



## A Study on the Influence of Social Capital on Community Disaster Resilience

Seol A Kwon<sup>1+</sup>, Sang Il Ryu<sup>2#</sup>

<sup>1</sup>National Crisisology Institute, Chungbuk National University, Chungdae-ro 1, Seowon-Gu, Cheongju, Chungbuk 28644, Korea

<sup>2</sup>Department of Fire Administration and Disaster Management, Dong-Eui University, 176 Eomgwang-ro, Busanjin-gu, Busan, Korea

### ABSTRACT

This study highlighted the differentiation from existing researches and on the assumption that social capital will function as an important element in disaster resilience, this study was conducted to explore the influence of social capital on the community disaster resilience through relative importance analysis about the necessity of social capital for the improvement of disaster resilience. As a result, the research outcomes showed that experts recognized reliability factor as most important for the relative importance of social capital in bringing improvement of social community disaster resilience, and it was perceived that participation factor must be established. Additionally, in the result of the overall importance ranking that considered the composite weighted values, the importance was recognized by the order of social participation, politics, reliability about the administrative leaders, and community network. Based on this, it means that reliability about politics and administration are important and active participation is required from the local residents and the community.

*Key words: social capital, disaster, resilience, risk management, community*

### Introduction

Recently, there is a rapid increase in the damage from various major and minor disasters. In particular, damage resulted from the outbreak of an earthquake in Gyeongju in 2016 and Pohang in 2017, and the rapid increase in the damage is because of continuous typhoons and heavy rain every year.

Likewise, damage continues due to the social disasters like fire accidents and explosions, so a provision of fundamental and systematic measures are required. When these minor and major disasters occur, community disaster resilience is crucial. In other

words, this brings out the importance of disaster resilience that focuses on the system operation process and abilities of disaster management organizations to take preventive measures in advance and correspond promptly even during the outbreak of disasters in order to minimize the damage and also transform and adapt into a more developed environment.

Regions with disaster resilience are equipped for disasters and minimize the damage, and become equipped with the preventive measures to avoid the same disasters from happening again. Disaster resilience is different for each area, and in particular, social capital like reliability, network, norms, and participation, which are the factors for the increase of solidarity and fellowship of the collapsed

<sup>+</sup> The 1st Author: Seol A Kwon, E-mail. [seolakwon@chungbuk.ac.kr](mailto:seolakwon@chungbuk.ac.kr)

<sup>#</sup> Corresponding Author: Sang Il Ryu, E-mail. [samuel@deu.ac.kr](mailto:samuel@deu.ac.kr)

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civil society of the region, function as crucial elements. Meanwhile, existing researches are about the influence caused by social capital on the community index, so most are researches about the influence of social capital on the residential satisfaction and quality of life (Yoon & Yang, 2014; Choi, *et al.*, 2016; Park, 2009; Kim, 2008; Kim, 2013; Mun, 2015; Lee, 2018; Lee, 2013; Yang, 2015; Lee, 2016; Park, 2013; Kim, 2016; Sung, 2015; Kim, 2017; Kim & Cheon, 2018; Kim, 2011; Noh & Deok, 2016).

It can be identified through the analysis done by existing researches that social capital generally cause a positive influence on the satisfaction of local residents about life and suggest how social capital represent mediating effects that encourage active activities and cooperative system for the local residents as well as propose that the influence of the social capital appears differently depending on the regional characteristics.

This study highlights the differentiation from existing researches and on the assumption that social capital will function as an important element in disaster resilience, this study will conduct relative importance analysis about the needs of social capital for the improvement of disaster resilience and explore the influence caused by social capital on the community disaster resilience.

## Theoretical Discussion

### Social Capital

The concept of social capital first made its appearance when the importance of social relations, which was excluded in the majority of development theory before 1990, started becoming recognized. The scholars that actively started discussion about the concept of social capital are Bourdieu & Putnam (2000) that discussed about social capital from 1970 to the beginning of 1980 with 'Bowling alone' (2000), Pierre Bourdieu (1995) classifies the society into 3 systems for analysis including the forms of economic capital, social capital, and cultural capital. It is claimed that each carries various agents and own characteristics in the society (Edwards & Foley, 1998: 125).

In particular, the concept of social capital is analyzed by focusing on the functions of conflicts and power. In addition, it is claimed that through the understanding about this concept, social capital is applied as the resource of power struggle carried out in the social field (Edwards & Foley, 1998: 125).

As a result, Pierre Bourdieu (1985: 248) defines social capital as institutionalization made up in relations that are mutually stabilized

to a certain degree and an assembly of potential resources that carry a durable network.

Moreover, details about social capital by Putnam (1995) show that it discusses about the deterioration and collapse of the civil society in the United States that began to appear from 1990. In particular, it is analyzed that passive dependence about the nation due to the absence of civic participation causes an influence on national vitality (Putnam, 2000: 223).

According to Putnam (2000: 224), the network factor in social capital appears as a major factor for the economic development of the nation, and it was analyzed that a highly effective and flexible industrial district is developed based on the cooperative network between the workers and the small businesses.

Putnam (2000: 224) also considers that norms in social capital cause a significant influence on government performances. As for the factors of the success of socio-economic modernization, it is claimed that the norms of civic participation is based on as the evidence.

In addition, Putnam (2000: 230) points out reliability as the quantitative factor of social capital. Reliability is the most fundamental conduct of social capital. It is claimed that amongst the forms of social capital, reliability is deeply connected to education and education level control will lower the reliability of social capital.

In conclusion, the main factors of social capital claimed by Putnam include the moral obligations and norms, social values (reliability), and social network. Putnam considers the accumulation of social capital and efforts as the proof of highly advanced political integration in a well-built economic region.

### Components of Social Capital

#### Reliability

Many benefits that appear in the local community turn out in the voluntary activities of the local residents. The basis of these voluntary activities is through reliability, reciprocity, solidarity, and cooperation.

Here, reliability functions as the main mechanism of voluntary activities (Simmel, 1950: 326). Reliability is the key component of social capital, and social capital can be perceived as an essential condition for social integration, economic efficiency, and democratic stability (Arrow, 1972: 357; Coleman, 1988: 306).

Generally, reliability in social capital refers to acting for one's own profit within the bounds of not causing harm to others. Accordingly, reliability is a basic behavior for productive cooperation and sustains stable social relations (Hardin, 1998: 12-15).

Reliability can be distinguished between social reliability and political reliability. Social reliability signifies reliability about the constructed community, and through reliability, it is linked to joining a community group that is connected to voluntary behaviors (Torcal & Montero, 1996: 181; Newton, 1999a: 173, 1999b: 16, 2000).

For instance, it refers to joining as a voluntary member in the consultative group for the safety of the community and engaging in activities as a regular member or a board member. However, at times, there are cases where efforts are not exerted to build reliability even for members of the consultative group (Torcal & Montero, 1996: 181; Newton, 1999a: 173, 1999b: 16, 2000).

#### Network

Considering the importance of the relations with resources in social capital, the status of the network is very crucial. There is a high tendency for research to be conducted based on the personal position to measure the key network of social capital (Lin, 1999: 36). This is a factor to measure if it is possible to access required, valuable information and its competitive advantage based on personal situations. This approach method considers the network status of individuals as the key factor to differentiate social capital (Lin, 2017: 36).

Moreover, another network approach method places emphasis on the resources. In social resource theory, most valuable resources in the society are represented by wealth, power, and status. Therefore, social capital can be analyzed through the characteristics and diversity of others who have direct or indirect bonds with the individual (Lin, 2017: 36-37).

#### Norms

In social capital, norms are regulated through mutual agreement. These norms are considered as the motive of actions so that the profit of the society organization can be supplemented with personal profit (Pretty, 2003: 1913).

Accordingly, these norms assign obligations that individuals have to observe in groups and agree to getting punished through sanctions in case the norms are violated (Pretty, 2003: 1913).

According to a research by Murali (2006), common regulations and norms generally prioritize the profit of the society organization more than the profit of individuals. These norms motivate people who participate in group activities and also function as the driving force that constructs social capital that enables successful group activities.

In addition, according to a precedent research by Dholakia, *et al.* (2004), Kankanhalli, *et al.* (2005), Bock, *et al.* (2005),

Hars (2002), and Yoo, *et al.* (2002), norms reinforce the willpower to participate in communities and cause a positive influence on collective intention. Additionally, it appeared that norms apply as a positive factor in the interrelation of knowledge sharing. Moreover, it was displayed that norms enhance social identity and reinforce residents' participation.

In social capital, norms function as a reliable factor to those who conduct the action. In addition, by establishing compensation and punishment regulations, individuals provide solutions about information, alternative measures, and conflicts, either indirectly or directly, and it could cause an influence on enthusiastic behaviors. In particular, if there are effective formal or informal regulations that impose punishment or damage to those who do not observe the norms, it even affects their future behaviors (Ostrom & Ahn, 2009: 11-12).

#### Participation

According to a research conducted by Yoo (2012), analysis was conducted based on a case where it was possible to resolve problems within a short period during the process of disaster counter-measure because of the participation by the citizens. The phenomenon was researched by focusing on the 'spontaneity' of civic participation, and it was emphasized that the medium induced this phenomenon.

In social capital, participation is influenced by various factors. Along with the political factors of individuals, participation affects the awareness, talents, and mental state of the individuals.

In addition, in regards to the civic awareness, enthusiasm, and capabilities of the citizens, the participating activities and the effects can appear differently. The potentials and qualification due to the civic awareness level are traditionally understood as the rights and obligations that are regulated in the fields of politics, economy, society, and culture that result in public relations between the nation and individuals.

Generally, local residents are the members of the smallest unit of a political system, and hold specific rights and responsibilities. The qualification of the citizens consist of obligations that are decided based on the constitutional law,

informal values, traditions, and collective agreement. The citizens granted with qualification are certified with either officially or unofficially granted status. This status commonly refers to those who carry obligations followed by the roles assigned by the nation or the region.

In order to build a community that is strongly resistant to disasters, the goal should be set up as minimizing the vulnerability against disasters in each region. For the community to become a disaster resistant community, the members of the community must con-

tinuously exert efforts for long term activities, and cooperation and sacrifice are required amongst different interested parties (Stewart, *et. al.*, 2009).

In disaster resilience, social cohesion, network, social capital, and solidarity are emphasized, and the importance of civic cooperation and participation are stressed (Stewart, *et. al.*, 2009).

If civic participation is expanded, then it will heighten the awareness about surrounding risks, threat asset, and awareness and understanding about vulnerability and it will be favorable for helping the vulnerable social group against disasters. Additionally, in long term perspective, it helps to realize a sustainable and safe future society (Maceda, *et. al.*, 2009: 1).

It is considered that if the measurement factors related to the participation of social capital are linked with the residents' public safety and examined, it will be possible for the participating private organization to recognize it and also enable the activity status.

## Disaster Resilience

At first, the concept of disaster resilience was researched while it was limited to the restoration from natural disasters. In particular, in natural disaster evaluation, the viewpoint of disaster resilience applied as very crucial grounds for an argument (Mileti, 1999).

Resilience refers to maintaining functions for specific buildings, bridge, networks, and communities within the controlled time. The controlled time is generally decided by the possessor or the society in case of specific buildings, and the life time and predicted life cycle of the system are included here (Renschler, *et. al.*, 2010: 26).

Moreover, resilience can be defined as the function that displays the ability to maintain the functions and performance of networks and communities. In the community, disaster resilience means to endure tolerable loss from disasters and take mitigation measures for disaster damage that corresponds to the attainment of the protection level (Mileti, 1999: 351).

### Robustness

Robustness is the strength to endure requirements from the damage of the disasters without experiencing functional loss and it also functions as the system analysis unit. The stronger the power of the robustness in a community, there is a higher chance for the community to display organizational suitability (Bruneau, *et. al.*, 2003: 738).

Robustness is a key factor that is essentially required as the improvement measure of resilience, and it causes a significant influence on the decision maker and the interested parties (Bruneau,

*et. al.*, 2003: 740).

When robustness is examined from the aspect of disaster resilience of a community, it could be understood to maintain the community functions during the occurrence of damage and shock from disasters, but if it is identified from the spatial perspective that carries varying cultural, geographical, and industrial characteristics, then it will make way to discuss about which type of community is equipped with stronger disaster resilience.

### Redundancy

Redundancy means that something is replaceable. Thus, it is the elements or system that can satisfy requirements in case disabilities result or functions become degraded or even deprived due to the disasters (Bruneau, *et. al.*, 2003: 738).

In disaster management, something that is redundant and overlapping is included in the redundancy domain. Redundancy means to minimize the risk of errors in unclear situations and heighten the reliability and adaptability of the system (Lee, 2009).

This shows that the community should normally be equipped with 120% or 130% of competence for redundancy in disaster resilience in order to be prepared for major disasters. This capability includes reserve manpower and resources, organization, and system (Yonhab News Agency, 2019).

### Resourcefulness

Resourcefulness is the ability to distinguish the occurrence of conditions that can interrupt the system and set up an order of priority to mobilize resources. An abundance of resources satisfy the previous order of priority and form with the competence to apply economic, physical, technical, informative, and human resources to achieve the goal (Bruneau, *et. al.*, 2003: 738-739). Especially, resourcefulness depends on how well useful information can be searched during the outbreak of disasters and also how attentively the order of priority is set up. In other words, it represents the ability to apply the resources that we have variedly in the right time and suitable place during disasters and the power to overcome the crises that result from disasters and advance towards a higher stage.

### Rapidity

Rapidity can be understood as the ability to fulfill the order of priority and achieve the goals in time in order to prevent loss from disasters and also avoid future confusion (Bruneau, *et. al.*, 2003: 739). This competence is shaped through the usual constructed

system. This is the ability to rapidly endure loss from disasters and avoid confusion while recovering the original functions of the society, and this includes elements such as system management, system planning, accurate delivery and sharing of information, and rapid resource transportation (Kim, *et. al.*, 2011: 68)

## Relationship between Social Capital and Disaster Resilience

In disaster resilience, social cohesion, network, social capital, and solidarity are emphasized, and the importance of civic cooperation and participation are also stressed (Stewart, *et. al.*, 2009).

When civic participation becomes expanded, then the awareness, threat asset, and recognition and understanding about vulnerability become heightened and it is favorable for helping the vulnerable social group against disasters. Additionally, in the long term perspective, it helps to build a sustainable and safe future society (Maceda, *et. al.*, 2009: 1).

The correlation between social capital and disaster resilience carries the following characteristics. First, reliability is a positive attitude about the members in social relations and under the faith of acting based on the expectations of the members, it is the willpower to gladly accommodate one's own vulnerability (Lee, 2016: 16-17).

This can be understood as supportive attitude for the norms of the region about the public safety of the community and putting up with any possible personal damage in order to ensure the safety of the community (Lee, 2016: 16-17).

This sense of reliability can be understood as a concept that was established for the public safety of the community and an evaluation predisposition about various resources produced by the community, and it is the normative anticipation of the residents about the functions and roles of the community for public safety.

In other words, the matters related to the disaster safety of the community and each disaster records must be ethically and legally valid. In addition, this type of reliability could be perceived as unconditional adaptation or emotional support in the community that is formed and displayed through long experiences and social activities in the community (Lee, 2016: 16-17).

Second, norms are important to sustain the relations and structure of the community. Norms especially apply as an essential factor to maintain a safe community. In addition, norms are the altruism that considers the values of the community and the socially disadvantaged in the community, and aside from that, it can be perceived as an essential aspect to maintain social relations and the structure (Jeong, 2014: 24).

Third, a network can be perceived as a structure of different

relationships that make up the community (Jeong, 2014: 24).

In other words, in regards to the network, it can be understood that the social members personally participate and engage in various activities for the public safety of the community and also a relation structure about it.

Lastly, participation is required for the preventive aspect of disasters, beyond the adaptation of norms. It is a clear fact that participation is the most important and primary action to enhance the public safety of the residents and reduce and prevent the occurrence of disasters in the community (Seo, 2017: 38).

However, it is hard to deny that the fundamental objective, which is the residents' public safety, cannot be achieved only through the accommodation and compliance of the residents about the norms. It is because the standard at the normative level is a measure that is established to build a safe and desirable community environment and also a device that is designed to secure the least safe environment.

## Research Design

### Analytic Hierarchy Process (AHP) Methodology

AHP is widely known because of the book titled 'Decision making for leaders : the analytic hierarchy process for decisions in a complex world' published by Professor Tomas L. Saaty of University of Pittsburg (United States) and it is a methodology that calculates the importance. Especially, it is commonly used to analyze relative importance or the order of priority between factors, and one of the advantages of AHP is that importance can be calculated with a scientific method on a small number of people, and for the research subjects, a small number of experts are more fitting than ordinary people. The following are the usefulness of AHP suggested by Saaty (1980). First, the information in the decision making process can be measured with a ratio scale based on the qualitative and quantitative standards. Second, complicated problems that are multi-criterional but not typical are segmentalized and stratified with sub-criterion so it can be solved with AHP. Third, it is indicated that qualitative information can be digitized quantitatively for expression (Saaty, 1982). Meanwhile, AHP is a methodology that is widely used in many different fields. In other words, Multi-Criteria Decision Making (MCDM) refers to cases where various criterion instead of a single criteria are considered for the decision making process about the latest alternative measures like the establishment of policies. This technique can also be applied

for the selection of the order of priority for the decision about the policies.

### Settlement of Research Measurement Elements

The following is the measurement model and measurement index of the relative importance analysis about the necessity of social capital for the improvement of community disaster resilience. Generally, disaster resilience in this study refers to robustness (the ability (flexibility) of the community to maintain functions for restoration (recovery) in case of the outbreak of disasters), redundancy (abundance of resources in preparation of disasters in order to bring restoration (recovery) in the case of the outbreak

of disasters), resourcefulness (ability to mobilize resources for the restoration (recovery) in case of the outbreak of disasters, and rapidity (competence to achieve goals on time for restoration (recovery) in case of the outbreak of disasters). In this study, social capital of the community has to be established in order to improve the disaster resilience (robustness, redundancy, resourcefulness, rapidity) and this study intends to examine which factor is more crucial.

### Research Subject and Survey Investigation

In the survey about the relative importance analysis about the needs of social capital for the improvement of community disaster resilience, 20 experts who know well about disaster resilience and

<Table 1> Main application sector of AHP and organizations that apply it

Application sector	National institution	<ul style="list-style-type: none"> <li>Establishment of strategic plans, arrangement of budget</li> <li>Enactment · revision and abolishment of the law</li> <li>Settle national crisis, establishment of military operation plans</li> </ul>
	Public policy	<ul style="list-style-type: none"> <li>Review of validity about investment plans, distribution of resources</li> <li>Setting of policies, establishment of execution plan, evaluation of proposal</li> <li>Establishment and execution of election strategy, optimization of resource application</li> </ul>
	Corporation	<ul style="list-style-type: none"> <li>Establishment of strategic plans, M&amp;A, R&amp;D, risk management</li> <li>Marketing, new product and design development, investment analysis, analysis of life cycle about the products, profit/cost analysis, personnel management</li> </ul>
	Individual	<ul style="list-style-type: none"> <li>Selection of university and occupation, selection of spouse, decision about product purchase, selection of politician, choice of vacation spot</li> </ul>
	Others	<ul style="list-style-type: none"> <li>Mediation of interests and settlement of social conflicts for many interested parties concerned with the execution of public policies such as labor and management dispute, greenbelt policy, and dam construction</li> </ul>
Utilizing institution	United States	<ul style="list-style-type: none"> <li>50% of federal offices in United States apply it                             <ul style="list-style-type: none"> <li>US Army, US Navy, National Health Service</li> <li>Applied for allocation and execution of 150 trillion won of government annual budget</li> </ul> </li> <li>25% of 200 Fortune companies apply it                             <ul style="list-style-type: none"> <li>Ford, GM, IBM, Xerox, Westinghouse</li> </ul> </li> </ul>
	In-country	<ul style="list-style-type: none"> <li>National council, government institution, university, national research institute, bank, etc.</li> </ul>

\* Source: Ahn, *et. al.* (2013: 354), Recomposed by Kim (2017).

<Table 2> Relative importance measurement index

Measurement goal	Measurement domain	Measurement element	Description
			Community for the improvement in disaster resilience
Regional disaster resilience	Reliability	Reliability about politics and administrative leaders	Whether reliability about the central government and local government leaders and National Assembly leaders is important
		Reliability about civic society leaders	Whether reliability about civic activist group and reliability about local opinions leaders is important
	Network	Degree of civic society network	Status of membership in civic activist group and labor union
		Degree of community network	Status of membership in cultural organization and social gathering
Establishment of social capital for improvement	Norms	Importance of social system and regulations	Whether the importance of tax obligation and the importance of the law and regulations are recognized
		Importance of family, friendship, traditional norms	Awareness about caring for oneself and family first, awareness about helping friends in need
	Participation	Political participation	Participation in political rallies or online debates
		Social participation	Payment of membership fees of the local council and attendance in the meetings of the local council

social capital amongst the members of The Korean Association for Crisis and Emergency Management were selected as the subjects. For the data collection, a survey was conducted throughout August 1, 2020 to August 5, 2020 through email and visiting research method. Out of the 20 copies of the survey questionnaires, 15 copies (75% of recovery rate) were collected and Analytic Hierarchy Process (AHP) was applied for the analysis. Amongst the 15 copies, 4 copies which were above 0.2 for the consistency ratio were dismissed, and the analysis was done on 11 copies, with less than 0.2 for the consistency ratio.

### Reliability of Empirical Analysis Results

The securement of reliability of AHP method is available through the measurement of consistency ratio (CR), which is the measurement method of errors for the decisions of experts as individuals when evaluating relative importance between each evaluation elements. Generally, the smaller the CR value, the greater the consistency about the decision and if CR is smaller than 20% (0.2), then it can be understood that the recipient of the response executed two-way

comparison with fair consistency (Saaty, 1982; Lee, 2002). In this study, the CR value of the composite weighted value for each class about relative importance was displayed as less than 20% (0.2), and in this study, consistency ratio measurement was executed in advance. This is because it is difficult to decide the ordinal ranking in case the consistency ratio (CR) of the respondents is over 0.2, so this is to verify preliminarily and eliminate the survey questionnaire from the relative severity and the order of priority measurement beforehand. Therefore, it is considered that the analysis was only conducted on valid questionnaires with identified consistency in the response results to secure reliability about the entire response results.

<Table 3> Relative importance of measurement domain and order of priority

Measurement domain	Reliability	Network	Norms	Participation
Relative importance	0.326	0.198	0.166	0.310
Order of priority	Ranking 1		Ranking 2	

CR (Consistency Ratio) < 0.2

<Table 4> Relative importance and order of priority per measurement element

Measurement domain	Measurement element	Relative importance	Order of priority for measurement elements per measurement domain
Reliability	Reliability about politics and administrative leaders	0.642	Ranking 1
	Reliability about civic society leaders	0.358	
Network	Degree of civic society network	0.356	Ranking 1
	Degree of community network	0.644	
Norms	Importance of social system and regulations	0.533	Ranking 1
	Importance of family, friendship, traditional norms	0.467	
Participation	Political participation	0.245	Ranking 1
	Social participation	0.755	

CR (Consistency Ratio) < 0.2

<Table 5> Relative importance and order of priority considering the composite weighted value

Measurement domain	Measurement element	Composite weighted value	Overall order of priority for measurement elements
Reliability	Reliability about politics and administrative leaders	0.209292	Ranking 2
	Reliability about civic society leaders	0.116708	Ranking 4
Network	Degree of civic society network	0.070488	Ranking 3
	Degree of community network	0.127512	
Norms	Importance of social system and regulations	0.088478	Ranking 3
	Importance of family, friendship, traditional norms	0.077522	
Participation	Political participation	0.07595	Ranking 1
	Social participation	0.23405	

CR (Consistency Ratio) < 0.2

## Analysis Results and Implication

### Measurement Domain Analysis Result

As a result of conducting relative importance analysis about the necessity of social capital for the improvement of community disaster resilience, the following are the relative importance and order of priority for the measurement domain.

As shown above, experts recognized reliability factor as ranking 1 and also most important for the relative importance about the necessity of social capital for the improvement of community disaster resilience, followed by participation factor as ranking 2. In other words, it can be identified that reliability factor is recognized as the most important element for the improvement of community disaster resilience such as reliability about politics and administrative leaders or reliability about civic society leaders.

### Analysis Results of Measurement Elements

As a result of conducting relative importance analysis about the necessity of social capital for the improvement of the community disaster resilience, the following are the relative importance and order of priority per measurement element.

As shown above, the following is the awareness of experts about the relative importance for each measurement element about the necessity of social capital for the improvement of community disaster resilience. First, in the reliability factor, reliability about politics and administration was recognized as more important. Second, in the network factor, the degree of community network was recognized as more important. Third, in the norms factor, the importance of the social system and regulations were recognized as more important. Fourth, in the participation factor, social participation was recognized as more important.

### Analysis Result of the Composite Weighted Value and Overall Order of Priority

As a result of conducting relative importance analysis about the necessity of social capital for the improvement of community disaster resilience, the following are the relative importance and order of priority in consideration of the composite weighted value.

Likewise, for the results of the overall importance ranking in consideration of the composite weighted value about the necessity of social capital for the improvement of community disaster resili-

ence, experts recognized each of the importance including social participation as ranking 1, reliability about politics and administrative leaders as ranking 2, degree of community network as ranking 3, and reliability about civic society leaders as ranking 4.

### Research Implication

This study intended to examine the factor with more importance since social capital of the community has to be established to improve the disaster resilience (robustness, redundancy, resourcefulness, rapidity,) of the community. As a result, experts recognized reliability factor as most important for the relative importance of the needs of social capital for the improvement in the community disaster resilience, and it was perceived that participation factor must be established. This signifies the reliability of politics and the administrative leaders, and to improve the disaster resilience of the communities in our country, efforts should be exerted to heighten the reliability about politics and administrative leaders above all things. In addition, in the result with the general ranking of importance that considered the composite weighted values, the importance was recognized by the order of social participation, politics, reliability about the administrative leaders, and the community network. Based on this, it shows that reliability about politics and administration are important and also the necessity of active participation of residents in the community. Likewise, it is suggested that once social capital is established in the community through firm reliability and active participation in the community, community disaster resilience can be improved.

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**Sang Il Ryu (samuel@deu.ac.kr)**

He received his Ph.D. from Chungbuk National University. He is an associate professor of the Department of Fire Administration and Disaster Management at Dong Eui University, in which he has taught since 2013. His research interests include Fire Administration, Disaster Administration, Unification Policy, and National Security. His main researches are "Analyzing the Lawmaking Process of the Sewol Special Law by Evolutionary Game Theory(2016)", "A Review of Response Systems to Food Terrorism in the US: Implications for South Korea(2016)", "The Relationship between Organizational Culture and Organizational Competency of Fire Fighting Organizations(2016)", "The Effects of Equity on Fire Officers' Job Satisfaction(2015)", "Study on the Establishment of the Concept of Terrorism using Semantic Network Analysis(2015)" and so on.

**Seol A Kwon (seolakwon@chungbuk.ac.kr)**

She received her Ph.D. from Chungbuk National University, Korea in 2017. She is a Chief of Center for Disaster Safety Innovation of National Crisisonomny Institute(NCI), Chungbuk National University. Her research interests include life environment crisis, crisis management, organization theories, and risk communication.