comprises second and third-generation migrants. These data indicate that children are replacing their parents as members. This shows that the cooperative's population has continually increased over the years.

Meanwhile, most (31.6%) of the respondents in *Goldenfields Samahang Nayon* migrated from the Visayas region since most of them comprised first-generation migrants. This finding implies that in *Goldenfields Samahang Nayon*, members are of the same age. This further enhances their shared background and experiences that bind them as members. This further implies a "group sense," which verifies the study of McMillan and Chavis (1986), which stated that the benefit of such engagement benefits the well-being of members and their community. However, a notable percentage of the members were born in Kalilangan (23.7%), which implies that new-generation members are becoming interested in joining the cooperative.

In terms of civil status, most (90%) of the members of the *Bayanihan Council* were married, while only a few (7%) were widowed and separated (2%). This pattern is also true in *Goldenfields Samahang Nayon*, where most (60.5%) members were married, and only a few (31.6%) were widowed. The data supported the role of membership in which only household heads were to be registered as members. Surprisingly, there is only one member whose status is single. According to the cooperative manager, being a single household head was rare since most farmers - members were married household heads.

In terms of ethnicity, the majority (85.5%) of the *Bayanihan Council* members belonged to one ethnic group, particularly Ilocano. At the same time, only a few (1.1%) are Cebuano

and (3.3%) Ilonggo. The small percentage (3.3%) of Ilonggo and Cebuano (1.1%) could be attributed to intermarriage, a common practice in the locale as a multi-ethnic community. Meanwhile, in the *Goldenfields Samahang Nayon*, most (34.2%) of the members are composed of Ilonggo and are closely followed by Cebuano (21.1%) and Ilocano (18.4%). The members' ethnicity in *Goldenfields Samahang Nayon* was more diverse than that of the Bayanihan Council.

Table 3

Ethnicity and Religion Distribution of the Respondents

Cooperatives	Bayanihan Council (n=90)		Goldenfields SN (n=38)		Total	
	f	Percentage (%)	f	Percentage (%)	f	Percentage (%)
Ethnic group						
Ilocano	77	85.6	7	18.4	84	65.6
Cebuano	1	1.1	8	21.1	9	7
Igorot	8	8.9	4	10.5	12	9.4
Ilonggo	3	3.3	13	34.2	16	12.5
Mixed Ilonggo/Ilocano	1	1.1	2	5.3	3	2.3
Tagalog	0	0	1	2.6	1	.9
Boholano	0	0	3	7.9	3	2.3
Total	90	100	38	100	128	100
Religion	f	Percentage (%)	f	Percentage (%)	f	Percentage (%)
Assembly of God	45	50	1	2.6	46	36
Roman Catholic	0	0	24	63.2	24	18.7
Methodist	14	15.6	1	2.6	15	11.7
Others	31	34.4	12	31.6	43	33.6
Total	90	100	38	100	128	100

Table 4 presents the respondents' educational attainments. In terms of education, most of the respondents in *Bayanihan Council* were elementary graduates (30%), followed by high school (27.8%) graduates. In the *Goldenfields Samahang Nayon*, most members were college graduates (42.4%), government employees, and skilled workers. In terms of educational attainments, the *Greenfields Samahang Nayon* has the highest number of college graduates compared to the *Bayanihan Council*.

Table 4

Highest Educational Attainment Distribution of the Respondents

Cooperatives	Bayanihan Council (n=90)		Goldenfields SN (n=38)		Total	
	f	Percentage (%)	f	Percentage (%)	f	Percentage
Highest Educational attainment						
Elementary Level	4	4.5	3	7.9	7	5.5
Elementary Graduate	27	30	4	10.5	31	24.2
High School Level	9	10	4	10.5	13	10.2
High School Graduate	25	27.8	4	10.5	29	22.7
College Level	13	14.4	6	15.8	19	14.8
College Graduate	11	12.2	16	42.2	27	21
Post Graduate	1	1.1	0	0	1	.80
Vocational	0	0	1	2.6	1	.80
Total	90	100	38	100	128	100

Table 5

Main Occupation Distribution of the Respondents

Cooperatives	Bayanihan Council (n=90)		Goldenfields SN (n=38)		Total	
	f	Percentage (%)	f	Percentage (%)	f	Percentage (%)
Skilled Agricultural	56	62.2	14	36.8	70	54.7
Elementary Occupation	4	4.4	0	0	4	3.1
Homemaker	10	11.2	3	7.9	13	10.2
Pensioner	0	0	4	10.5	4	3
Professionals	2	2.2	5	13.2	7	5.5
Clerical Support	1	1.1	3	7.9	4	3.1
Service and Sales Workers	8	8.9	6	15.8	14	11
Plant machine operators	5	5.6	0	0	5	4
Craft and trader worker	3	3.3	0	0	3	2.3
Managers	1	1.1	3	7.9	4	3.1
Total	90	100	38	100	128	100

As seen in Table 5, regarding the main occupation, the majority (54.7%) of the members from both cooperatives were farmers who were considered skilled agricultural workers (PSOC-Phil Standard Occupational Classification, NSO 2012). Since both cooperatives were registered as agricultural cooperatives, it is expected that most of the members' main occupation is farming. This finding supports the study of Coleman (1986) and Lin (2004), whereby people associate themselves with organizations that can be potential resources as an outcome of their engagement.

Table 6

Hectares Cultivated Distribution of the Respondents

Hectares	f	Percentage (%)	f	Percentage (%)	F	Percentage (%)
None	18	20	2	5.3	20	15.6
1 hectare and below	21	23.3	3	7.9	24	18.7
2 – 3 hectares	42	46.7	8	21.1	50	39.1
4-5 hectares	6	7	4	10.5	10	7.8
More than 5 hectares	3	3.3	15	39.4	18	14.1
No answer	0	0	6	15.8	6	4.7
Total	90	100	38	100	128	100

Most (46.7%) of the *Bayanihan Council* members cultivated 2 to 3 hectares of land on the number of hectares owned and cultivated. This finding can be explained by members being children of first-generation migrants since parents were expected to divide their lands among their children. Meanwhile, a considerable percentage (20%) did not own any land for cultivation. This percentage is evident with the children of migrants who sold their inherited lands and worked as farm laborers.

In contrast, the majority of *Goldenfields Samahang Nayon* members cultivated more than 5 hectares (39.4%). This finding was supported by the data on the cooperative members' profile, where the majority were first-generation migrants, and as settlers, they were Agrarian Reform Beneficiaries.

Table 7*Income and ARB Beneficiary Distribution of the Respondents*

Cooperatives	Bayanihan Council (n=90)		Goldenfields SN(n=38)		Total	
	f	Percentage (%)	f	Percentage (%)	f	Percentage (%)
Income in thousand (Php)						
< 200	77	85.6	28	73.7	105	82
200 – 400	5	5.6	8	21.1	13	10.1
400 – 600	2	2.2	1	2.6	3	2.3
800 to 1M	2	2.2	0	0	2	1.6
No answer	4	4.4	1	2.6	5	4
Total	90	100	38	100	128	100
ARB Beneficiary	f	Percentage (%)	f	Percentage (%)	F	Percentage (%)
Yes	25	27.8	25	65.8	50	39.1
No	65	72.2	13	34.2	78	60.9
Total	90	100	38	100	128	100

Regarding income of most members from both cooperatives, 85.6% in *Bayanihan Council* and 73.7% in *Greenfields Samahang Nayon*, claimed that they earned less than 200 thousand per year. In terms of members' classification as agrarian reform beneficiaries, a majority (72.2%) of the respondents from the *Bayanihan Council* were non-ARB beneficiaries. In contrast, a majority (65.8%) of *Goldenfields Samahanag Nayon* members were ARB beneficiaries.

The respondents' demographic and economic characteristics show that members from both cooperatives were farmers who claimed to have an income of less than 200 thousand pesos per year. However, the demographic characteristics of the members from both cooperatives vary in sex, age, place of birth, civil status, ethnicity, religion, educational attainment, and hectares cultivated. Furthermore, the *Bayanihan Council* members were more ethnically homogenous since they were kin. Their proximity further strengthened the network of relationships since they lived nearby.

Consequently, the members of *Greenfields Samahang Nayon* were aging but had high educational attainment and cultivated more hectares of land. Given the differences in demographic and economic profiles, the following section ascertained if the members of the two cooperatives differ in their level of social capital.

Level of Social Capital between Members of Two Cooperatives

In this section, the members' level of social capital was determined in the following dimensions: a) Trust, Reciprocity, and Norms, b) Network and Collective Actions, and c) Information and Empowerment.

In terms of trust, members from both cooperatives showed a high level of trust. Although members from the *Bayanihan Council* had a higher mean of 4.13 with a standard deviation of .62, the *Goldenfields Samahang Nayon* had a mean of 3.92 but reported a more dispersed response of .80 standard deviation. A less dispersed standard deviation of members of the *Bayanihan Council* means their responses were alike. These findings further reveal that the members have high trust towards the cooperatives and their leaders. This finding corroborates with the study of Putnam (1993), where a healthy level of trust binds social relationships, thereby reducing conflict in the organization.

Table 8
Respondents' Level of Social Capital

Dimension	Bayanihan Council			Goldenfields SN			
	Mean	Std. Deviation	QD	Mean	Std. Deviation	QD	Mean
Trust	4.13	.62	H	3.97	1.05	H	4.09
Reciprocity	3.92	.80	H	3.97	.94	H	3.94
Norms	4.78	.58	H	4.66	.53	H	4.74
Network	4.72	.56	H	4.18	.80	H	4.56
Collective Actions	4.77	.56	H	4.05	1.59	H	4.55
Information	4.80	.58	H	4.61	.72	H	4.74
Empowerment	4.94	.35	H	4.89	.39	H	4.93

Legend:

Low 1.0 – 1.6

Medium 1.7 – 3.3

High 3.4 – 5.0

Both cooperatives have a high level of reciprocity, with a mean of 3.92 in the *Bayanihan Council* and 3.97 in *Goldenfields Samahang Nayon*. For *Goldenfields Samahang Nayon*, this result shows members' loyalty towards their cooperatives as it finds support from Fukuyama's (2000) study, which asserts that reciprocity leads to cooperation, a basis for loyalty in keeping its cooperative's goals.

Meanwhile, in terms of norms, both cooperatives had a high level of Norms. However, the members' collective norms were slightly higher (4.74) than reciprocity, with a mean of 3.94. Nevertheless, this supports the study of Bourdieu (as cited by Lin, 2002), who considered high regard for norms as a manifestation of membership, reflecting members' high social capital.

In terms of Network and Collective Actions, *Bayanihan Council* showed a higher mean in terms of Network (4.72) and Collective Actions (4.77). Its members' responses were close, which is .56. The high level of Networks and Collective Actions of *Bayanihan Council* cooperative resonated in the work of McMillan and Chavis (1986), where a strong sense of community will serve as a "powerful force" to drive people's participation as engagement in the community through communal and church activities enhances cooperation among members of the community.

On Information and Empowerment, *Bayanihan Council* had a slightly higher mean on Information (4.8) and Empowerment (4.94). In summary, both cooperatives had a high level of social capital across all dimensions. However, *Bayanihan Council* exhibits a slightly higher mean in most dimensions than *Goldenfields Samahang Nayon*.

In a two-sample test of difference, the p-value of .000 shows a significant difference in Trust, Norms, and Reciprocity dimensions between the two cooperatives. This result indicates that although both cooperatives rated high on social capital, the T-test indicates a significant difference in Trust, Norms, and Reciprocity dimensions. It further shows that *Bayanihan Council* has a mean higher than *Goldenfields Samahang Nayon*. Further, the higher social capital of the *Bayanihan Council* could be attributed to their geographical location since most of them lived in the same locale as their kin. This attribution implies close family ties among members.

Table 9*Two-sample Independent Test of Difference*

Dimensions of social capital	Cooperative	Mean	SD	t-value	P value
Trust, Norms & Reciprocity	Bayanihan Council	4.28	.47	5.021	.000**
	Goldenfields SN	4.20	.65		
Networks & Collective Actions	Bayanihan Council	4.74	.43	3.57	.001*
	Goldenfields SN	4.12	.98		
Information and Empowerment	Bayanihan Council	4.87	.42	1.41	.165
	Goldenfields SN	4.75	.46		

** *Very significant*

* *Significant*

Moreover, this finding corroborates the study of Hatak et al. (2016) and Woolcock (2001), whereby trust exists in groups where people are homogenous, share the same concerns and goals, and are more relational than psychological or political. Thus, among members of the *Bayanihan Council*, trust in the organization was founded by bonding and bridging social capital. Claridge (2018) further explains that bonding capital is inherent in family relationships, while bridging capital is a generalized trust of a member of the organization.

Moreover, a significant p value of .001 means that Networks and Collective actions significantly differ between the cooperatives. This result implies that ethnicity and close family ties contribute to a strong Network and Collective Actions. It confirms Grootaert et al. (2004) finding that collective action is present in an organization with high social capital. Besides, the result strongly suggests that ethnic groups are collectivist as they have a strong “collective sense of identity.” This insight is supported by the study of Giorgas (2000), where social capital is utilized more by groups with firm cultural boundaries and a strong collective sense of identity.

Moreover, a strong correlation between a high level of Trust, Norms, and Reciprocity with Networks and Collective Actions was observed in Putnam’s (2000) study on American civic participation. He asserts that the organization’s success is determined by prior trust, which facilitates positive action and eventually leads to collective actions.

Consequently, an organization that possesses resilient capacity has high social capital. This was supported by Putnam’s (2000) study on the significant role of social capital in people’s motivation to join an organization as an act of civic responsibility. This also corroborates with the members’ response when asked about their purpose of joining the cooperative, the majority answered, “*I joined to help myself and others.*”

Among the three dimensions, only Information and Empowerment showed no significant difference. Since both cooperatives had high social capital in terms of Empowerment and Information, this result affirms the study of Woolcock and Narayan (2000) that resilient cooperatives have highly empowered and informed members. In addition, their participation in the cooperative encourages empowerment as they learn and benefit from their membership.

CONCLUSIONS AND RECOMMENDATIONS

Upon examination of the members' social capital, the Bayanihan Council cooperative has significantly higher social capital than the *Goldenfields Samahang Nayon* cooperative. A significant amount of social capital contributed to the *Bayanihan Council's* resilience compared to *Goldenfields Samahang Nayon*. Thus, a higher level of social capital of the members would result in better organizational resiliency. Based on this conclusion, the cooperatives must invest in the member's social capital. They can organize activities that encourage bonding, like social gatherings, sustaining the *Bayanihan* practice, and other group activities.

Moreover, a brief discussion on cooperative principles must be included in the pre-membership seminars to encourage new members to participate in cooperative activities and fulfill their roles as members. Thus, pre-membership seminars should be about not only the benefits and services offered but, most notably, the role of members in the resiliency of the cooperatives. CDA should host a yearly conference among regional cooperatives to allow cooperatives to establish an extensive cooperative affiliation. This venue could be an opportunity for cooperatives to exchange experiences and learn ideas and strategies in the management of cooperatives.

REFERENCES

- Aldrich, D. P. (2012). *Building resilience: Social capital in post-disaster recovery*. The University of Chicago Press. DOI: 10.7208/Chicago/9780226012896.001.0001
- Borda-Rodriguez, A., Johnson, H., Shaw, L., & Vicari, S. (2016). What makes rural cooperatives resilient in developing countries? *Journal of International Development*, 28(1), 89–111. DOI: 10.1002/jid.3125
- Bourdieu, P. (1986). The forms of capital. *Handbook of theory and research for the Sociology of Education*, Greenwood Press, 241–258. <https://doi.org/10.1007/s11010-011-0831-4>
- Birchall, J. (2013). Resilience in a downturn: The power of financial cooperatives. *International Labour Organization*, 65. <http://ccednet-rcdec.ca/en/node/12026>
- Claridge, T. (2004). Social capital and natural resource management: An important role for social capital? University of Queensland, Brisbane, Australia. DOI: <https://www.socialcapitalresearch.com/literature/nrm/>
- Claridge, T. (2018a). Dimensions of social capital – structural, cognitive, and relational. *Social Capital Research*.
- Claridge, T. (2018b). Functions of social capital – bonding, bridging, linking. *Social Capital Research*.
- Claridge, T. (2021). Evolution of the concept of social capital. DOI: 10.5/zenodo.8015737.
- Coleman, J. S. (1986). Social theory, social research, and a theory of action. *American Journal of Sociology*, 91(6), 1309–1335. DOI: 10.1086/228423
- Duchek, S. (2014). Growth in the face of crisis: The role of organizational resilience capabilities. *Academy of Management Proceedings*, 1. DOI: 10.5465/ambpp.2014.225
- Duchek, S. (2019). Organizational resilience: A capability-based conceptualization. *Business Research*. DOI: 10.1007/s40685-019-0085-7
- Field, J. (2008). *Social capital*. New York: Routledge. <https://philpapers.org/rec/FIESC>
- Field, J. (2013). *Social capital*, 53(9), 1689–1699. Routledge, Taylor & Francis Group. DOI: 10.1017/CBO9781107415324.004
- Fukuyama, F. (2000). Social capital and civil society. In IMF Institute Conference. 1–18. International Monetary Fund.

- Giorgas, D. (2000). Social capital within ethnic communities. *ANU Research Publications*. <https://openresearch-repository.anu.edu.au/handle/1885/41477>
- Grootaert, C., Narayan, D., Nyhan Jones, V., & Woolcock, M. (2004). Measuring social capital: An integrated questionnaire. In J. Page & S. Jorgenson (Eds.). *World Bank Working Papers*. <https://openknowledge.worldbank.org/entities/publication/634c867c-cbc8-536a-8446-a2703177bc7c>
- Hatak, I., Lang, R., & Roessl, D. (2016). Trust, social capital, and the coordination of relationships between the members of cooperatives: A comparison between member-focused cooperatives and third-party-focused cooperatives. *Voluntas*, 27(3), 1218–1241. DOI: 10.1007/s11266-015-9663-2
- Jia, B. X. (2018). The role of social capital in building organizational resilience. UC Library. <http://dx.doi.org/10.26021/5475>
- Krishna, A. (2002). Active social capital: Tracing the roots of development and democracy. Columbia University Press. DOI:10.1017/CBO9781107415324.004
- Lin, N. (2002). *Social capital: A theory of social structure and action*. Cambridge University Press.
- Lin, N. (2004). Social capital: A theory of social structure and action. *The British Journal of Psychiatry*, 112(483), 211–212. DOI: 10.1192/bjp.112.483.211-a
- Lin, N. (2007). A network theory of social capital. *Handbook of social capital*, 17(2), 377–484.
- McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition & theory. *Journal of Community Psychology*, 14(4), 315–325.
- Mhembwe, S., & Dube, E. (2017). The role of cooperatives in sustaining the livelihoods of rural communities: The case of rural cooperatives in Shurugwi District, Zimbabwe. *Journal of Disaster Risk Studies*, 9(1). <https://doi.org/10.4102/jamba.v9i1.341>
- Official Gazette No. 23. Implementing PD No. 175 Governing the organization, administration, and supervision of Samahan Nayan (Barrio Associations) and Kilusang Bayan (Cooperatives). <https://www.officialgazette.gov.ph/1973/07/09/letter-of-implementation-no-23-s-1973/>
- Putnam, R. D. (1993). The prosperous community: Social capital and public life. *The American Prospect*, 35–42.
- Putnam, R. D. (2000). Bowling alone: The collapse and revival of American community. <https://doi.org/10.1017/CBO9781107415324.004>
- Republic Act 9520. Philippine Cooperative Code of 2008. https://lawphil.net/statutes/repacts/ra2009/ra_9520_2009.html
- Rodriguez, A., Johnson, H., Shaw, L., & Vicari, S. (2016). What makes rural co-operatives resilient in developing countries? *Journal of International Development*, 28(1), 89–111. <https://doi.org/10.1002/jid.3125>
- Tantardini, M., & Kroll, A. (2016). The role of organizational social capital in performance management. *Public Performance and Management Review*, 39(1), 83–99. <https://doi.org/10.1080/15309576.2016.1071163>
- Woolcock, M. (2001). The place of social capital in understanding social and economic outcomes. *Canadian Journal of Policy Research*.
- Woolcock, M., & Narayan, D. (2000). Social capital: Implication for development theory, policy and practices. *World Bank Research Observer*. <https://doi.org/10.1117/12.772411>