Examining the Role of Communication Activities in Perceived Collective Efficacy and Neighborhood Violence

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This study examines two communication-based sources of neighborhood collective efficacy: communication ties with neighbors and local media use. Data from a Web survey of Chicago residents reveal that communication characterized by weak and strong ties has a positive association with perceived collective efficacy. Data also show a positive link between attention to neighborhood social news and perceived collective efficacy. Weak- and strong-tie communication and attention to neighborhood social news also have indirect negative relationships with perceived violence in the neighborhood through perceived collective efficacy. Implications are discussed for the role of interpersonal and mediated communication in neighborhood safety.

Keywords: collective efficacy, weak ties, communication, social news, neighborhoods

Existing literature indicates that collective efficacy—the willingness of residents to regulate disruptive behaviors—is a key to neighborhood safety and order (e.g., Sampson, 2012; Sampson, Morenoff, & Gannon-Rowley, 2002). Collective efficacy is characterized by two intertwined dimensions: informal social control (e.g., monitor suspicious activities, intervene in inappropriate behaviors) and social cohesion (e.g., working trust, shared values). The premise is that residents' willingness to exercise informal social control is realized when they develop shared expectations for the common good and working trust in one another's ability to take action.

Research provides support for the role of collective efficacy in reducing neighborhood violence and crime. Yet there is still room for theoretical extensions, including a further exploration of antecedents to collective efficacy. Particularly, more research is needed on the role of communication in collective efficacy and neighborhood social control processes. Although evidence shows a link between local social ties and the social control ability of neighborhoods (e.g., Bellair, 1997; Silver & Miller, 2004; Warner, 2003), this line of research approaches social ties broadly, such as the frequency of "getting together" and the number of close friends, with limited attention to communication activities as unique elements of social ties. Furthermore, despite the evidence that local mass media foster residents' voluntary action and shared values for collective goods (e.g., Fleming, Thorson, & Peng, 2005; Yamamoto, 2011), previous research has not specifically examined the role of local mass media in neighborhood social control and safety.

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It is against this background that the present study channels its theoretical focus on interpersonal and mediated communication. The motivation to study communication in this context is clear. Through everyday communicative interaction, residents can develop mutual dependency and familiarity that lubricate a peaceful and cooperative living climate and direct and indirect learning of the normative culture (Forrest & Kearns, 2006; Kleinhans, 2009). Because residents cannot learn everything that occurs in their neighborhoods by themselves, local media can also play a vital role in both transmitting information about local residents and groups and communicating symbolic messages about norms and values shared in the neighborhood.

The goal of this study is to address this limitation in the literature. Specifically, I draw from communication infrastructure theory (CIT) to focus on two locality-based communication variables—weak-tie communication and neighborhood social news—as sources of perceived collective efficacy. In addition to assessing the direct relationships, weak-tie communication and neighborhood social news are hypothesized to have indirect negative links with perceived neighborhood violence through perceived collective efficacy. To test these expectations, data from an online panel of Chicago residents are analyzed. If collective efficacy is norm-enforcing social action nourished through working trust and shared values, where does it actually come from? How do neighborhoods foster such action and shared culture in pursuit of public safety? Since collective efficacy is a social property of neighborhoods (Sampson, 2012; Sampson, Raudenbush, & Earls, 1997), it does not likely occur in a vacuum and rather must be embedded within the social processes of neighborhoods. The findings of this study will deepen our understanding of the role of communication in neighborhood social control processes.

The Role of Communication in Neighborhood Processes

The role of communication in locality-based civic action can be examined from the perspective of communication infrastructure theory. Communication infrastructure refers to a storytelling network embedded in a residential neighborhood (Kim & Ball-Rokeach, 2006a). Storytelling is communicative in that residents construct identity as members of a neighborhood through everyday communication practice (Kim & Ball-Rokeach, 2006a). This process involves three storytelling agents: residents, local media, and community organizations (Kim & Ball-Rokeach, 2006a, 2006b). These storytelling agents are unique assets grounded in residential neighborhoods. When the storytelling agents are rich and active, they generate social resources that serve as a fertile ground to facilitate civic action (Kim & Ball-Rokeach, 2006a).

Influences of the storytelling agents on neighborhood life are manifested at different levels. CIT focuses on micro- and meso-level storytelling influences on geographic areas. As micro-level storytellers, residents participate in community identity building through everyday talks about topics such as schools, crime, traffic, weather, lawns, and road construction (Kim & Ball-Rokeach, 2006a). As meso-level storytellers, community organizations foster civic mindedness in members through conversations about community heritage, events, issues, and challenges and, by doing so, bridge the members with other community members (Kim & Ball-Rokeach, 2006a). Finally, local media as meso-level storytellers contribute to storytelling resources by reporting daily happenings in local communities, highlighting the activities of local residents, groups, and organizations and providing opportunities for residents to talk

about community stories (Kim & Ball-Rokeach, 2006a). These storytelling agents play a unique role in generating community resources that residents can draw upon in daily living and to facilitate their engagement with local communities.

Drawing from CIT, the present study focuses on weak-tie communication among residents and neighborhood social news as antecedents to perceived collective efficacy. The examination differs from the traditional CIT literature in a few important respects. First, CIT work typically focuses on the frequency of discussion with others about a neighborhood as ways to measure interpersonal-level neighborhood storytelling (Chen et al., 2013; Kim & Ball-Rokeach, 2006b; Ognyanova et al., 2013). This study (described in more detail below) adopts a multidimensional approach to interpersonal communication among residents. Second, I place a specific emphasis on neighborhood social news to investigate local media storytelling. This type of news has been used implicitly as part of local media storytelling in past research (Kim & Ball-Rokeach, 2006b). Based on community newspaper scholarship (e.g., Janowitz, 1967), I enhance this aspect of local news to approach local media storytelling. Finally, when CIT research examines collective efficacy in relation to locality-based communication, it tends to focus on the informal social control dimension (Chen et al., 2013; Kim & Ball-Rokeach, 2006b; Ognyanova et al., 2013). This study adopts Sampson et al.'s (1997) collective efficacy measure and assesses the relationships interpersonal communication among residents and neighborhood social news have with perceptions of neighborhood violence through perceived collective efficacy.

Communication Ties

A basic definition of communication ties can stem from social network literature. A social network refers to any form of social structure (e.g., organization, classroom, professional association, friend group) made up of a set of nodes, or social actors that constitute the network, and a set of dyadic ties, or links between each pair of nodes (Wasserman & Faust, 1994). These ties are social in nature. Communication research examines the communicative dimensions of a tie to describe how social actors are related to one another in nuanced detail (Parks, 2011).

One common way to study social ties is to examine the strength of a tie. According to Granovetter (1973), the strength of a tie can be studied by a "combination of the amount of time, the emotional intensity, the intimacy (mutual confiding) and reciprocal services that characterize the tie" (p. 1361). Various indicators have been used to operationalize the strength of a tie, such as the frequency of contact, the duration and closeness of a relationship, and self-disclosure (e.g., Marsden & Campbell, 1984; Mathews, White, Long, Soper, & von Bergen, 1998).

The underlying assumption of this approach is the unidimensional view of social ties. Stated differently, a social tie is placed on a single continuum. A tie is strong on one end of the continuum and weak on the opposite end. For example, if one often confides in a neighbor, the tie with the neighbor is relatively strong. If one infrequently confides in a neighbor, then the tie with the neighbor is relatively weak. Likewise, if one frequently says hello to a neighbor, the tie between the two is relatively strong. If one does so infrequently, the tie is relatively weak.

Although common, this bipolar approach may miss the conceptually distinct nature of a social tie. Using Granovetter's definition, the first example above (i.e., confide to a neighbor) can be reasonably considered an indicator of a strong tie. If one confides to neighbors more or less often, such variations then should be understood in terms of the relative strength or weakness of this particular strong tie, not in terms of the strength of a tie on a bipolar continuum. That is, more frequent confiding to a neighbor can be interpreted as the relative strength of this strong tie, whereas less frequent confiding to a neighbor can suggest the relative weakness of this strong tie. In contrast, the second example (i.e., a greeting a neighbor) can be viewed as an indicator of a weak tie. More frequent greetings to a neighbor can be interpreted as the relative strength of this weak tie, whereas less frequent greetings can indicate the relative weakness of this weak tie.

It is, hence, possible that weak and strong ties coexist in different dimensions. As supportive evidence for this conception, Wellman and Wortley (1990) discovered that social ties were differentiated by intimacy, voluntariness, and multiplexity and that strong and weak ties played different social support functions. Henning and Liebert (1996) defined weak ties as "unpretentious everyday contacts in the neighbourhood" (p. 6) characterized by more superficial forms of communication, such as exchanging greetings and stopping to talk to neighbors. They found that, on average, respondents had 12 such weak ties, compared to three strong ties, or persons important to respondents, in the neighborhood. Most strong ties were located outside their residential areas. Respondents also noted that weak ties were important mainly in terms of a feeling of home and security. Only 10% said weak ties were of little or no importance.

The difference between strong and weak ties is consistent with the literature on interpersonal communication. For example, research on stages of relational development indicates that communicative interaction typically begins with shallow, superficial topics and patterns and progress to deeper, more intimate topics if one decides to further a relationship (e.g., Altman & Taylor, 1973). Yet, in this process, people strategically decide which types of information they share with others (Petronio, 2002) as they constantly negotiate tensions between competing values such as openness and closeness (Montgomery & Baxter, 1998). The existing literature, thus, suggests that communication does not necessarily progress in a unidirectional, linear fashion from distant to intimate forms. And the assumption that kinships and friendships are strong ties and acquaintances are weak ties may overlook the nuanced nature of interpersonal communication. In fact, research has reported that people sometimes prefer sharing intimate, personal information with distant others (Wright & Miller, 2010). Directly examining the qualitatively different forms of communication that residents perform in daily life with neighbors may help address these issues. In this article, communicative interaction characterized by weak ties is referred to as *weak-tie communication*, and communicative interaction characterized by strong ties is referred to as *strong-tie communication*.

A Linkage of Weak- and Strong-Tie Communication and Collective Efficacy Theory

A multidimensional examination of communication ties aligns with the notion of collective efficacy and, more broadly, community social control. A key to community social control is informal social control derived from the voluntary action of residents to enforce local norms, including informal surveillance and

direct and indirect intervention (Greenberg & Rohe, 1986). The capacity of residents to control criminal acts is conventionally linked to the strength and interdependence of locality-based social ties (Sampson & Groves, 1989). In this tradition of research, informal social control is derived from strong ties (Kasarda & Janowitz, 1974). Dense, affection-based strong ties can serve to regulate the behavior of individuals in the forms of, for example, direct criticism, ridicule, and exclusion (Hunter, 1986).

Yet such strong social ties may not be prevalent in contemporary neighborhoods. Changes in society, such as suburban sprawl, the development of transportation means; the growth of social media, mobile phones, and e-commerce; and diversified lifestyles and work schedules have transformed the nature of locality-oriented social ties, which are increasingly characterized by anonymous, casual, and instrumental relationships that require little intimacy, time commitment, and emotional closeness (Bellah, Madsen, Sullivan, Swidler, & Tipton, 2007; Guest & Wierzbicki, 1999; Paxton, 1999). Such personal needs and wants as friendships and emotional support can be met outside the neighborhood through communication with others at work or in distant locations via social media and mobile devices. While strong ties still exist in the neighborhood, weak ties are equally, and possibly more, prevalent and deserve attention in neighborhood social control processes.

Recognizing a shift in the nature of locality-based social ties, Sampson et al. (1997) advanced the notion of collective efficacy, arguing that the willingness of residents to uphold local norms can be realized without dense strong ties. As residents develop the common expectations for the realization of neighborhood well-being and working trust in others' ability to take action, they can exercise effective informal social control. Research indicates that collective efficacy reduces violence and crime (e.g., Morenoff, Sampson, & Raudenbush, 2001; Sampson et al., 1997). It can be argued that it is a key social mechanism that helps realize neighborhood safety.

One question, then, concerns how such mutual dependency and expectations can be cultivated. A potential source, the current study predicts, is the casual communication activities that residents engage in with neighbors. Communication, in both verbal and nonverbal forms, is an important source of social capital, which can refer to "features of social life—networks, norms, and trust—that enable participants to act together more effectively to pursue shared objectives" (Putnam, 2000, pp. 664–665). When residents casually communicate with neighbors over fences, on streets and porches, in playgrounds, and at local stores in their daily living, they form mutual dependency and familiarity. Such communicative interaction directly transmits or symbolically embodies the normative culture shared and endorsed in the neighborhood (Kim & Ball-Rokeach, 2006a, 2006b; Matsaganis, 2007). Thus, by monitoring what neighbors talk about and how they talk and behave, residents can learn common norms and values, all of which enable them to live harmoniously alongside one another and cooperate when common interests that they share by simply living in the same area are at stake (Kleinhans, 2009).

Yet this process may not necessarily require strong-tie communication. Research suggests that emotionally intense strong ties can fuel conflict (Cooney, 1998), which may limit residents' ability to act for a collective good. Pattillo-McCoy (1999) argued that tight-knit social ties foster social cohesion, but also impede a neighborhood's effort to address gang-related crime. These insights suggest that social ties are not always and uniformly positive in nature. It is possible that certain forms of social ties foster

collective efficacy, but others may not. Forrest and Kearns (2001) noted that "the less robust and less deep-rooted are neighbourhood networks, the more stable and conflict-free may be the social order in which they sit" (p. 2134). From this perspective, weak-tie communication can be a fertile social mechanism by which collective efficacy can be meaningfully cultivated.

One line of research, particularly studies grounded in CIT, examines the role of communication in neighborhood collective efficacy (e.g., Kim & Ball-Rokeach, 2006a, 2006b; Chen et al., 2013; Matsaganis, 2007; Matsaganis & Wilkin, 2015; Yamamoto, 2015). For example, Yamamoto (2015) revealed that neighborhoods characterized by a denser network of weak-tie communication had higher levels of collective efficacy and, consequently, showed lower levels of crime and disorder. Despite the empirical support, his study measured weak-tie communication only with a single item asking respondents how often they stopped to exchange greetings and chat with neighbors. The present study, although limited to individual-level analysis, addresses this limitation in the previous research.

A Linkage of Local Social News and Collective Efficacy Theory

The present study also considers neighborhood social news as another source of collective efficacy, which is defined here as news items that focus on the activities of local residents and groups such as schools, churches, and clubs. The definition depends heavily on community journalism literature (Edelstein & Larsen, 1960; Janowitz, 1967; Jeffres, Cutietta, Lee, & Sekerka, 1999; Lauterer, 2006; Rosenberry, 2015). It indicates that community press content is characterized by a stable, coherent, and recurrent pattern of messages, with a high concentration of news on local groups, such as youth, school, religious, and civic associations and organizations, and social and personal news spotlighting the activities and achievements of local residents such as weddings, anniversaries, and births (Edelstein & Larsen, 1960; Janowitz, 1967; Lauterer, 2006; Rosenberry, 2015).

Locality-focused news is theoretically important in its own right as an antecedent to collective efficacy. In all likelihood, residents cannot keep track of all community issues and events through interpersonal communication, even if they have dense communication networks. Interpersonal communication is not a functional substitute for local media, which are dedicated to reporting local issues and events with professional training and privileged access to information sources (Demers, 1996). In fact, a long line of research has investigated the role of community media in social control and finds that local media serve to maintain the order of a community through the selective distribution of conflict (e.g., Donohue, Tichenor, & Olien, 1973).

Neighborhood social news likely fosters collective efficacy, because its social and personal nature and tone can cultivate mutual familiarity and civic action. In his seminal study of urban community press, Janowitz (1967) reported that local social and personal news not only strengthened existing mutual connections and feelings but also made it easy for newcomers and residents with limited social connections to vicariously know, and develop feelings toward, other local residents and groups—or what can be called "pseudo-involvement" or "substitute gratification" (p. 151). Mutual familiarity that social news can promote in this way would also likely foster working trust and one's willingness to act for a collective good. In fact, research has shown that local media use is positively related to locality-oriented

social ties, trust, and voluntary action (Beaudoin & Thorson, 2004; Edelstein & Larsen, 1960; Finnegan & Viswanath, 1988; Fleming et al., 2005; Viswanath, Finnegan, Rooney, & Potter, 1990).

News not only transmits directly observable, descriptive information that informs audiences but also communicates cultural meaning that functions as a normative integration mechanism (Bird & Dardenne, 1997; Breed, 1958; McQuail, 1987). Research has determined that local news characterized by a strong emphasis on social news functions to maintain and reinforce the normative culture of a community (Breed, 1958; Edelstein & Larsen, 1960; Janowitz, 1967). For instance, a news story about local students donating unworn clothing and preparing meals for the homeless not only transmits factual details but also contains an added layer of meaning such as the importance of kindness. Although factual details presented in news change every day, a narrative underlying social news is more stable and enduring (Bird & Dardenne, 1997; Edelstein & Larsen, 1960; Janowitz, 1967; Rosenberry, 2015). Through interaction with social news, audiences can symbolically learn the norms and values shared in the neighborhood. Research has shown a linkage of social news and social cohesion characterized by such indicators as common values, cooperation, and collective responsibilities (Yamamoto, 2011).

Goals of the Study

In sum, the preceding reviews suggest that weak-tie communication can be a fertile context in which collective efficacy can flourish, even with limited strong-tie communication. With a focus on individual-level analysis, the first hypothesis states that the frequency of weak-tie communication will be positively related to perceived collective efficacy. Although strong ties are not central in collective efficacy theory, research has shown that they still matter in fostering collective efficacy (Morenoff et al., 2001). Therefore, the frequency of strong-tie communication is expected to be positively related to perceived collective efficacy. The present study also posits that neighborhood social news can foster perceived collective efficacy, independent of weak- and strong-tie communication, because it offers opportunities for residents to know other residents and local groups and learn the normative culture of a neighborhood. To precisely capture one's level of involvement with social news, an attention-based measure is used to test this hypothesis. Perceived collective efficacy is then predicted to be inversely related to perceived neighborhood violence. Finally, the above hypotheses indicate that weak- and strong-tie communication and neighborhood social news, respectively, will have a negative indirect relationship with perceived neighborhood violence through perceived collective efficacy. A summary of the hypotheses is presented in Figure 1.
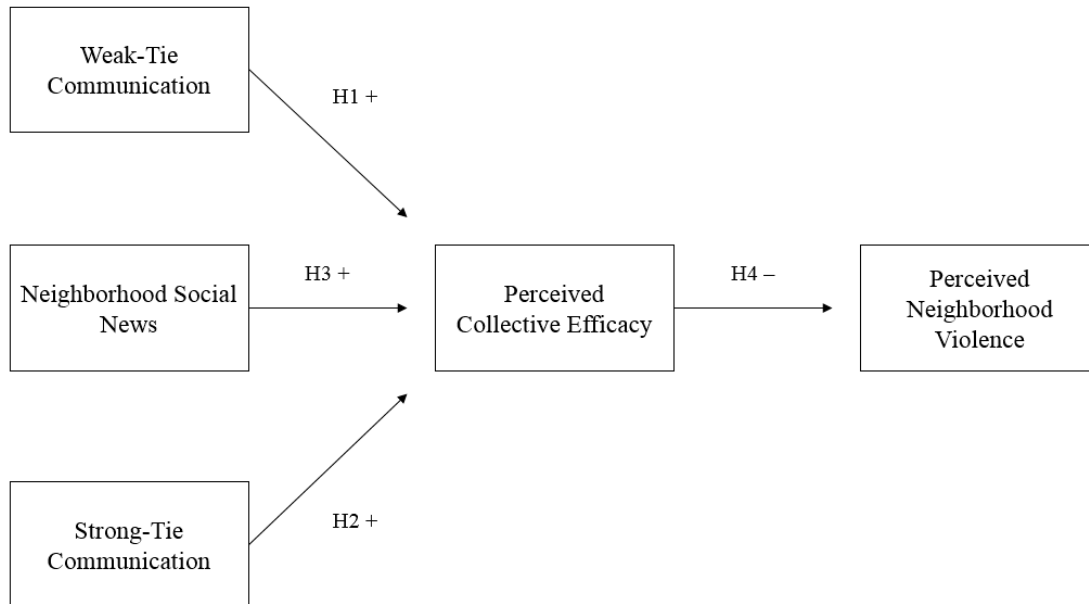
H5: Weak-tie communication > perceived collective efficacy > perceived neighborhood violence.
H6: Strong-tie communication > perceived collective efficacy > perceived neighborhood violence.
H7: Attention to neighborhood social news > perceived collective efficacy > perceived neighborhood violence.

Figure 1. A theorized model.

H1:   *The frequency of weak-tie communication will be positively associated with perceived collective efficacy.*

H2:   *The frequency of strong-tie communication will be positively associated with perceived collective efficacy.*

H3:   *Attention to neighborhood social news will be positively associated with perceived collective efficacy.*

H4:   *Perceived collective efficacy will be negatively associated with perceived neighborhood violence.*

H5:   *The frequency of weak-tie communication will have an indirect negative association with perceived neighborhood violence through perceived collective efficacy.*

H6:   *The frequency of strong-tie communication will have an indirect negative association with perceived neighborhood violence through perceived collective efficacy.*

H7:   *Attention to neighborhood social news will have an indirect negative association with perceived neighborhood violence through perceived collective efficacy.*

Method

Data for this study came from online panels of participants living in Chicago. The sample was obtained from Qualtrics and matched with 2010 census parameters of the city in terms of age, gender, and race. An online survey was administered in late April and early May 2015 (*N* = 538). At the start of the survey, respondents were asked to answer a multiple-choice question about their city of residence. Those who selected Chicago continued to answer the remaining survey questions. Respondents who did not select Chicago were taken to the end of the survey. The sample was distributed similarly to the population in age (census median = 32.9; sample median = 40.0), gender (census: male = 48.5% and female = 51.5%; sample: male = 48.5% and female = 51.5%), and race (census: White = 45.0%, Black or African American = 32.9%, American Indian = 0.5%, Asian = 5.5%, and some other race = 13.4%; sample: White = 45.2%, Black or African American = 31.4%, American Indian = 1.1%, Asian = 13.9%, and some other race = 8.4%).

Measures

Five items were adapted from previous research to measure *perceived violence* (Sampson et al., 1997). Respondents were asked, on a 4-point scale (1 = *never*; 4 = *often*), how often each of the following had occurred in their neighborhood during the past six months: a fight in which a weapon was used, a violent argument between neighbors, a gang fight, a sexual assault or rape, and a robbery or mugging. Responses were combined to form an additive scale (*M* = 8.02, *SD* = 3.36, α = .89).

Based on Sampson et al.'s (1997) study, the measure of *perceived collective efficacy* consisted of two dimensions: informal social control and social cohesion. Informal social control was measured by five items asking respondents, on a 5-point scale (1 = *very unlikely*; 5 = *very likely*), how likely it was that people in their neighborhood would act in different manners if a group of neighborhood children were skipping school and hanging out on street corner; if some children were spray-painting graffiti on a local building; if a child was showing disrespect to an adult; if there was a fight in front of your house and someone was being beaten or threatened; and if the fire station closest to your home was going to be closed by the city because of budget cuts. Social cohesion was measured by asking respondents to indicate, on a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*), the extent to which they agreed or disagreed with five statements: this is a close-knit neighborhood; people around here are willing to help their neighbors; people in this neighborhood generally don't get along with each other (reverse-coded); people in this neighborhood don't share the same values (reverse-coded); and people in this neighborhood can be trusted. Responses to each set of items were combined to create additive informal social control and social cohesion scales. The two variables were then combined into an additive perceived collective efficacy scale (*M* = 35.55, *SD* = 6.81, Spearman-Brown coefficient = .75).

Based on the conceptual and empirical guidance discussed above (Forrest & Kearns, 2001; Henning & Liebert, 1996), four items were used to measure the *frequency of weak-tie communication*. Respondents were asked, on a 5-point scale (1 = *never*; 5 = *very often*), how often they engaged in each of the following with their neighbors: exchange greetings (e.g., how are you, hello, good morning) with neighbors; smile or wave at neighbors when you see them on the street; chat with neighbors about miscellaneous topics (e.g., weather, lawn, pet); and chat with neighbors about things happening in their neighborhood. These activities can be performed with little intimacy and emotional closeness. Responses were combined to create an additive scale (*M* = 13.71, *SD* = 3.80, α = .90).

Based on the conceptual guidance and previous empirical measures (Marsden & Campbell, 1984; Mathews et al., 1998; Sampson et al., 1997), two items were employed to measure the *frequency of strong-tie communication*. Respondents reported, on a 5-point scale (1 = *never*; 5 = *very often*), how often they confided personal information to a neighbor and asked neighbors about personal topics such as child rearing or job openings. Responses were combined to form an additive scale (*M* = 4.56, *SD* = 1.99, Spearman-Brown coefficient = .75). To evaluate the dimensionality of the items used to measure weak- and strong-tie communication, I performed principal component analysis with promax rotation. This analysis yielded a two-factor solution. The first component explained 61.37% of the variance with the eigenvalue of 3.68: exchange greetings (0.95), smile or wave (0.91), chat with neighbors about miscellaneous topics (0.84), and chat with neighbors about things happening in the neighborhood (0.78). The second component accounted for 17.38% of the variance with the eigenvalue of 1.04: confide to a neighbor (.93) and ask about personal topics (.86). The analysis showed no signs of cross-loadings.

Three items, derived from the literature on community journalism, were used to measure *attention to neighborhood social news* (Edelstein & Larson, 1960; Janowitz, 1967; Jeffres et al, 1999; Rosenberry, 2015). Respondents were asked, on a 5-point scale (1 = *no attention*; 5 = *a lot of attention*), how much attention they paid to the activities of clubs, churches, or organizations; the activities of schools and students; and stories about residents (e.g., weddings, achievements, births) when they read, watched, or listened to news about their neighborhood in the media (e.g., newspapers, TV, radio, the Internet). Responses were combined to form an additive scale (*M* = 8.68, *SD* = 3.43, α = .84).

Based on previous research, several variables were included as statistical controls. *Age* was measured on a ratio scale (*M* = 42.49, *SD* = 15.28). *Gender* was measured with women as the high value (51.5%). *Education* was measured on an 8-point scale ranging from *less than high school* to *postgraduate or professional degree* (median = 5). *Income* was measured on a 10-point scale ranging from *less than $10,000* to *$200,000 or more* (median = 6). *Race* was coded with Whites as the high value (45.2%). *Marital status* was coded with married respondents as the high value (43.7%). *Number of children* was measured by asking respondents how many children, under age 18, lived in their household (*M* = 1.71, *SD* = 1.05). *Length of residence* was measured by the number of years respondents had been living in their neighborhood (*M* = 11.88, *SD* = 11.41). *Home ownership* was coded with homeowners as the high value (64.1%). Additionally, *perceived neighborhood racial diversity* was measured by asking how racially and ethnically diverse respondents would say their neighborhood was on a 5-point scale (1 = *not at all diverse*; 5 = *substantially diverse*) (*M* = 3.13, *SD* = 1.27). *Attention to crime news* was measured by asking respondents how much attention (1 = *no attention*; 5 = *a lot of attention*) they paid to crime (e.g.,

murder, shooting, robbery, rape) when they read, watched, or listened to news about their neighborhood (M = 4.02; SD = 1.10). Finally, *perceived neighborhood socioeconomic status* was measured using the MacArthur Scale of Subjective Social Status. Respondents were asked to place people in their neighborhood on a 10-rung ladder with 1, or the bottom of the ladder, representing people who had the least money, least education, and least respected jobs or no job, and 10, or the top of the ladder, representing people at the very top (M = 6.48, SD = 1.91).

Analytic Strategy

To test the hypotheses, two ordinary least squares regression models were estimated first. Next, the hypothesized indirect relationships were assessed with the SPSS PROCESS macro (Hayes, 2013), using 95% bootstrapped confidence intervals. Finally, path analysis was performed to test the theorized model shown in Figure 1, using the R package "lavaan" (Rosseel, 2012).

Results

The first and second columns in Table 1 show an ordinary least squares regression model where perceived collective efficacy was regressed on the control variables, the frequency of weak- and strong-tie communication, and attention to neighborhood social news. The data show that the frequency of weak- and strong-tie communication was positively related to perceived collective efficacy (β = .30, p < .001 and β = .21, p < .001, respectively). The magnitude of the regression coefficient for the frequency of weak-tie communication was stronger than that for strong-tie communication. Independent of all other variables in the model, attention to neighborhood social news was also positively related to perceived collective efficacy (β = .10, p < .05).

The third and fourth columns in Table 1 show an ordinary least squares regression model predicting perceived neighborhood violence. Independent of all other variables in the model, perceived collective efficacy was negatively associated with perceived neighborhood violence (β = −.38, p < .001). The frequency of weak-tie communication was not significantly related to variations in perceived neighborhood violence. However, the frequency of strong-tie communication was positively associated with perceived neighborhood violence (β = .16, p < .01).

Table 1. Ordinary Least Squares Regression Models Predicting Perceived Collective Efficacy.

	Perceived collective efficacy		Perceived neighborhood violence	
	B	β	*B*	β
Age	0.02	.04	0.01	.02
Sex (1 = female)	−0.30	−.02	−0.25	−.04
Education	−0.06	−.01	−0.05	−.02
Income	0.17	.05	0.01	.01
Race (1 = White)	0.74	.05	−0.27	−.04
Employed	−0.51	−.04	−0.26	−.04
Married	0.30	.02	−0.87**	−.13
Children	−0.06	−.01	0.00	.00
Length of residence	−0.01	−.02	0.02	.06
Home ownership	−0.11	−.01	−1.05**	−.15
Attention to crime news	−0.15	−.02	0.58***	.19
Perceived socioeconomic status	0.92***	.25	−0.37***	−.20
Perceived diversity	−0.20	−.04	0.27*	.10
Strong-tie communication	0.74***	.21	0.28**	.16
Weak-tie communication	0.54***	.30	0.03	.03
Neighborhood social news	0.20*	.10	0.05	.05
Perceived collective efficacy			−0.19***	−.38
R^2 (%)	42.4***		32.5***	

Note. N = 479 for perceived collective efficacy and N = 474 for perceived neighborhood violence. *B* = unstandardized regression coefficients. β = standardized regression coefficients.
*** $p < .001$. ** $p < .01$. * $p < .05$.

These results combine to suggest that perceived collective efficacy functioned to mediate the relationship that frequency of weak- and strong-tie communication and attention to neighborhood social news had with perceived neighborhood violence. Indeed, 95% bootstrap confidence intervals showed that weak- and strong-tie communication was negatively related to perceived neighborhood violence indirectly through perceived collective efficacy (point estimate = −.139, CI [−.212, −.078 and −.102], CI [−.151, −.062], respectively). Likewise, attention to neighborhood social news was negatively related to perceived neighborhood violence indirectly through perceived collective efficacy (point estimate = −.039, CI [−.091, −.0003]).

Finally, the present study conducted a path analysis to test the theorized model. The frequency of weak- and strong-tie communication, attention to neighborhood social news, perceived collective efficacy, and perceived neighborhood violence were residualized on the control variables first (see the covariance matrix in the Appendix). The model did not fit the data well: χ^2 = 17.179; df = 3; p = .000; confirmatory factor analysis (CFI) = .919; standardized root mean residual (SRMR) = .052; root mean square error of

approximation (RMSEA) = .100. Modification indices suggested a notable χ^2 decrement if the direct path from the frequency of strong-tie communication to perceived neighborhood violence were freed. Based on the evidence that strong ties can be a source of conflict (e.g., Cooney, 1998), the path was allowed to vary freely. This change drastically improved the model fit: χ^2 = 1.521; *df* = 2; *p* = .467; CFI = 1.000; SRMR = .013; RMSEA = .000). The model reproduced the analyzed matrix of associations extremely well.

The relationships presented in Figure 2 show that the frequency of weak- and strong-tie communication was positively associated with perceived collective efficacy (γ = .296, *p* < .001 and γ = .217, *p* < .001, respectively). Attention to neighborhood social news was also positively linked with perceived collective efficacy (γ = .098, *p* < .05). Perceived collective efficacy was negatively related to perceived neighborhood violence (β = −.361, *p* < .001). Turning to the indirect links, the frequency of weak- and strong-tie communication had an indirect negative link with perceived neighborhood violence indirectly through perceived collective efficacy (β = −.107, *p* < .001 and β = −.078, *p* < .001, respectively). An indirect link between attention to neighborhood social news and perceived neighborhood violence through perceived collective efficacy was also significant (β = −.035, *p* < .05). On the whole, the data provided support for all the hypotheses.
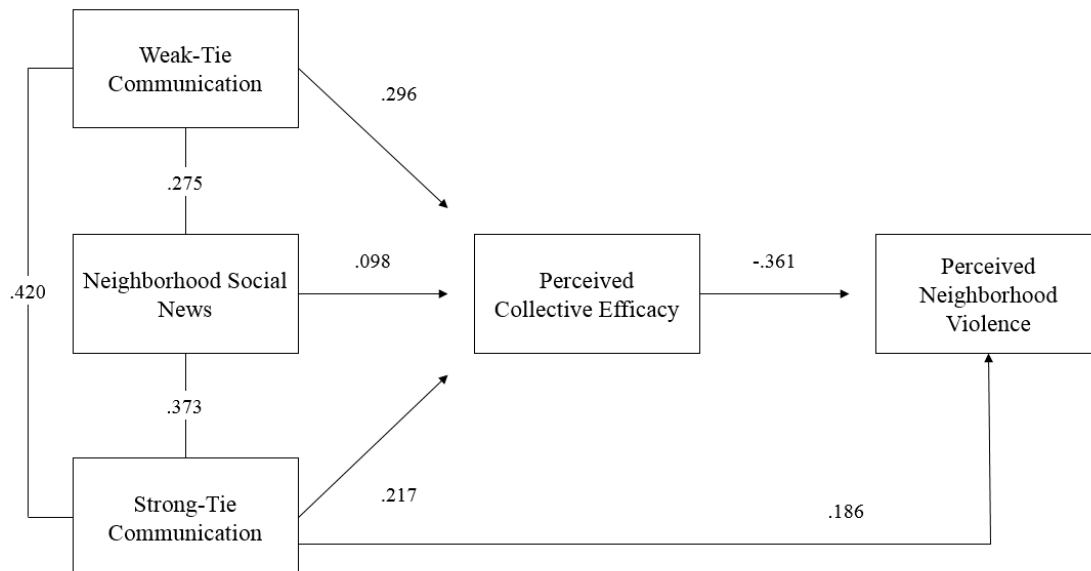
Note. N = 474. Path entries are standardized coefficients significant at *p* < .05. The effects of all control variables on endogenous and exogenous variables were residualized. Model goodness of fit: χ^2 = 1.521; *df* = 2; *p* = .467; confirmatory factor analysis = 1.000; standardized root mean residual = .013; root mean square error of approximation = .000. Variance explained: perceived collective efficacy = 23.0%; perceived neighborhood violence = 11.4%.

Figure 2. A path model.

Summary and Discussion

Research indicates that collective efficacy is a key mechanism to realize neighborhood safety. Despite a rich body of research on its antecedents and consequences, little research has examined what role communication can play in fostering the ability of residents to uphold local norms. Drawing from CIT scholarship (e.g., Chen et al., 2013; Kim & Ball-Rokeach, 2006a, 2006b), this study examines interpersonal and mediated communication factors to address this issue. The results are consistent with the predictions.

Before elaborating on the current results, several limitations that hamper definitive conclusions are acknowledged. First, the results based on online panels are limited in terms of generalizability, because the relationship between the sample and the population of interest is unknown. To address this limitation, higher-quality data based on probability sampling are desired. Second, the cross-sectional data analyzed here do not permit drawing a causal inference among the variables of theoretical interest. Although the three communication variables were specified as antecedents to perceived collective efficacy, and this specification is grounded in theoretical guidance (e.g., Sampson, 2012; Sampson et al., 1997; Steenbeek & Hipp, 2011), alternative specification is equally plausible. For example, neighborhood violence might decrease communicative interaction with neighbors or increase attention to local news. To address this limitation, more causally robust longitudinal data are desired.

Third, the analysis was conducted at the individual level, and therefore conclusions cannot be generated for neighborhoods. Although studies have approached this subject at the individual level (Swatt, Varano, Uchida, & Solomon, 2013), collective efficacy, by nature, is a property of a neighborhood and must be studied at a collective level independent of the perceptions of any single resident (Sampson et al., 1997). Relatedly, the measure of neighborhood violence relied on respondents' perceptions, which is admittedly not as precise as independently recorded incidents of crime. Future work should ask respondents about their place of residence and obtain official crime statistics linked with their residential areas. Alternatively, individual-level studies could ask respondents how likely it is that they would get caught by neighbors if they commit certain violent or disorderly acts. This approach might help assess behavioral inhibition effects on residents derived from perceived collective efficacy.

Finally, future work should continue to explicate the concepts of weak- and strong-tie communication in the neighborhood and develop corresponding empirical measures. Directly studying the nature of communication residents engage in with neighbors on a day-to-day basis would improve our understanding of how locality-based communication can contribute to neighborhood social control processes.

These limitations and concerns notwithstanding, the present study offers a few important insights. First, communicative relationships with neighbors characterized by weak ties are related to increases in perceived collective efficacy. Casual communicative interaction with neighbors, such as greetings and nodding, helps residents develop mutual connections and familiarity and share the normative culture. Such sociocultural resources appear to foster norm-enforcing action. This result is consistent with prior empirical evidence (Yamamoto, 2015) and with collective efficacy theory, which

proposes that the willingness of residents to intervene for the common good does not depend on dense strong ties (Sampson et al., 1997). Although a social tie is commonly studied in terms of its strength, this approach may miss the qualitatively distinct nature of strong and weak ties (Henning & Liebert, 1996; Wellman & Wortley, 1990). Likewise, the binary assumption that strong ties are based on kinships and friendships and weak ties consist of acquaintances may not be tenable, because friends casually communicate with one another and non-friend neighbors can intimately interact with one another (Wright & Miller, 2010). Directly capturing the nature of communication may be a useful way to understand how social ties cultivate collective efficacy and neighborhood social control.

Second, and relatedly, weak-tie communication did not have a direct association with perceived neighborhood violence. This result implies that weak-tie communication does not act as a regulatory mechanism in and of itself, but as an antecedent to collective efficacy. The finding is consistent with collective efficacy theory, which argues that social ties, although not a sufficient condition, are still important for the development of informal social control in that they yield sociocultural resources in which purposive collective action can flourish (Sampson, 2012).

The results regarding weak-tie communication can offer practical implications. For example, neighborhood groups—such as homeowners associations, neighborhood associations, apartment management offices, and rental property owners—might encourage residents to communicate with neighbors by conducting a communication campaign with flyers, yard signs, cards, posters, and shared bulletin boards or websites. Residents would not need to be close friends with one another. Casual forms of communication that any residents could perform, such as simply saying hello or waving to neighbors when they pass one another on the street or while doing yardwork, would build mutual connections and familiarity conductive to the development of collective efficacy.

Third, the frequency of strong-tie communication was indirectly related to decreases in perceived neighborhood violence via perceived collective efficacy. Although not central in collective efficacy theory, the role of tight-knit social ties in fostering a shared culture among residents is consistent with past work (Morenoff et al., 2001). At the same time, however, the frequency of strong-tie communication had a direct positive link with perceived neighborhood violence. A few explanations are plausible. It is possible that residents who closely know one another, as characterized by strong-tie communication, frequently exchange information about crime in their neighborhood, which cultivates an increased perception of crime in their locality. Alternatively, it is possible that these residents are directly involved in violent events, such as a violent argument, as strong ties can sometimes be a source of conflict (Cooney, 1998). It seems important that future work addresses the potentially dark side of strong-tie communication in the neighborhood.

Finally, neighborhood social news with a focus on the activities of local residents and groups is related to perceived collective efficacy. This association is likely explained on two levels. Neighborhood social news commonly spotlights the activities of community members such as local residents, clubs, schools, and churches (Edelstein & Larsen, 1960; Janowitz, 1967; Rosenberry, 2015). Such news can facilitate the development and reinforcement of mutual familiarity and trust. It helps residents better know other residents and groups, while those with few social connections get to know and interact with

them vicariously (Janowitz, 1967). Beyond observable manifest information, social news also communicates the normative culture of a neighborhood. Underlying such everyday imageries of neighborhood life are common values, standards, and expectations. Therefore, in addition to reporting factual details of what happens in the neighborhood, social news "offer[s] pictures of life and models of behavior" (McQuail, 1987, p. 280). Both functions are equally important, because the capacity of residents to fulfill the functions is limited. Social news can be a unique source of collective efficacy by filling such a functional niche. It is important to note, however, that the magnitude of the coefficients related to neighborhood social news was not as strong as those related to weak- and strong-tie communication. Therefore, neighborhood social news did not play as important a role as interpersonal communication in the neighborhood social control process.

Overall, this study presents empirical evidence for the role of locality-oriented communication activities in neighborhood social control processes. Communicative relationships characterized by weak and strong ties and neighborhood social news—important elements of everyday community life—seem to foster the collective capacity of a neighborhood to uphold local norms through their contributions to the development of mutual familiarity and voluntary action. Collective efficacy cultivated through such communication activities, in turn, appears to help reduce neighborhood violence. Facilitating not only intimate but also superficial forms of communication with neighbors and attention to news about local residents and groups, therefore, could be a catalyst for the realization of neighborhood safety.

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Appendix: A Residualized Covariance Matrix

	1	2	3	4	5
1. Perceived neighborhood violence	8.736				
2. Perceived collective efficacy	−5.068	34.745			
3. Frequency of weak-tie communication	0.158	4.290	7.835		
4. Frequency of strong-tie communication	0.256	3.871	1.817	3.023	
5. Attention to neighborhood social news	−0.437	7.859	2.483	2.355	10.390