Do Political Similarities Facilitate Interlocal Collaboration?

Abstract: This research examines the extent to which political similarities—that is, homophily between political actors at the local level—affect patterns of interorganizational collaboration in an emergency response situation. While the field of emergency management has focused on implementation-oriented arrangements among key stakeholders, few studies have systematically investigated the creation and development of interorganizational collaborations led by political actors, especially following catastrophic events. The analysis reveals that a dyadic tie with political homophily boosts local responders’ ties with other agencies during emergencies. Findings indicate that political solidarity, formulated by chief elected officials of municipalities and council members, can broaden the scope of interorganizational collaboration by mitigating institutional collective action problems at the local level. This research presents a critical recommendation for emergency managers that interlocal collaboration for timely response to a disaster is attributable to political similarities that facilitate frequent interlocal interactions through formal and/or informal agreements.

Evidence for Practice

• Collaboration mechanisms embedded in political homophily matter, highlighting the important managerial aspects played by mayors and representatives.
• Political similarities are important not only for enhancing a strong commitment but also for reducing the risks associated with interorganizational collaboration.
• With the increasing number of joint response operations, mayors and representatives need to consider political homogeneities that are suitable to meet interlocal interests and policy preferences.

Despite a corpus of empirical and theoretical studies on interorganizational networks, hypotheses about how similarities among actors, such as sociodemographic or geographic features or political homogeneity, can influence networks remain less explored (Comfort, Waugh, and Cigler 2012; Kapucu, Augustin, and Garayev 2009; Shrestha 2013). Homogenous actors are more likely to ensure network ties than heterogeneous actors (Gerber, Henry, and Lubell 2013). This similarity characteristic among actors, referred to as homophily, has been identified as a critical determinant of interlocal collaboration in other policy arenas (Gerber, Henry, and Lubell 2013; McPherson, Smith-Lovin, and Cook 2001).

Theoretical inquiry into political homophily is rare in emergency management compared with other policy areas. Collaboration among fragmented authorities is associated with the policy problems that are being addressed, the economic gains for participants, and the nature of the disasters (Gerber, Henry, and Lubell 2013). Although the creation and development of interorganizational collaboration, led by political actors as decision makers, is regarded as significant, it has hardly been investigated in emergency contexts. Rather, it has been considered a part of systematic implementation. This article will assess this crucial form of political homophily (i.e., the extent to which participants with similar political ideologies are more likely to collaborate).

Institutional collective action (ICA) dilemmas emerge from fragmented authority. These are cases in which actors weigh the potential transaction costs of interaction and the benefits of collaboration (Feiock 2009, 2013; Feiock and Scholz 2010). In creating multifunctional and multilayered emergency networks, local government officials overseeing governmental agencies consider the consequences of interorganizational collaboration, but the partisan aspects of decision making may differ depending on political ideologies (Gerber, Henry, and Lubell 2013). In creating interorganizational ties across local
areas, network settings are under contentious political conditions, which may also influence network members’ decisions regarding relational ties.

This article uses emergency management operations as a lens through which the role of political homophily in networks can be understood. A central contribution of this study is to embrace the concept of political homophily and more fully integrate it into the ICA framework so as to reinforce the current empirical discussion. In particular, this article argues that political homophily is significant for reducing the transaction costs involved in collective action, thereby increasing the number of ties that are forged among actors. The effect of homophily on interorganizational collaboration is tested using data derived from the 2015 Seoul Emergency Management Survey. The next section reviews relevant key bodies of literature. Measures of political similarity are then constructed after formulating a hypothesis. This hypothesis is tested using quadric assignment procedure (QAP) regression models.

**Institutional Collective Action Framework**

Institutional collective action frameworks extend the understanding of actor-based collective action to institutional collaborations. These occur when diverse but relevant organizations work together to achieve common interests that otherwise would not be achieved because of collection action problems (Feiock 2009). Interorganizational collaboration is often a product of the efficiency-improving and disruption-resolving efforts of stakeholders achieving common goals. ICA dilemmas primarily arise from the fragmented authorities relying on functional, bureaucratic, or political systems (Feiock 2009, 2013). The capability for establishing and sustaining collective action relies on the degree of mutual agreement among the fragmented authorities and the problem-solving tactics for conflict resolution (Feiock 2009).

Participating in self-organized networks is a form of collective action, and voluntary involvement in interorganizational collaboration is indispensable during unexpected disasters, although it incurs transaction costs associated with this interaction. ICA mechanisms influence the network structure in that this specific form of collaboration emerges only when the potential benefits exceed the costs of interaction (Feiock 2007, 2013). Understanding incentive structures and the way in which actors perceive the costs and benefits is therefore key to supporting collective action. The effort to resolve ICA problems begins with the recognition of the interrelations and interdependencies that affect the actions of other organizations and the assumption that rational human beings join collective action on the presumption that it ensures benefits over costs (Feiock 2013).

Buchanan and Tullock (1962) provide the idea of external costs in which risk participants are represented as bearing the possibility of deviating from their own preference so as to be bound by collective decisions. Homophily, which denotes the propensity to form relationships with those who are similar, is consistently emphasized as a crucial factor in network structures (McPherson, Smith-Lovin, and Cook 2001). Collaboration often accompanies the political contracting process in an argumentative environment in which actors consider possible gains and costs of diverse interaction (Gerber, Henry, and Lubell 2013). The participants involved in policy networks such as regional planning (Gerber, Henry, and Lubell 2013), public safety (Andrew 2010), land use and service delivery in urban areas (Krueger and Bernick 2010), and local economic development (Feiock, Steinacker, and Park 2009; Minkoff 2012) are often political actors (e.g., the mayor, head of local government, and administrative staff) who agree to common rules and mutual aids such as information sharing and resource sharing upon joining these networks. Political homophily affects the range of common preferences, which determines the risk levels of the transaction costs (Lubell et al. 2017).

The costs of seeking mutually beneficial implementation decisions are lower because political similarity pervades local jurisdictions (Gerber, Henry, and Lubell 2013). Similar political preferences and thoughts regarding the appropriate role of organizations might favor specific policies and implementations. Political representatives and/or government leaders within the boundary of political homogeneity are more likely to agree on a specific policy adoption and policy operation. In addition, similarity reduces relational risks deriving both from interdependence itself and from the costs relating to external environment and uncertainty that emerge during collaboration (Feiock 2013).

**Political Solidarity Accounting for Political Homophily**

Political solidarity is defined as “a sense of common purpose or solidarity that ensures individual commitment to group ideology, goals, and tactics” (Hirsch 1986, 379). Again, it is a result of a political process that influences members to accept and commit themselves to an ideology in which they identify shared problems that are experienced by a number of community residents. This process provides an account for those groups that are responsible for the wicked problems in the community (Carden 1978; Hirsch 1986; Wilson 1973). Through political bargaining and institutions, a commitment is generated (McAdam 1982), and a continuing commitment to a community alliance can account for the notion of political solidarity. Movement mobilization is a complicated phenomenon in the sense that mobilization incentives vary. For example, there are material inducements, social incentives, and commitments that are created for a common purpose (Hirsch 1986). The literature has examined how existing relational ties are utilized in mobilization (Calhoun 1982; Oberschall 1973; Pinard 1971), and some literature has investigated on how emergent solidarity is generated in community groups (Feiock, Lee, and Park 2012; Musso and Were 2015; Nisar and Maroulis 2017; Siciliano 2015; Siciliano et al. 2017). The recognition of the solidarity-formation process is linked to discussions of political homophily during collaboration.

Hirsch (1986) describes three phases of the mobilization process: material self-interest, reciprocity, and the creation of political solidarity. In terms of the initial mobilization of a community group, McCarthy and Zald (1973) emphasize economic self-interest as a critical incentive. Each participant might have his or her own personal reason for joining a group, such as life-relevant issues, but the motivations for continuing involvement may differ. An intrinsically relational reward, known as a solidarity incentive, is introduced that includes a sense of belonging and ownership (Wilson 1973). Once they are participating in a community through material self-interest and social motivation, participants are
encouraged to involve broad issues through reciprocity, as developed by Axelrod and Hamilton (1981). Blau (1964, 92) emphasizes a fundamental and ubiquitous norm of reciprocity. Reciprocity encourages participants to remain active while self-interest inspires them to be active at the community level (Hirsch 1986).

The creation of political solidarity permits leaders to foster a continuing commitment to a common goal and group ideology (Hirsch 1986), which is relevant to the process of building social capital. As highlighted in theories of social capital (Lin 2002; Putnam 2000), the creation of political solidarity offers a crucial factor such as social trust and connections, which are formally and/or informally established, to leaders in achieving goals. Institutional authority for decision making is not given to individuals, but political solidarity provides the perspective of community-wide issues, ideological acceptance, and collective action necessary for resolution. In order to increase political solidarity, political polarization is often seen as maximizing the commitment of the participants and seeking a bandwagon effect that leads to a high level of mobilization when polarized conflicts are resolved (Granovetter 1978; Hirsch 1986; Moe 1988). The group that resolves the conflict generates and reinforces a sense of its own political power, and consensus mobilization guarantees a commitment to its tactics and goals (Klandermans 1984). In sum, political solidarity is forged through three resources: (1) the dissemination and acceptance of a powerful ideology; (2) the creation of a polarized conflict; and (3) the creation of feelings of collective political efficacy produced by emphasizing benefits (Hirsch 1986).

Political power and partisanship in a community affect the operation of emergency management. Through political solidarity, leaders continue their commitment to party tactics and goals, and their action mobilization can affect the way in which collaboration with other jurisdictions occurs. Political polarization is often created after the alteration of tactical purposes. It implies that political homophily is a crucial factor in collective interaction in the emergency management field because political representatives (e.g., the governor and mayor) undertake the key role of disaster response in a chain of command. Ideological homogeneity may facilitate consensus mobilization and empower municipalities to create and sustain social collaborative ties in emergencies.

However, there is a counter to political homophily assuming that a heterogeneous system of emergency management organizations within a community may be an alternative to a homogeneous system. According to Shrestha (2013), a heterogeneous system, in which organizations from various sectors are engaged in disaster response operations, can foster a consensual environment for more equitable access to resources and better opportunities to be part of collective decision-making processes. Political actors such as mayors and council members, as well as community leaders, are more likely to mitigate internal conflicts and create greater external partnerships for communities’ success. Kapucu, Augustin, and Garayev (2009) and Comfort, Waugh, and Cigler (2012) also assert that the heterogeneity of organizations may be better situated to addressing complex and uncertain situations. Therefore, it is possible that heterogeneous communities are more likely to satisfy the different needs of each community beyond political homophily in a timely manner in terms of resource mobilization during a disaster.

Political Homophily and Interorganizational Collaboration

Local representatives with politically similar populations have an influence on policy decision making and the actual operation of emergency management in South Korea. Each local jurisdiction has a chief elected official of municipalities and council members who represent public opinions on policies or means to achieve them. Both groups are directly elected by South Korean citizens. South Korea has two dominant political parties—Republican and Democrat—although its political system is based on a multiparty system. For instance, all elected officials of the municipalities in the Seoul Metropolitan City are either Democrats or Republicans, although institutional differences exist across countries. Disparities in the political orientation of the politicians or leaders in the municipalities can foster different perspectives on emergency management. The political orientation of a municipality is reflected by the dominant political orientation of the constituents in the area; in relying on Democrats or Republicans, the priority value of emergency management can differ. Each municipality has its own authority to decide what kind of spending is more focused on a given budget; political homophily, therefore, increases a shared understanding of what it needs to manage first.

For a time, the conservatives-versus-liberals debate in South Korea centered on economics and the social policy between the two parties. Each local government’s elected official shows consistent policy tools based on his or her party. Under the Korean party system, all parties generate their platforms in various policy areas and enforce the rule that their members follow the party line. The local chief elected official makes his or her decision based on his or her party platform. If he or she created a different policy than that which the party supports, then he or she could not be selected as a candidate in next municipal election (Bailey 2010). Therefore, the same-party members as the municipal chief elected officials have similar policy preferences not only in emergency management but also in other policy areas.

The government agencies play a key role in emergency management through the operation and functioning of a three-tier system that comprises national, provincial, and local governments. Their responsibilities and authorities are stipulated in the Disaster and Public Safety Act, enacted in 2004 and revised since that time. Under the act, Seoul enforcement provisions and municipal ordinances were enacted and changed. Despite those lawful enactments, every detail of operational decision making cannot be made individually. Rather, a municipal chief elected official initiates thinking on what directions should be taken more seriously and how disasters should be handled.

The Disaster and Public Safety Act (Article 1) stipulates that all levels of government, including governmental agencies such as fire and police departments, are the primary actors in preparedness, response, and recovery. This is despite the fact that the range of potential stakeholders who are involved in disaster response and recovery was extended to the private sector, nonprofit organizations, and citizens. Regarding the types of disasters at the national level, the primary department or organization differs, but at the local level, the local government and primary response organizations are in control of any type of disaster. Emergency management
ordinances are more directly response oriented, and local responders’ discretion in long-term sustainable action is limited.

The role of the local authorities emphasizes first responders. Nevertheless, the level of local autonomy for local governments in Korea still lags behind that of the United States. Unlike the incident command system of emergency management in the United States, Korean local response teams or organizations have limited discretion in evaluating disaster situations and requesting aid from higher levels of government. In other words, the Disaster and Public Safety Act stipulates the autonomous role of the municipalities in disaster response but does not necessarily require municipal aid requests for upper-level response organizations or governments. Rather, the autonomous decision making and authority of the municipalities are incomplete because the national or provincial government can legally intervene or be involved in disaster response and recovery.

This study hypothesizes that political factors matter for collaboration with other actors within interorganizational emergency management networks. The creation or termination of ties with other organizations also involves costs such as bargaining, seeking information, and deflections that either political homophily can reduce or political distance can increase. In particular, when a disaster occurs, it produces changes in emergency management operations or policies. This implies that emergency management is not a simple implementation but rather that political effects are involved. A focusing event explains the dynamics of how disaster-induced changes can bring group mobilization of political communities into emergency operations beyond policies (Birkland 1998; Birkland and DeYoung 2013). For example, the Sewol ferry disaster of 2014 contributed to changes in the emergency management system and was the impetus for the amendment of the Disaster and Public Safety Act. Political leaders could not ignore public opinion. Again, the dynamics of political homophily matter not only in the ICA framework as a measure to mitigate dilemmas that are embedded in interorganizational networks but also in the emergency management policy arena by reducing the transaction costs that are embedded in the networks. This further affected the implementation of emergency management networks. Based on the consideration of the effects of political homophily, the hypothesis is as follows:

**Hypothesis**: Political homophily has a positive relationship with interorganizational collaboration in collaborative emergency management networks.

### Data and Methods

The roster method was used to collect data on forging ties in emergency management networks. The purpose of the 2015 Seoul Emergency Management Survey was to investigate the extent to which political homogeneity in the Seoul Metropolitan City of South Korea affects interorganizational collaboration for building disaster-resilient networks. The survey respondents were emergency managers of representative local response organizations within the Seoul Metropolitan City.

The study focuses on interlocal collaborations in the Seoul Metropolitan City instead of the whole level of all networking relations. The principal focus was the horizontal collaboration ties that were forged for disaster response. There are 25 local governments in the Seoul Metropolitan City, and it includes 23 fire stations and 25 police stations. All 73 local public organizations, which were the primary government responders in the Seoul Metropolitan City at the local level, responded to the 2015 Seoul Emergency Management Survey.

The 2015 Seoul Emergency Management Survey was conducted in the Seoul Metropolitan City to investigate the effects of political homophily in interlocal emergency management networks on the forging of collaborative ties. Political factor-related data were collected from the National Election Commission, which discloses the political party of the elected officials and council members in each municipality. The parties of the leaders in each municipality are considered for political homophily measures. Financial variables were gathered from the Ministry of the Interior, which stores the finance yearbook for safety expenditures. The rest of the control variables were collected from the 2014 Government Census and each local organization’s website. The Government Census includes the senior population ratio of people over age 65 and their experience of natural disaster in 2013. The number of emergency managers and the existence of an emergency management department come from each organization. Table 1 describes the variables, measures, and data sources.

#### Political Homophily

Based on the election statistics, political homophily was measured in two ways. First, the elected official of each municipality, who has the primary authority in policy decision making and directs disaster response and emergency operations, was considered in terms of whether his or her political ideology was based on that of his or her party, as well as the political ideology of the leader in the neighboring municipality or the jurisdiction adjacent to the riverside.

### Table 1 Variables, Measures, and Data Sources

<table>
<thead>
<tr>
<th>Variable</th>
<th>Concept</th>
<th>Measurement</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborative arrangement</td>
<td>Collaboration</td>
<td>Coded 1 if an organization has a collaboration tie with other organization, otherwise 0</td>
<td>2015 Seoul EM Survey</td>
</tr>
<tr>
<td>Political leader</td>
<td>Political homophily</td>
<td>Coded 1 if the political identity is identical, otherwise 0</td>
<td>2014 National Election Commission report</td>
</tr>
<tr>
<td>Council members</td>
<td></td>
<td>Coded 1 if the political identity is identical, otherwise 0</td>
<td>2014 National Election Commission report</td>
</tr>
<tr>
<td>EM department</td>
<td>Internal capacity</td>
<td>Coded 1 if the existent status of emergency department is identical, otherwise 0</td>
<td>2014 Government finance yearbook</td>
</tr>
<tr>
<td>EM managers</td>
<td>Internal capacity</td>
<td>The absolute difference between the number of emergency managers $i$ and $j$</td>
<td></td>
</tr>
<tr>
<td>Ratio of safety expenditure</td>
<td></td>
<td>The absolute difference between the ratio of total safety expenditure $i$ and $j$</td>
<td>2014 Government Censuses</td>
</tr>
<tr>
<td>Riverside</td>
<td>External vulnerability</td>
<td>Coded 1 if the jurisdiction adjacent to the riverside is identical, otherwise 0</td>
<td></td>
</tr>
<tr>
<td>Natural disaster 2013</td>
<td>External vulnerability</td>
<td>Coded 1 if the experience of natural disaster 2013 is identical, otherwise 0</td>
<td></td>
</tr>
<tr>
<td>Neighboring jurisdiction</td>
<td>External vulnerability</td>
<td>The absolute difference between the number of neighboring jurisdiction $i$ and $j$</td>
<td></td>
</tr>
<tr>
<td>Ratio of over 65</td>
<td>External vulnerability</td>
<td>The absolute difference between the ratio of over 65 $i$ and $j$</td>
<td></td>
</tr>
</tbody>
</table>
political party. Seoul Metropolitan City is composed of 25 local governments, and each municipality has a chief elected official. In order to examine homophily, the similarity of the political parties between the local jurisdictions was examined. If one elected official in a jurisdiction was politically similar based on his or her political party—Republican or Democrat—to one in another jurisdiction, then the matrix cell \( ij \) indicated 1; otherwise, it indicated 0. Two political identities were identified—Republican and Democrat. In other words, the matrix cell \( ij \) was 1 if the political identity was identical; otherwise, it was 0.

The other way to measure political homophily considers the relationship between council members. Each local council has its own political committee members consisting of local councilors and proportional representatives who are all elected as local representatives. In order to identify the majority political party, the sum of the number of councilors and proportional representatives who were politically similar was calculated and the difference was compared. Three values were indicated: Republicans, an equal number of political parties, and Democrats. These were coded 1, 2, and 3, respectively. Then, depending on the similarity of their political preference, if homophily existed, the relation was coded 1. If two local jurisdictions (the matrix cells \( ij \)) were politically distant, then it was coded 0.

**Collaborative Arrangement**
Recognizing that political homophily influences interlocal collaboration networks, the 2015 Seoul Emergency Management Survey included questions for investigating the collaboration ties that were forged. The respondents were asked the following question: “Consider the full range of organizational types including local government, fire stations, and police stations in the Seoul Metropolitan City. Please list the organizations that you have collaborated with during emergency situations in order to provide assistance to victims and their communities of a disaster.” The ties forged included both in-flow and out-flow connections. During disasters, regardless of whether they were a receiver or a sender, if organizations interacted with others, they were assumed to have a relationship. In sum, the collaboration tie variables were dichotomized as symmetrizing the matrix cell \( ij \) with the maximum number.

**Control Variables**
Testing for political homophily in emergency management networks requires controlling for other elements that might affect decision-making considerations in establishing or eliminating ties. Two types of key attributes in the emergency management literature are as follows: (1) organizational capacity (Andrew and Carr 2013; Jung and Song 2015; Song et al. 2015; Valero, Jung, and Andrew 2015) and (2) vulnerability (Andrew et al. 2016; Jung 2013; Jung, Song, and Feiock 2017; Song et al. 2015; Valero, Jung, and Andrew 2015). Organizational capacity, indicating the internal capacity of response organizations to deal with disasters, includes measures of whether there is an independent emergency management (EM) department, emergency managers, and public safety expenditures. The size of the personnel for emergency management and the existence of an emergency management department are closely related to professionalism, and financial level is directly connected to the availability of resources or investment. In the measurement, the former matrix cell \( ij \) was coded 1 if the status of the emergency department was identical; otherwise, it was coded 0. The latter matrix cell \( ij \) represented the absolute difference between the number of emergency management managers \( i \) and \( j \), as did the measure for the ratio of total safety expenditures.

Vulnerability, indicating the external weakness that is susceptible to disasters, includes the measures of the ratio of the senior population for social vulnerability, the experience of natural disasters, the number of neighboring jurisdictions, and regional conditions such as a riverside location for environmental vulnerability. In disasters, seniority level is critical for evacuation and self-response, and relational conditions such as neighboring jurisdiction changes the possibility of receiving aid. Further, similar disaster experience and environmental geography such as a riverside location helps organizations that are more aware of the disaster and more resilient to the incident and environment. In the measurement, the social vulnerability matrix cell \( ij \) represented the absolute difference between the ratio of senior population \( i \) and \( j \), as did the same measure for the number of neighboring jurisdictions. The experience of natural disaster and environmental vulnerability was measured by whether there was an identical status between the organizations. If they have the same regional features, then the matrix cell \( ij \) was coded 1; otherwise, it was coded 0. The identical status of disaster experience between organizations was coded 1; otherwise, it was coded 0.

**Analytical Methods**
In this study, the unit of analysis was a dyad. A collaborative arrangement between two actors is a dyadic relationship and not an individual property. Each of the 73 respondents (25 local governments, 23 fire stations, and 25 police stations) had the potential for a collaborative tie with the other 72 organizations, yielding 2,628 observations. The intention of this collaboration was considered to be reciprocal, with in-flow relations indicating a receiver tie and out-flow relations indicating a sender tie. This was despite the existence of relational strength (Jung and Song 2015). Ties were only counted as present if they were reported by either organization.

The statistical analysis applied the technique of quadric assignment procedure (QAP) logistic regression analysis using UCINET 6.0, which allows researchers to deal with inherent problems in network data, that is, autocorrelation errors (Dekker, Krackhardt, and Snijders 2007; Huang 2014; Krackhardt 1988) and standard errors (Hanneman and Riddle 2005). Each organization answered the questions about relationships with one another, and the collaboration ties forged were not independent from one another. The QAP is also an appropriate method for analyzing dyadic network data.

The QAP test consists of two steps to explain the nonindependence of the network data. Logistic regression coefficients were computed in the usual manner. For the significance association, a null hypothesis reference distribution was generated against that which was observed from the first step by randomly permuting all rows, matching the columns of the matrix, and reprocessing the regression on the permuted matrix (Huang 2014). In our study, the test of statistical significance involved 10,000 permutations.
Results

Table 2 reports the correlation coefficients between the variables in our models. Table 3 presents the logistic regression odds ratio for a block of independent variables to indicate significance on forging collaborative ties and −2LL. Two different models were proposed: a nested basic control model without political homophily and a full model that includes political homophily variables. The value of −2LL shows that the full model (587.839), rather than the control model (615.071), is a better fit with the data. The smaller value implies a better fit between the two nested models.

The hypothesis predicted a positive relationship between political homophily and interorganizational collaboration. This hypothesis was strongly supported in our model. With regard to capturing political homophily, two variables were generated: the homophily of elected officials between jurisdictions and that of the majority party in a council. The coefficients for both measures of political homophily were significant (β = .828, 1.107, p < .01). Holding other variables at a fixed value, the odds of establishing collaborative arrangements for similarity between chief elected officials of municipalities were approximately 129 percent higher than the odds for heterogeneous relations, and the odds for the similarity of propensity of council members were roughly 203 percent higher than the odds for heterogeneous relations, implying that political homophily increases the possibility of facilitating collaborations.

Similarities in environmental or social vulnerability also affected the possibility of interorganizational collaborations. Similar features, such as a riverside location, enabled actors to share their understandings about the external environment (OR = 1.973). Similarly, experience sharing in previous years had a positive effect on establishing relations among other organizations. The odds of being connected in collaborative networks for the same experience of a natural disaster were 99 percent higher than the odds for dissimilarity. When controlling for other variables (OR = .666), the odds ratio of being connected in collaboration with the difference in the number of emergency management managers across organizations in the full model indicated that interorganizational collaboration was associated with a 33 percent reduction in the one-unit difference between the managers of two organizations. The findings show that an organization that has an emergency management department is more likely to collaborate with another that has an emergency management department. Furthermore, the fewer the differences among emergency management managers between organizations, the more likely it is there are collaborative ties that will be present in emergencies.

The finding of similarities between elected officials and council members as a measure of political homophily demonstrates that interorganizational collaboration is promising. This relationship has been overlooked in the emergency management sector. Although political actors are involved in the chain of command in emergency management, the operation of emergency management is seemingly separated from political decision making, but the emergency operational mechanism cannot be separated from it.

The other homophily factors are supported in our model to enhance interorganizational collaborations in emergency management networks. In both modes, control variables are significant except for safety expenditures. Overall, the homophily factors are generally significant for collaborative emergency networks. The similarity of the internal capacities, such as the existence of an emergency management department and the number of emergency management managers, affected tie creation among emergency management organizations. In terms of percent change, the results in the full model show that when holding other variables fixed, the odds for the similarity of the existence of the emergency management department were about 128 percent higher than the odds for dissimilarity. When controlling for other variables (OR = .666), the odds ratio of being connected in collaboration with the difference in the number of emergency management managers across organizations in the full model indicated that interorganizational collaboration was associated with a 33 percent reduction in the one-unit difference between the managers of two organizations. The findings show that an organization that has an emergency management department is more likely to collaborate with another that has an emergency management department. Furthermore, the fewer the differences among emergency management managers between organizations, the more likely it is there are collaborative ties that will be present in emergencies.

Table 2 QAP Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborative arrangement</td>
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<tr>
<td>Political leader</td>
<td>.095**</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Council members</td>
<td>.156**</td>
<td>.112</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>EM department</td>
<td>.168**</td>
<td>.021</td>
<td>.17**</td>
<td></td>
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<tr>
<td>EM managers</td>
<td>−.205**</td>
<td>−.09</td>
<td>−.122**</td>
<td>−.185**</td>
<td></td>
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<tr>
<td>Safety expenditure ratio</td>
<td>−.080**</td>
<td>−.350**</td>
<td>−.196**</td>
<td>−.056**</td>
<td>.443**</td>
<td></td>
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</tr>
<tr>
<td>Riverside</td>
<td>.153**</td>
<td>.064</td>
<td>.13**</td>
<td>.194**</td>
<td>−.271**</td>
<td>−.107**</td>
<td></td>
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<tr>
<td>Natural disaster 2013</td>
<td>.126**</td>
<td>−.011</td>
<td>.049</td>
<td>−.009</td>
<td>−.06*</td>
<td>−.076*</td>
<td>−.013</td>
<td></td>
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<tr>
<td>Neighboring jurisdiction</td>
<td>−.141**</td>
<td>.098</td>
<td>.027</td>
<td>−.059*</td>
<td>.026</td>
<td>−.003</td>
<td>−.054</td>
<td>.001</td>
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<tr>
<td>Ratio of over 65</td>
<td>−.223**</td>
<td>−.143**</td>
<td>−.086*</td>
<td>−.412**</td>
<td>.096*</td>
<td>.145*</td>
<td>−.182**</td>
<td>−.072*</td>
<td>.169**</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05; **p < .01 (two-tailed).

Table 3 Analysis Results of QAP Logistic Regression Models

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1 (Control variable)</th>
<th>Model 2 (H: Political homophily)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political leader</td>
<td>2.288***</td>
<td>2.288***</td>
</tr>
<tr>
<td>Council members</td>
<td>3.025***</td>
<td>3.025***</td>
</tr>
<tr>
<td>EM department</td>
<td>2.090**</td>
<td>2.284***</td>
</tr>
<tr>
<td>EM managers</td>
<td>.626***</td>
<td>.666***</td>
</tr>
<tr>
<td>Ratio of safety expenditure</td>
<td>.820</td>
<td>1.189</td>
</tr>
<tr>
<td>Riverside</td>
<td>2.281***</td>
<td>1.973**</td>
</tr>
<tr>
<td>Natural disaster 2013</td>
<td>2.623***</td>
<td>1.990***</td>
</tr>
<tr>
<td>Neighboring jurisdiction</td>
<td>.636***</td>
<td>.632***</td>
</tr>
<tr>
<td>Ratio of over 65</td>
<td>.328***</td>
<td>.350***</td>
</tr>
<tr>
<td>Intercept</td>
<td>.112</td>
<td>.031</td>
</tr>
<tr>
<td>N</td>
<td>2,628 (615.071)</td>
<td>587.839</td>
</tr>
<tr>
<td>−2LL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.448</td>
<td>.492</td>
</tr>
</tbody>
</table>

Average ties of 73 network organizations = 3.26.

Odds ratio (OR) is reported.

*p < .10; **p < .05; ***p < .01.
negative effect on interorganizational collaboration. A collaborative arrangement is associated with a 65 percent reduction in the one-unit difference of the seniority ratio across jurisdictions in the full model.

Figure 1 indicates that the emergency management network of municipalities in the Seoul Metropolitan City is somewhat less centralized (network centralization: 0.082). These horizontal response networks are decentralized compared with the hierarchical networks in general (Song and Jung 2015; Jung, Song, and Feiock 2017; Jung and Song 2015). Further, the political networks show that collaboration among political homophily is more active.

Discussion
The results of the empirical analysis show that political homophily enhances the likelihood of interorganizational collaboration in emergency management networks. This finding underscores the fact that local jurisdictions with elected officials or council members who have similar political ideologies are more likely to collaborate with one another in emergencies than those with different political ideologies. Political homophily lowers the transaction costs associated with engaging in institutional collective action, even in settings in which one might not be aware of political considerations such as emergency management.

In light of the theoretical extension of the ICA framework, this study was aimed at empirically testing whether political homophily in emergency management is associated with interorganizational relations. The previous argument presented by scholars doing institutional homophily research was based on the form of government, such as mayor-council or council-manager, but there is no current study that investigates political homogeneity in partisan affiliations between leaders. The only research to account for aspects of political similarities are a couple of studies in urban planning (Gerber, Henry, and Lubell 2013; Jung and Song 2015). Despite the prominent role of political homophily in collaboration theory, no previous work on emergency collaboration in public administration has systematically examined its effects.

Simply put, this study confirmed the evidence of the political mechanism of collective action in emergencies that promotes the likelihood of forging ties between politically similar actors. Political homogeneity in the partisan affiliation of representatives curtails the transaction costs of interorganizational collaboration and enhances the possibility of generating collaboration ties.

In addition, the study provided empirical grounds for the core hypothesis of the ICA framework to minimize the transaction costs of collective action and mitigate collaboration risks. Interorganizational collaboration in emergency management is accelerated with political, internal capacity, geographic, and sociodemographic homogeneity, and those who are similar face lower transaction costs associated with collaboration risk over mutual benefits. Each political partisan affiliation has their own priorities when dealing with emergency management and political solidarity reduces the likelihood that other collaborators will defect. The homophily effect studied here implies that similarities among collaborators provide a better understanding of the specific environmental or social features because similarity enables the sharing of more knowledgeable information and reduces relational risks. Despite the existence of relational risk, it is also necessary that fragmented actors collaborate, especially in voluntary networked relations of emergency management. Similarity that derives from the homophily of political ideology is reinforced in order to draw a common picture of disaster response in which others’ behavior is more predictable and reliable. The perceived level of defection risk during the unexpected situations is therefore lowered. Further, political actors are involved in diverse policies beyond public safety and emergency management, and the potential multilateral relationship with their partner municipalities may decrease the possibility of betrayal behavior (Feiock 2013).

Lastly, this study is believed to fill the lacuna of political characteristics within emergency management. Despite political leaders positioning emergency operations as an issue for commanders, the attributes of political partisanship have not been studied. The decision making of political leaders leads to different policy adoptions and operations in terms of emergency management. Political homophily therefore encourages organizations to easily collaborate with those who are politically similar. This eventually reduces transaction costs deriving from collaboration risks including defection, division, and lack of coordination.

Conclusion
The findings are based on the horizontal collaborations among local-level organizations instead of the hierarchical networks. Political partisanship is more entangled and complex in hierarchical networks, and its effect might differ. Furthermore, comparisons of the political homophily effect between horizontal and hierarchical networks are surely interesting. As the first step of investigating its effect in horizontal emergency management networks, our findings provide the homophily effect of political partisan affiliation on self-organized collaboration among locally fragmented authorities.
Emergency management operations are embedded in highly networked settings that require the appropriate collaboration in patterns of interdependence in a timely manner. Unexpected emergency situations that are directly connected to the level of casualties require a quick but appropriate response; therefore, the collaboration risk perceived by the responders may be high enough to hinder the ability to establish and/or sustain a networked group. However, active collaboration is indispensable for effectively managing disasters situations. This study has explored networked collaborations, focusing on the following three understood ideas: (1) collaboration risk associated with institutional collective action, (2) political similarity among actors and its influence on the possibility of joining networking groups, and (3) relations of embeddedness deriving from a network structure.

Similarity between actors, especially political homophily that is closely engaged in decision-making processes prior to organizational implementation, has been discussed as a factor that might facilitate interorganizational collaboration, but it has not been tested in empirical work. Furthermore, the properties of the network structure have an influence on risk level. The existence of a perceived collaboration risk is significant when forming a networked collaboration, and it can be relieved when actors’ characteristics are similar and/or the relational embeddedness in the networks functions effectively.

The study concludes that political homophily enhances the likelihood of interorganizational collaborations in emergency management networks. The findings underscore the fact that local jurisdictions whose political party of elected officials or council members as local representatives are similar are more likely to collaborate with one another in emergencies than those whose political party differs. It contributes to providing empirical grounds for the core hypothesis of the ICA framework to minimize the transaction costs of collective action and fills the lacuna of political characteristics within emergency management. In future research, the dynamics of political homophily and the role of legal and administrative discretion should be considered as the key factor when examining interorganizational collaboration. This research also presents a critical recommendation for emergency managers in practice, highlighting that effective interlocal collaboration for the timely response to a disaster is attributable to political similarities facilitating frequent interlocal interactions through formal and/or informal agreements.

Nevertheless, this study has several limitations. Despite its effort to measure the effect of political homophily on collective action, this dyad-based study only captures the political relations between different jurisdictions. As an actor-based study of internal political homophily, we can consider the similarity of elected officials and council members in one jurisdiction to be another benchmark of measurement. This might be intriguing and novel but it is a task for future studies.

Problems of generalization exist in this study since the scope is limited to the Korean peninsula, specifically the Seoul Metropolitan City. Although it exemplifies the effect of political homophily on forming collaboration networks, this study may not be generalizable to different contexts, as in the United States. It nonetheless makes a contribution to inspiring other similar studies to examine political homophily. Future replicable studies may reinforce the effect of political homophily on collaborative emergency networks.

Acknowledgments
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Notes
1. A focusing event is “an event that is sudden; relatively uncommon; can be reasonably defined as harmful or revealing the possibility of potentially greater future harms; has harms that are concentrated in a particular geographic area or community of interest; and that is known to policy makers and the public simultaneously” (Birkland 1998, 54).
2. The list of emergency managements organizations was established in a 2012 survey based on the response of 25 local governments in the Seoul Metropolitan City. All 25 local governments were asked to name up to three organizations with which they generally collaborated during unexpected events (Jung, Kim, and Song 2014; Jung et al. 2014; Song and Jung 2015).
3. At the local level in the Seoul Metropolitan City, all elected officials and council members are either Democrats or Republicans. Further, the South Korean election system is a multiparty system. However, in general, there are two dominant parties: Republicans and Democrats.
4. In June 2014, there were Korean local elections for positions including local councilors, proportional representatives of local council members, and principals of municipalities.

References


