Mutual Efficacy and Social Cohesion: Predictors of Neighbouring and Organisational Participation

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Mutual efficacy – defined as, "Group members' beliefs that collective action can be successful at achieving group goals," was designed to integrate the psychological and sociological literature on collective efficacy. In sociology, collective efficacy refers to the process by which social cohesion is activated as informal social control. In psychology, collective efficacy is a construct reflecting the perceived capability of a group. Previous research supports mutual efficacy as a partial mediator of the relationship between social cohesion and informal social control. However, mutual efficacy is theorised to be a task-specific construct. This study contributes to our understanding of mutual efficacy by examining the relationships among social cohesion, mutual efficacy, and two actions: neighbouring and participation in organisations. The mediational role of mutual efficacy is supported for both actions. Findings contribute to our understanding of the mechanisms that inform action in communities, and highlight complex – possibly reciprocal – relationships among social cohesion, mutual efficacy, and action.

Keywords: Mutual Efficacy; Collective Efficacy; Social Cohesion; Neighbouring; Organisational Participation

Mutual efficacy refers to, "Group members' beliefs that collective action can be successful at achieving group goals," (Gearhart & Joseph, 2019). The construct was developed to establish a bridge between the sociological and psychological conceptualisations of collective efficacy. In psychology, collective efficacy refers to the perceived capability of a group (Bandura, 1997). In sociology, collective efficacy is a theoretical framework outlining the process by which social cohesion is activated as community-level actions, typically informal social control. Social cohesion is the extent of mutual trust, solidarity and shared values among community members (Sampson, Raudenbush, & Earls, 1997). Informal social control reflects community members' willingness to enforce social norms (Sampson et al., 1997).

Collective efficacy theory is a widely studied framework associated with positive community-level outcomes (Sampson, 2012). However, the perceived capability of a group can have a significant impact on whether a group acts (Alinsky, 1971). For example, individuals are less likely to participate in informal social control activities if they believe that the police are unable to effectively address crime (Gau, 2014), and individuals are less likely to participate in civic actions if they feel that their votes do not matter (Ballard, 2014; Morrow, 2015). Prior research has demonstrated that groups with higher levels of mutual efficacy are more likely to institute informal social control (Gearhart, 2019b). Thus, mutual efficacy contributes to our understanding of how to empower communities to create change by acting collectively (Gearhart, 2019b).

Though mutual efficacy is conceptualised as a construct that can result in multiple collective actions, research on mutual efficacy is limited because it focuses exclusively on the relationships among social cohesion, mutual efficacy, and informal social control (Gearhart,

2019a; Gearhart & Joseph, 2019). This study contributes to our understanding of mutual efficacy by examining the relationships among social cohesion, mutual efficacy, and two actions: neighbouring and participation in organisations. Findings refine our understanding of the mechanisms that inform action in communities and highlight key insights for empowering communities.

Literature Review

Collective Efficacy and Mutual Efficacy

Within the field of sociology, the seminal study of collective efficacy (Sampson et al., 1997) used data from the Project on Human Development in Chicago Neighbourhoods (PHDCN) study. Sampson and colleagues (1997) tested the relationship between social cohesion and informal social control, and found that the constructs were highly correlated (r = 0.80). As a result, the measures of social cohesion and informal social control were combined into a summary measure of collective efficacy (Sampson et al., 1997).

Although the summary measure of collective efficacy is associated with a variety of positive outcomes, research suggests that social cohesion and informal social control are better modelled as two constructs (Hipp & Wo, 2015). Confirmatory factor analyses consistently demonstrate that social cohesion and informal social control fit the data better as unique constructs (Barnhart, Gearhart, & Maguire-Jack, 2018; Brisson & Altschul, 2011; Gearhart, 2019a; Rhineberger-Dunn & Carlson, 2009; Wickes, Hipp, Sargeant, & Homel, 2013), and structural equation models show that the relationship between social cohesion and community outcomes are mediated by informal social control (Gearhart, 2019a; Drakulich & Crutchfield, 2013; Gau, 2014; Rhineberger-Dunn & Carlson, 2011).

Gearhart and Joseph (2019) noted that separating social cohesion and informal social control revealed the absence of an explicit measure of efficacy, defined as the perceived capability of a group, in collective efficacy theory. Social cohesion, mutual efficacy, and the willingness to perform a given behaviour (i.e. informal social control as developed by Sampson and colleagues, 1997) are conceptually and operationally distinct (Bandura, 1997; Gearhart, 2019b; Zaccaro, Blair, Peterson, & Zazanis, 1995). Thus, mutual efficacy integrates the sociological and psychological literature on collective efficacy – addressing a key gap in the sociological conceptualisation of collective efficacy, and utilising a theoretical framework to describe how the psychological construct of efficacy is activated in communities (Gearhart, 2019a).

Empowerment

Though the primary goal of mutual efficacy was to integrate the sociological and psychological definitions of collective efficacy, the construct has significant implications for community psychology – particularly as it relates to empowerment (Gearhart, 2019b). Empowerment is both a process and an outcome. As a process, empowerment focuses on how individuals and groups gain greater control over their lives. As an outcome, empowerment examines how gaining more control of the decision-making process and increasing access to resources can lead people to feel more empowered (Maton, 2008; Perkins, 2010; Pigg, 2002; Zimmerman, 1995, 2000).

Empowerment occurs at multiple levels including the individual and community levels (Zimmerman, 1995, 2000). The individual level focuses on psychological factors (e.g. self-efficacy), knowledge of social issues, and the actions that individuals take to create change

(Christens, 2012; Christens, Inzeo, & Faust, 2014; Perkins, 2010; Zimmerman, 1995, 2000). The community level examines how individuals work collectively to create change (Maton, 2008; Zimmerman, 1995, 2000). As summarised by Perkins (2010), the majority of studies examine empowerment as it relates to individual psychological factors, and very few studies focus on community-level psychological factors or community-level strategies that explain how communities develop and apply power.

Studying mutual efficacy in the context of collective efficacy theory addresses key gaps in the empowerment literature (Perkins, 2010). As a construct, mutual efficacy is a community-level, psychological factor that can help facilitate collective actions in communities (Gearhart, 2019b). As a community-level theory, collective efficacy explains how communities use social resources to act collectively (Perkins, 2010; Sampson, 2012). Social cohesion can help empower communities by creating strength in numbers, developing a shared understanding of the world, and identifying mutually agreed upon goals (Alinsky, 1971; Christens, 2012; Pigg, 2002; Speer & Hughey, 1995). Fostering social cohesion can build mutual efficacy, which in turn increases the likelihood that communities will act collectively (Gearhart, 2019b).

The Present Study

A limitation of previous research informed by collective efficacy theory is that it focuses almost exclusively on the relationship between social cohesion and informal social control Gearhart, 2019b; Gearhart & Joseph, 2019; Hipp & Wo, 2015; Sampson, 2012; Sampson, Morenoff, & Gannon-Rowley, 2002; Sutherland, Brunton-Smith, & Jackson, 2013). This focus is most likely due to the fact that collective efficacy was initially developed in the field of criminology (Sampson, 2004). However, social cohesion can result in multiple forms of action (Sampson, 2004; Wickes et al., 2013). For example, Wickes and colleagues (2013) found that social cohesion predicts child-focused informal social control, violence focused informal social control, and civic engagement (e.g. voting). Though theory suggests that mutual efficacy can result in multiple actions (Gearhart & Joseph, 2019), research has yet to test mutual efficacy as a predictor of actions other than informal social control. This study contributes to the literature by testing whether mutual efficacy mediates the relationship between social cohesion and two actions: neighbouring and organisational participation.

Neighbouring is defined as activities including daily interactions and the exchange of social support among neighbours (Farrell, Aubry, & Coulombe, 2004; Unger & Wandersman, 1985). There are multiple ways that neighbours interact with one another such as discussing neighbourhood issues, loaning items, and interacting socially (Kusenbach, 2006; Nation, Fortney, & Wandersman, 2010). Organisational participation is the voluntary involvement of individuals in activities promoted by organisations (Chinman & Wandersman, 1999; Gamble & Weil, 1995). Participation in organisations is associated with multiple outcomes of interest for community psychologists including improved quality of life, well-being, empowerment, and a stronger sense of community (Nussbaum, 1999; Sampson, 2012; Talò, Mannarini, & Rochira, 2014; Wandersman & Florin, 2000).

Though neighbouring and organisational participation can have a positive impact on communities, they also play a key role in empowering communities. Frequent social interaction among neighbours (i.e. neighbouring) builds social resources that can be called upon to address neighbourhood issues (Browning, Dietz, & Feinberg, 2004; Putnam, 2000). Further, neighbouring is directly associated with positive outcomes such as a greater sense of security, belonging, connection to the community, and collective efficacy – as measured by a combination of social cohesion and informal social control (Browning et al., 2004; Burchfield & Silver, 2013). Organisations can train and support individuals and groups, as well as

influence systemic changes that empower others (Chaskin & Greenberg, 2015; Chinman & Wandersman, 1999; Wandersman & Florin, 2000; Zimmerman, 1995, 2000).

Understanding the pathways by which individuals participate in actions like neighbouring and working with local organisations is foundational to community empowerment. However, no study has examined the relationships among social cohesion, mutual efficacy, neighbouring, and organisational participation utilising the collective efficacy framework developed by Gearhart & Joseph (2019). Mutual efficacy is expected to at least partially mediate the relationship between social cohesion and both neighbouring and organisational participation. The strength of the relationship between mutual efficacy and action is expected to vary based on the action under study. Findings can increase our understanding of the processes that inform action among community members.

Methods

Data

The present study utilises data from the Seattle Neighbourhoods and Crime Survey (SNCS) – a cross sectional of Seattle Washington residents collected between 2002 and 2003 (Matsueda, 2010). This study will utilise data that were collected from two sampling strategies: a random sample (n = 2,220) and an ethnic oversample (n = 1,145). For the random sample, researchers randomly selected two block groups from each of Seattle's 123 Census Tracts. Roughly nine households per block group were randomly selected to be surveyed. The ethnic oversample is a random sample of individuals from 141 block groups with high concentrations of racial and ethnic minorities. The purpose of the ethnic oversample was to create a more representative sample of Seattle residents. A total of 558 Census Blocks were chosen from these block groups, and two households per block were randomly chosen to be surveyed. The total sample size used in this study is 3,365.

Measures

Neighbouring

Neighbouring is measured using five items that reflect the frequency of the following neighbouring activities: (1) watching a neighbour's home, (2) borrowed tools or small food items, (3) had dinner or lunch with a neighbour, (4) helped a neighbour with a problem and (5) asked neighbours about personal things. Response options range from 1 (Often) to 3 (Never).

Organisational participation

Organisational participation is measured using five items that assess how frequently a respondent participates in five types of organisations: (1) church, synagogue, temple, or mosque; (2) recreational sports, book club, or card playing; (3) service or charitable organisation; (4) neighbourhood associations; (5) other organisations. Response options range from 1 (Often) to 3 (Never).

Social cohesion

Social cohesion is operationalised using items based on the social cohesion measure developed by Sampson and colleagues (1997). This measure assesses residents' agreement with the following statements: (1) you can count on adults in this neighbourhood to watch out that children are safe and don't get into trouble, (2) people in this neighbourhood can be trusted, (3) adults in this neighbourhood know who the local children are, and (4) people around here are willing to help their neighbours. Response options range from 1 (strongly agree) to 4 (strongly disagree).

Mutual efficacy

Mutual efficacy is measured by combining two items: (1) how effective would the following approach be in resolving major problems around your neighbourhood: small groups of neighbours working together, and (2) how effective would the following approach be in resolving major problems around your neighbourhood: organised neighbourhood associations or community clubs? Response options on each item range from 1 (highly effective) to 3 (not at all effective).

Neighbourhood disorder

To maintain consistency with previous research on mutual efficacy (Gearhart, 2019b; Gearhart & Joseph, 2019), neighbourhood disorder will be included as a covariate for the analyses. Neighbourhood disorder – defined as public behaviours that are threatening to residents such as public intoxication, and physical markers like garbage on the streets, graffiti, and abandoned buildings (Sampson, 2012). Neighbourhood disorder contributes to social issues like poor physical health, mental illness, substance use, and crime (Chappell, Monk-Turner, & Payne, 2011; Hill & Maimon, 2013; Molina, Algria, & Chen, 2012). Neighbourhood disorder can also moderate the buffering effect of protective factors like collective efficacy (Hill & Maimon, 2013).

Neighbourhood disorder is measured by combining five items that reflect the severity of problems in the neighbourhood: (1) groups of teenagers hanging out on the streets; (2) litter, garbage, or trash on the streets; (3) spray painted graffiti on buildings and streets; (4) abandoned houses and run-down buildings, and (5) neighbours causing too much noise. Response options on each item range from 1 (not a problem) to 3 (a big problem).

Analysis

Multiple imputation

The data were screened for missing values using SPSS' v23 missing value analysis. The analysis showed that listwise deletion would result in losing 15.72% (n = 529) and 16.19% (n = 545) for the neighbouring and organisational participation analyses respectively. The four most common patterns of missing data present were: (1) n = 90 people missing data on the first social cohesion item (you can count on adults in this neighbourhood to watch out that children are safe and don't get into trouble), (2) n = 75 cases missing data on the efficacy of organised neighbourhood associations or community clubs item, (3) n = 70 individuals missing data on the third social cohesion item (adults in this neighbourhood know who the local children are), and (4) n = 53 individuals missing data on the first and third social cohesion items. No other pattern of missing data affected more than 1% of the cases (n = 34). Bivariate comparisons found that there were no statistically significant differences between cases that had missing data, and cases with complete data.

Multiple imputation was used to account for the missing data. Data were imputed using a variance covariance model outlined by Asparouhov and Muthén (2010a). Twenty datasets were created for the present study to account for the missing data. The imputations included all variables in the analysis as well as age, gender, race/ethnicity, education, income, employment, and home ownership status. Data were not imputed for respondents who answered "don't know" or "refused' on survey items (Graham, Olchowski, & Gilreath, 2007).

Structural equation modelling

Analyses consist of two structural equation models that examine the relationships among social cohesion, mutual efficacy and two actions: neighbouring, and organisational participation. Parameters were estimated using mean and variance adjusted weighted least squares estimator

(WLSMV) because the focal variables are ordinal in nature (Flora & Curran, 2004; Muthén & Muthén, 1998-2015). Because WLSMV estimates bivariate correlations using polychoric correlations, it is resistant to violations of normality, particularly when the sample size is large (i.e. $N \geq 1{,}000$; Flora & Curran, 2004). Despite this, descriptive statistics were examined to check for normality and outliers. Further, covariances, and correlations among latent variables were examined to asses for multicollinearity (Muthén & Muthén, 1998-2015).

Intraclass correlation coefficients (ICCs) were computed because data are nested within neighbourhoods. ICCs range from 0.05 to 0.15 for the variables included in the analysis, suggesting that clustering is present in the data (Kreft & de Leeuw, 1998). Analyses will be conducted using Huber-White sandwich estimators to account for the clustering in the data (Szpiro, Rice, & Lumley, 2010). Multilevel structural equation modelling was not feasible because of the small sample size on the neighbourhood level ($n = 123$; Asparouhov & Muthén, 2010b). All analyses were conducted using Mplus v.7.4 (Flora & Curran, 2004; Muthén & Muthén, 1998-2015).

Results

Sample Characteristics

Table 1 presents the sociodemographic characteristics of the sample. Nearly half (48.1%, $n = 1{,}619$) of the sample is female and 53.9% ($n = 1{,}814$) are married or cohabiting. The average age of respondents is 48.6 ($SD = 0.30$) years of age. Over three-quarters of the sample identified as white (77.8%, $n = 2{,}619$). Two-thirds of respondents own their home (67.5%, $n = 2{,}271$) and were employed at the time of the survey (66.9%, $n = 2{,}251$). One-third of the sample graduated from either a college or trade school (35.4%, $n = 1{,}191$), and 28.3% ($n = 955$) either graduated from graduate school or completed some graduate school. In terms of income, most of the sample report making between $25,000 and $75,000 (51.9%, $n = 1{,}746$) or over $75,000 (30.9%, $n = 1{,}040$)

Table 1

Sample Characteristics

	Mean	*SD*	*n*	%
Age	48.61	0.30		
Female			1,619	48.1
Race/Ethnicity			2,618	77.8
White			2,619	77.8
Black			318	9.5
Asian			242	7.2
Other			186	5.5
Marital Status				
Married or Cohabiting			1,814	53.9
Separated, Widowed, or Divorced			697	20.7
Never Married			855	25.4
Education				
High School or Less			485	14.4
Some College			734	21.8
College Graduate or Trade School			1,191	35.4
Some Graduate School or Beyond			956	28.4
Income				
Less than $25,000			579	17.2
$25,000 to less than $75,000			1,746	51.9
$75,000 or more			1,040	30.9
Employed			2,251	66.9
Own Home			2,271	67.5

As seen in Table 2, perceptions of social cohesion are relatively high in the sample with most respondents stating that they either agree, or strongly agree with the survey items. In terms of mutual efficacy, respondents felt more confident in terms of the effectiveness of small groups of neighbours relative to organised neighbourhood associations or clubs. The two most frequently reported neighbouring behaviours are watching a neighbour's home and helping neighbours with a problem. Asking neighbours about personal things and borrowing tools or small food items are the least common neighbouring behaviours. Organisational participation appears to be low in the sample with only 23.0% (n = 774) of respondents stating that they 'often' attend church, synagogue, temple, or mosque; and roughly 17% stating that they 'often' participate in sports, book clubs or card playing; or participating in activities sponsored by 'other' organisations. Neighbourhood disorder is relatively low in the sample with the largest issues being litter, garbage, or trash on the streets; and neighbours causing too much noise.

Table 2

Frequency Distribution for Focal Indicators

Indicator	Response Options			
Social Cohesion[1]	1	2	3	4
Can count on adults to make sure children are safe	807 (24.0%)	1,820 (54.1%)	643 (19.1%)	95 (2.8%)
People in the neighbourhood can be trusted	852 (25.3%)	2,133 (63.4%)	316 (9.4%)	64 (1.9%)
Adults know who the local children are	631 (19.8%)	1,618 (48.1%)	962 (28.6%)	154 (4.6%)
People are willing to help their neighbours	841 (25.0%)	2,252 (66.9%)	249 (7.4%)	23 (0.7%)
Mutual Efficacy[2]	1	2	3	
Small groups of neighbours	1,597 (47.5%)	1,516 (45.1%)	252 (7.5%)	
Organised neighbourhood associations or clubs	1,019 (30.3%)	1,911 (56.8%)	435 (12.9%)	
Neighbouring[3]	1	2	3	
Watch neighbour's home	1,034 (30.7%)	1,331 (39.6%)	1,000 (29.7%)	
Borrowed tools or small food items	426 (12.7%)	1,398 (41.5%)	1,541 (45.8%)	
Had dinner or lunch with a neighbour	361 (10.7%)	1,534 (45.6%)	1,470 (43.7%)	
Helped neighbours with a problem	718 (21.3%)	2,042 (60.7%)	603 (17.9%)	
Asked neighbours about a personal thing	403 (12.0%)	1,172 (34.8%)	1,790 (53.2%)	
Organisational Participation[3]	1	2	3	
Church, synagogue, temple, or mosque	774 (23.0%)	609 (18.1%)	1,982 (58.9%)	
Sports, book club, or card playing	600 (17.8%)	821 (24.4%)	1,944 (57.8%)	
Service or charitable organisation	360 (10.7%)	947 (28.1%)	2,058 (61.2%)	
Neighbourhood association	275 (8.2%)	901 (26.8%)	2,189 (65.1%)	
Other organisation	583 (17.3%)	471 (14.0%)	2,311 (68.7%)	
Neighbourhood Disorder[4]	1	2	3	
Groups of teenagers hanging out on the streets	2,147 (63.8%)	881 (26.2%)	337 (10.0%)	
Litter, garbage or trash on the streets	1,595 (47.4%)	1,299 (38.6%)	471 (14.0%)	
Spray-painted graffiti on buildings and streets	2,170 (64.5%)	966 (28.7%)	229 (6.8%)	
Abandoned houses and run-down buildings	2,430 (72.2%)	743 (22.1%)	192 (5.7%)	
Neighbours causing too much noise	1,908 (56.7%)	1,144 (34.0%)	313 (9.3%)	

[1] Response options: (1) Strongly Agree, (2) Agree, (3) Disagree (4) Strongly Disagree
[2] Response options: (1) Highly Effective, (2) Somewhat Effective, (3) Not at all Effective
[3] Response options: (1) Often, (2) Sometimes, (3) Never
[4] Response options: (1) Not a Problem, (2) Somewhat a Problem, (3) A Big Problem

Model Fit

The following indices are produced to determine model fit: model chi-square (χ^2_M), the root mean square error of approximation (RMSEA), the comparative fit index (CFI), the Tucker Lewis Index (TLI), and the weighted root mean square residual (WRMR). Further, standardised residuals were examined for both analyses. The standardised residuals suggest that the model was properly specified and the measurement model suggests that social cohesion, mutual efficacy, neighbouring, and organisational participation are unique constructs (full results available upon request). The model fit indices are presented in Table 3. Both models meet criteria for model fit on the RMSEA, CFI, and TLI. Consistent with previous research on mutual efficacy (Gearhart, 2019a; Gearhart & Joseph, 2019) neither model meets criteria on the χ^2_M and WRMR. However, this finding should be interpreted cautiously. The χ^2_M is sensitive to large sample sizes and the WRMR can be inflated when clustering is present in the data (Hsu, 2011).

Table 3

Model Fit Indices

Fit Index	Neighbouring	Organisational Participation	Fit Criteria
χ^2_M	436.26*	281.24*	non-significant
RMSEA	0.03	0.02	≤ 0.05 close fit 0.05-0.08 reasonable fit ≥ 0.10 poor fit
CFI	0.98	0.99	> 0.95
TLI	0.97	0.98	> 0.95
WRMR	1.96	1.56	≤ 0.90

* $p < 0.05$

Neighbouring

Table 4 contains the correlations among the latent variables in the analysis focusing on neighbouring. As seen in the table, mutual efficacy has a moderate correlation with social cohesion (r = 0.373) and neighbouring (r = 0.343). However, social cohesion has stronger correlations with both neighbouring (r = 0.435) and neighbourhood disorder (r = 0.537).

Table 4

Correlations Among Latent Variables, Neighbouring

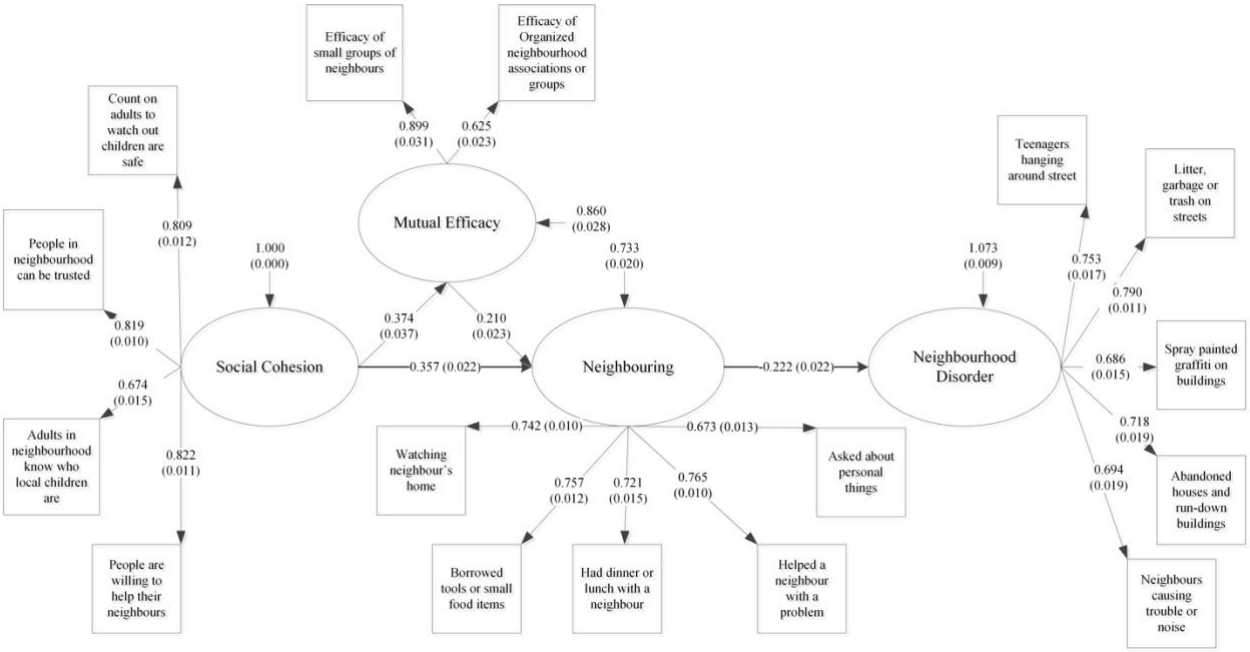
	1	2	3	4
Mutual Efficacy (1)	1.000			
Social Cohesion (2)	0.373	1.000		
Neighbouring (3)	0.343	0.435	1.000	
Neighbourhood Disorder (4)	0.160	0.537	0.054	1.000

As seen in Figure 1, factor loadings ranged from 0.674 to 0.822 for social cohesion, 0.625 to 0.899 for mutual efficacy, 0.673 to 0.765 for neighbouring, and 0.686 to 0.790 for

neighbourhood disorder. Social cohesion is significantly associated with mutual efficacy (β = 0.374, $p < 0.05$) and neighbouring (β = 0.357, $p < 0.05$). Mutual efficacy has a positive relationship with neighbouring (β = 0.210, $p < 0.05$). Further, neighbouring is associated with

Figure 1

Standardised Model Results, Neighbouring



Note: Ovals represent latent variables and squares represent measured variables

lower levels of neighbourhood disorder (β = -0.022, $p < 0.05$). The Sobel standard error test (Preacher & Hayes, 2004) indicates a significant indirect effect (estimate = 0.078, *SE* = 0.012) – suggesting that mutual efficacy partially mediates the relationship between social cohesion and neighbouring.

Organisational Participation

Table 5 shows a slightly different pattern of correlations among latent variables used in the analysis focusing on organisational participation. Again, social cohesion is more strongly correlated with neighbourhood disorder (r = 0.538) compared to mutual efficacy (r = 0.169). However, mutual efficacy is more strongly correlated with organisational participation (r = 0.347) compared to social cohesion (r = 0.283).

Table 5

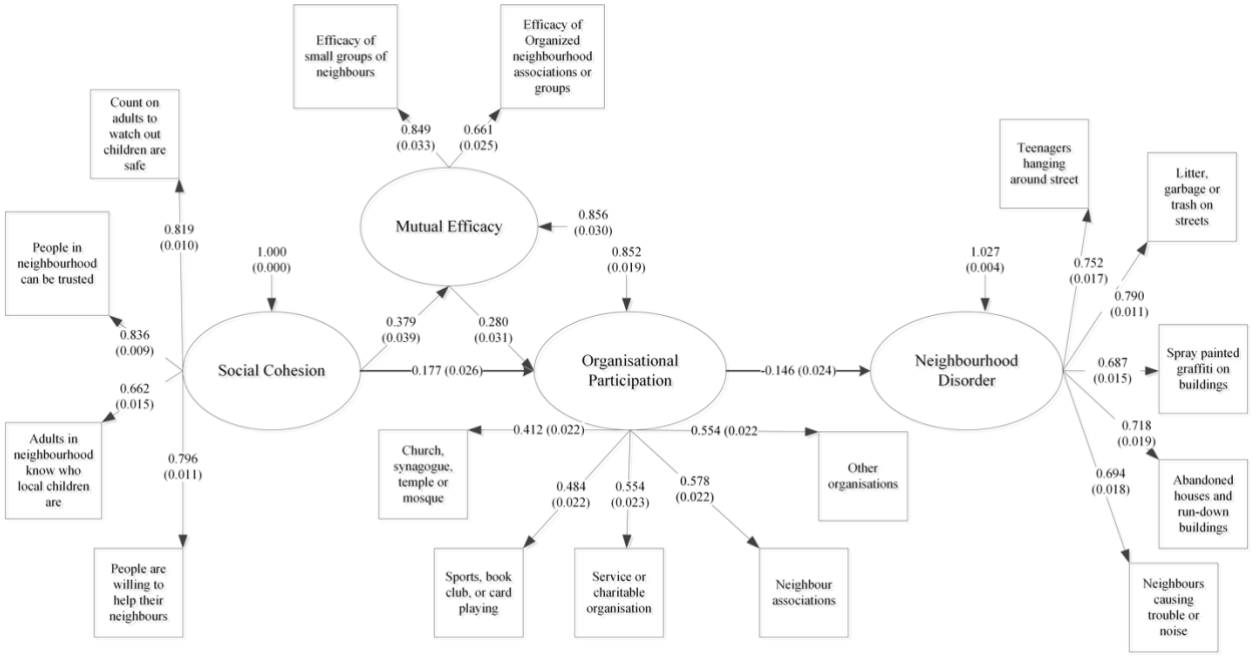
Correlations Among Latent Variables, Organisational Participation

	1	2	3	4
Mutual Efficacy (1)	1.000			
Social Cohesion (2)	0.379	1.000		
Organisational Participation (3)	0.347	0.283	1.000	
Neighbourhood Disorder (4)	0.169	0.538	0.018	1.000

Factor loadings for social cohesion, mutual efficacy, and neighbourhood disorder are similar to the analysis of neighbouring. Factor loadings for organisational participation are weak – ranging from 0.412 to 0.578. This may be due to the variety of organisations listed that may not overlap conceptually. Figure 2 shows that social cohesion is significantly associated with organisational participation (β = 0.177, $p < 0.05$) and mutual efficacy (β = 0.379, $p < 0.05$). Mutual efficacy is also positively associated with organisational participation (β = 0.280, $p < 0.05$). The Sobel standard error test (Preacher & Hayes, 2004) indicates that mutual efficacy also partially mediates the relationship between social cohesion and organisational participation (Estimate = 0.106, *SE* = 0.017). Mutual efficacy has a stronger association with organisational participation compared to social cohesion, which differs from the analysis of neighbouring. As expected, organisational participation is associated with lower levels of neighbourhood disorder (β = -0.146, $p < 0.05$).

Figure 2

Standardised Model Results, Organisational Participation



Note: Ovals represent latent variables and squares represent measured variables

Discussion

Findings indicate that mutual efficacy is a partial mediator of the relationships between social cohesion and both neighbouring, and organisational participation. The mediational role of mutual efficacy is consistent with previous research on the relationship between social cohesion, mutual efficacy, and informal social control (Gearhart, 2019b; Gearhart & Joseph, 2019). The results show that social cohesion has a stronger association with neighbouring compared to mutual efficacy, suggesting that – within the context of collective efficacy theory – mutual efficacy is not the primary mechanism by which social cohesion is activated as neighbouring behaviours. In terms of organisational participation, the findings suggest that individuals who have stronger beliefs in the perceived capability of the group may be more likely to work with organisations in order to create change.

The weak indirect effect of mutual efficacy on neighbouring may be due to a reciprocal relationship between social cohesion and neighbouring (Farahani, 2016). This study supports previous research suggesting that social cohesion can result in neighbouring (Farahani, 2016). However, neighbouring increases social cohesion as well (Farahani, 2016). Establishing connections among residents is a key initial step towards building mutual efficacy because cohesive groups typically have a stronger belief in the effectiveness of their actions (Bandura, 1997; Gearhart, 2019a,b). However, networks among community members must be active in order to be meaningful (Sampson, 2004). Efforts to empower communities should build relationships among members that establish social norms, identify commonly agreed upon problems, and foster the desire to act collectively (Bandura, 1997; Gearhart & Joseph, 2019; Sampson et al., 1997; Zaccaro et al., 1995).

The stronger relationship between mutual efficacy and organisational participation may be due in part because one of the mutual efficacy items focuses on the effectiveness of organised associations or community clubs. However, it is important to discuss the relationship between mutual efficacy and organisational participation because many change efforts are led by organisations (Chaskin & Greenberg, 2015; Chinman & Wandersman, 1999; Wandersman & Florin, 2000). The findings discussed above emphasise the importance of strengthening mutual efficacy through social cohesion and neighbouring. Although social cohesion can be developed without the intervention of organisations, organisations can foster social cohesion among community members directly by serving as community connectors (Fook, 2002; Mezirow & Taylor, 2009). These connections are particularly important in communities that may be lacking in mutual efficacy.

Actions that build social cohesion in communities increase the likelihood that individuals will mobilise to perform a variety of additional actions (Collins, Neal, & Neal, 2014). The findings indicate that communities with higher levels of mutual efficacy are more likely to collaborate with organisations. Thus, it is important for organisations to effectively partner with communities so that community-organisation partnerships continue to build mutual efficacy. There are multiple actions that organisations can perform to build mutual efficacy in communities including engaging residents early in the change process and placing residents at the centre of efforts to build social cohesion, identifying goals, and creating action steps (Alinsky, 1971; Bandura, 1997; Fook, 2002; Mezirow & Taylor, 2009). Organisations can also teach community members the skills and provide knowledge necessary to create change (Bandura, 1997). Setting realistic goals and achieving early successes can build mutual efficacy and increase the likelihood that community members will act in the future as well (Hipp, 2016).

As stated previously, neighbourhood disorder was included in the analyses to maintain consistency with previous research (Gearhart, 2019a; Gearhart & Joseph, 2019). However, the limited relationship between neighbouring, organisational participation, and neighbourhood disorder suggest that these actions may not be effective at addressing neighbourhood disorder. Therefore, it is important for communities to establish a clear connection between proposed actions, and the problems that they are trying to address.

Taken as a whole, the findings highlight relationships as foundational to empowering communities. Social cohesion and mutual efficacy both influence neighbouring. Though neighbouring is important in its own right, it can further empower communities by building a shared identity and demonstrating that communities can accomplish goals if they work together (Bandura, 1997; Gearhart, 2019a; Zaccaro et al., 1995). Communities with higher levels of mutual efficacy appear to be more likely to collaborate with organisations to create change. It is incumbent upon organisations to help empower communities through authentic community engagement, and allowing the community to take ownership of the change process (Alinsky, 1971; Fook, 2002; Gearhart & Joseph, 2019; Mezirow & Taylor, 2009).

Limitations

While the findings of this study are informative, there are limitations worth noting. The discussion above draws on prior research and theory to highlight the complex and possibly reciprocal relationships among social cohesion, mutual efficacy, neighbouring, and organisational participation. Unfortunately, testing such relationships are beyond the scope of the SNCS data – highlighting a key area for future research. Seattle is also a high socioeconomic status city on the west coast of the United States (Matsueda, 2010). Therefore, the findings may not be generalisable beyond the SNCS sample. Future research can study mutual efficacy in other US cities and countries to determine if the findings presented here are supported in other social contexts.

Though the items used to measure mutual efficacy are a useful proxy for mutual efficacy, they do not include elements of the construct outlined by Gearhart and Joseph (2019). Mutual efficacy was also measured using two items with three response categories compared to social cohesion (four items, four response categories), and neighbouring and organisational participation – both of which were measured using five items and three response categories. Inconsistency in terms of measurement may have influenced the relationships among the constructs (Kreft & de Leeuw, 1998). Limitations in the present study highlight a critical need for research on mutual efficacy that collects primary data over time.

Conclusion

Findings suggest that mutual efficacy at least partially mediates the relationships among social cohesion, and neighbouring and organisational participation. Thus, belief in the effectiveness of action is a critical precursor to multiple actions among community members. The findings presented here – combined with previous research – suggest that there may be complex reciprocal relationships among social cohesion, mutual efficacy, and actions – highlighting a need for future research. Future research can develop a more valid and reliable measure of mutual efficacy that is consistent with the measure of social cohesion and actions under study in terms of the number of items and response options. Further, the findings emphasise the importance of studying the relationships among social cohesion, mutual efficacy, and action longitudinally. The continued study of mutual efficacy can lead to the development of interventions designed to raise a community's belief in the effectiveness of their actions, which

will in turn lead to greater community engagement, community action, and by extension, positive community outcomes.

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