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FROM ISOLATION TO COMMUNITY: EXPLORATORY STUDY OF A SENSE-OF-COMMUNITY INTERVENTION

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Abstract

This exploratory pilot study analyzes the role a facilitated neighborhood intervention, geared towards meeting one's neighbors and discussing local needs and civic action, can play in moving individuals from isolation to community. It focuses on whether NeighborCircles, a neighborhood intervention run by a non-profit in Massachusetts, is associated with increases in social capital (SC); the main constructs used are Perkins and Long's (2002) four dimensions of SC (sense of community (SOC), collective efficacy, neighboring and participation), with a primary focus on SOC. Surveys and interviews with a majority Latino sample group reveal NeighborCircles is associated with increases in all four dimensions of SC. The author concludes by considering what may have led to these reported increases, as well as implications for both future research about and experimentation with similar interventions.

Keywords

sense of community; social capital; neighboring; participation; collective efficacy; mixed methods

"A more organized citizenry in low- to moderate-income neighborhoods would constitute a systems change that could have far-reaching consequences" (Ferguson & Stoutland, 1999, p. 48). This pilot study begins to analyze the role that a neighborhood intervention, geared towards knowing one's neighbors and discussing local needs and potential civic action, can play in addressing Ferguson and Stoutland's concept of a "more organized citizenry" on the neighborhood level. More precisely, a mixed methods design of surveys and interviews was used with a largely Latino population to analyze whether the NeighborCircles (NC) intervention in Lawrence, MA was associated with increases in social capital (SC), focusing primarily on sense of community (SOC). Given the more homogeneous sample, I conclude by considering the potential for both more robust follow-up research and similar interventions in mixed-income, diverse neighborhoods; findings from this study, however, build a foundation for further research into these forms of interventions by providing a conceptual framework and initial findings.

This study focuses on SOC for two main reasons. First, the chief goal of NC is to foster SOC. Second, community psychology considers SOC a central value (Townley, Kloos, Green & Franco, 2011) for various reasons, not the least of which is Sarason's (1974) view

of it as “the overarching criterion by which to judge any community effort” (p.4). Despite the constitutive value of SOC, this article also examines how SOC and SC are related, as Perkins and Long (2002) argue SOC is weakened when divorced from the inherent actions of SC.

NC, facilitated by the non-profit Lawrence CommunityWorks (LCW), involves a neighbor (the *host*) inviting around seven to ten others from their block who they do not know well or at all into their home for a series of three meetings, including refreshments and sometimes full meals. At NC, two trained LCW members¹ facilitate conversations and activities. The first NC meeting includes a chance for participants to tell their story to the group of how and why they ended up on the block where they live. Although LCW staff indicate that the primary goal is to form actual relationships and a sense of community,² facilitators also encourage participants to engage in civic or political action during or soon after the meetings.³

Sense of Community and Social Capital

Definitions

SOC has a long and deep history in community psychology, dating back to Sarason (1974). In similar ways, SC resonates in other disciplines, from political science to community development (Perkins & Long, 2002). This study draws on Perkins and Long's (2002) four-dimensional definition of SC, which includes: SOC, collective efficacy, neighboring, and participation (see Figure 1).

It is important to briefly define these four dimensions of SC. First, for SOC, McMillan and Chavis' (1986) attitudinal definition is used: “Sense of community is a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together” (p. 9). McMillan and Chavis identify four dimensions of SOC that will be used and elaborated on throughout this article: membership, shared emotional connection, needs fulfillment, and influence.

For the other three dimensions of SC, Long and Perkins (2007) hold that: 1) collective efficacy involves the belief that behavior or action with others will be effective; 2) neighboring is “informal mutual assistance and information sharing among neighbors” (p. 566); and 3) participation entails grassroots formal citizen behavior in an organization, although that is expanded here to include formally organized social behavior, such as NC or joining in a social event⁴ (an expansion supported by the relational nature of SC (Sampson, 2008)).

¹Members sign a commitment and are defined as anyone “enrolled in or participating in community and family asset-building and/or who is engaging in relationships of mutual support or collective action” (LCW, n.d.).

²SOC is treated in this study as the primary focus even though NC use what Perkins and Long (2002) consider the *participation* dimension of SC to affect SOC.

³More details are below and a NC guide is available online: www.typp.org/media/docs/0155_NeighborCircles.pdf

⁴For example, a senior center could formally organize bridge games to build SOC, but it appears Long and Perkins' (2007) definition of citizen participation would exclude this.

The Utility and Challenge of SOC and SC

Why do SOC and SC matter? SOC has been correlated with myriad positive outcomes, from community participation (Chavis & Wandersman, 1990; Long & Perkins, 2007), to collaboration at work (Lambert & Hopkins, 1995), to psychological empowerment (Peterson, Speer & McMillan, 2008), to health and well being (e.g., Freedman, et al. 2006; Pretty, Andrewes, & Collett, 1994). Similarly, SC is widely regarded as a key sign of a healthy civic life (e.g., Putnam, 2000; Warren, Thompson & Saegert, 2001), despite disputes about the level of its decline in the U.S. (e.g., Sobieraj and White, 2004). More recently, Putnam (2007) contends that SC and trust⁵ are lower in heterogeneous, urban areas than more homogeneous, suburban areas. He associates such diversity with anomie and isolation—which suggests the need to explore ways to build SOC and SC, given unprecedented levels of U.S. diversity (Alesina & Glaeser, 2004) and common ideals of mixed-income, diverse neighborhoods (DeFilippis & Fraser, 2010).

If SOC and SC promote positive outcomes, should one or both be facilitated via deliberate interventions? Sampson (2008) argues such efforts simply may not work: “[I]nterventions in the local community are unlikely to succeed if they attempt to penetrate the private world of personal relations” (p. 165). In another study, Sampson, McAdam, MacIndoe and Weffer-Elizondo (2005) found the presence of organizations spurs participation to a greater extent than social ties or neighboring do,⁶ however they largely fail to consider the independent worth of those relational outcomes. The present study begins to challenge and add nuance to Sampson and colleagues’ (2005) work by suggesting that interventions in personal relations may not be successful if attempted outside of organizations and the “specified processes that take place within them” (p. 679); following that logic, the organization in this study is understood to be LCW and the process, NC.

This leads to the question of whether practitioners who want to increase either SOC or SC can easily do so. How would a community center or community organizing group best increase their members’ SOC and/or SC? Could they simply use a SOC or SC intervention, or somehow incorporate these constructs into existing interventions? It is unclear from previous studies if they could easily do either. Several scholars argue for useable SOC interventions (Proescholdbell & Roosa, 2005; Bathum & Baumann, 2007; Townley, et al 2011; Bolland & McCallum, 2002), as well as interventions to stem the apparent decline in SC (Putnam & Feldstein, 2003); however, existing interventions have not been widely researched. This pilot study begins to fill that gap by using quantitative and qualitative data to analyze reported effects of a SOC intervention, extending the discussion at key points to SC.

SOC Interventions

The most applicable literature for this study includes research related to the outcomes and processes associated with SOC interventions. The term *intentional SOC intervention* is used

⁵Trust is a term used synonymously with SOC by Perkins and Long (2002)

⁶The importance of organizations noted here is similar to the focus in community psychology literature on the importance of settings (e.g., Seidman, 1988).

here to refer to any intervention that has the explicit goal of increasing SOC, though some literature on interventions that affect SOC without that explicit goal will also be reviewed.

Intentional SOC Interventions

Proeschold-Bell and Roosa (n.d.) claim that “while theory and measurement of SOC have progressed, there have been few reports of interventions designed to promote it” (p. 2). Kingston, et al. (1999) describe both individual and environmental factors that may lead to SOC. They suggest SOC interventions could help “local residents to increase their skills, and to strengthen their connections with other residents” (p. 684)—an intervention that sounds quite similar to NC.

In a study of low-income Baltimore neighborhoods, Brodsky, O’Campo and Aronson (1999) discuss SOC interventions. They found active involvement in neighborhood organizations predicts higher SOC (at individual and community levels), and the same for religious institutions (at the individual level). While not likely thought of as “SOC interventions,” neighborhood organizations often have a deliberate interest in building locational community, while virtually all religious institutions intend to build relational community (for more on locational vs. relational community, see Bess, Fisher, Sonn & Bishop, 2002). Brodsky and colleagues suggest community-level changes are needed to increase SOC, such as better job opportunities, increased economic development, and increasing voter registration. Importantly, however, they state: “Efforts to reach and understand the needs of uninvolved, alienated residents while harder, seem to be necessary” (p. 677).

Some interventions had insignificant results. Kingston, et al. (1999) found the mere *presence* of a neighborhood association did not have a significant relationship to their measure of SOC⁷—despite the fact that Long and Perkins (2007), similar to Brodsky, O’Campo and Aronson (1999), found *participation* in a neighborhood association was predictive of SOC. Although presence of an association is different than participation in one, analyzing the effects of both highlights some of the limited reach of neighborhood associations.

Unintentional SOC Interventions

Some interventions have not intentionally focused on increasing SOC, but have nevertheless been associated with SOC. Peterson and Reid (2002) found in a substance abuse intervention that higher reported empowerment meant lower SOC. Interestingly, this led Peterson and Reid to advocate for deliberate promotion of SOC within empowerment interventions. Speer (2000) determined organizational participation was associated with higher SOC and empowerment, using formal participation in “school groups, church groups, [and] block clubs” as the participation variable (p. 55). Using a more political participation scale—including signing petitions, writing letters, and attending public meetings—Peterson, Speer and McMillan (2008) found significant positive correlations between SOC and participation.

In summary, some participation—in neighborhood associations, political activities, and school or church groups—is related to SOC, while some is not. Most of these studies,

⁷Whether true for most neighborhood associations or not, this was the impetus behind NC—LCW staff thought neighborhood associations were too hierarchical and, based on staff interviews, less likely to increase SOC.

however, ask whether participation in an available intervention or related experience is associated with SOC. What Kingston, et al. (1999) and Brodsky, et al. (1999) note may highlight the more difficult realities of anomie and isolation—that is, the existence of more common forms of participation (e.g., neighborhood associations or religious institutions) may not be enough to curb the lower levels of trust and SC that Putnam (2007) has found in urban areas. Thus, research that examines innovative SOC and/or SC interventions may not only help document how such interventions work, but how anomie and isolation might be reduced.

SOC Intervention Processes

As Miller and Shinn (2005) note, processes by which interventions work are often not explicit. Given the limited interventions that target SOC, there is similarly little known about how interventions create SOC. Proeschold-Bell and Roosa (n.d.) do articulate factors that may lead to SOC, yet they do not indicate a clear process by which these factors may work together in a SOC intervention. They review literature related to McMillan and Chavis' (1986) SOC dimensions and connect it to research into group cohesion, social identity, and social support; they then create a matrix of 20 causal antecedents for these three areas, suggesting the antecedents may be useful in SOC interventions.

Research Questions and Hypotheses

Based on these gaps in the literature about SOC interventions and processes, two questions guided this study: 1) Is NeighborCircles associated with reported increases in SOC and the other three SC dimensions? 2) If there are reported increases in SOC, what about the NC process may have facilitated those apparent increases?

The study involved two related hypotheses: 1) NC will be associated with an increase in SOC and all three other dimensions of SC. This is based on Long and Perkins (2007) finding that participation—which again, is how NC is understood in this study—can predict SOC. 2) If this first hypothesis is correct, though study design precludes causal inferences, it was hypothesized that any of the attitudinal dimensions of SOC that NC reportedly increases will be related to behavioral counterparts of those SOC dimensions. That is, any SOC dimensions that NC increases will be increased via behavioral group processes in NC that promote membership, shared emotional connection, needs fulfillment and influence.

Methods

Study Overview and Setting

This study draws on Miller and Shinn's (2005) call to "locate, study, and cooperate in the dissemination of successful indigenous programs" (p. 170). The Annie E. Casey Foundation, based on their support (Fulton & Jordan, 2010) and dissemination of the NC model in various parts of the U.S. (A. Jordan, personal communication, August 4, 2012), have suggested it works. Therefore, this study's focus on a promising program, using inductive and mixed methods, offers high potential for the ecologically-valid findings emphasized by Miller and Shinn.

The study was conducted in partnership with LCW in the old textile city of Lawrence, 30 miles north of Boston. Lawrence's population has shifted from largely white, European immigrants to over 70% Latino. Hence, survey and interview protocols were translated into Spanish with a professional translator; 21 of 28 surveys and 2 of 11 interviews were in Spanish.

Guiding Principles

This is an exploratory, cross-sectional case study that uses mixed methods. The goal was to contribute to theory and practice about SOC and SC interventions. This included an attempt not to ascertain generalizable results, but rather to consider findings "in terms of the generalizability of cases to theoretical propositions rather than to populations or universes" (Bryman, 1988, p. 90). Additionally, such research provides a theoretical foundation for future studies that may wish to generalize to certain populations or communities. Lastly, the study was designed in the spirit of Townley and colleagues' (2011) view that SOC has generally been measured quantitatively, leading them to suggest a need for more mixed methods studies of SOC.

Quantitative Surveys

Sample and representativeness—Each of the 221 NC participants from 2008 to 2012 in LCW's records were mailed physical invitations to come to LCW for a meal, to give feedback on NC, and to fill out the survey. Partially due to the transitory nature of the population, low email use precluding electronic invitations, and limited resources for making individual phone calls, only 28 former NC participants completed the survey (see Table 1). This low response rate, in addition to sampling limitations, further justified a mixed methods approach.

Three main factors affected the survey sample. First, the 28 in the final sample received a high dosage of NC, with the vast majority (86%) reporting the full dosage of one NC group (i.e., three meetings) or more (see Table 2). This may not be representative of the larger group of 221 NC participants, as only 24% ($n=54$) of those were logged by LCW as having attended three meetings or more.⁸ Second, respondents included two staff members and eight facilitators,⁹ though all but one were regular NC participants at one point prior to assuming those roles. Third, ten individuals (40%) participated in NC five or more blocks from their home, including three in another city (two were facilitators); the other 60% participated in NC within one block of their home or in their home.

However, these data were still valuable. Given the limitations though, and the need to be adaptive in mixed methods research (Bryman, 1988), a social desirability scale was used and the study was modified to be an analysis of highly-involved attendees. While not optimal, this finds support in Cronbach's (1982) call for research into the who, where and when of why programs work. Less highly-involved attendees were also interviewed.

⁸LCW data had lower reliability; other data suggested doing more than three meetings was fairly common.

⁹Facilitators are not staff, but previous NC participants paid a small stipend to lead one or more NC.

Instruments and scales used—Survey responses mainly involved retrospective self-reports, with pre- and post-NC items juxtaposed immediately after one another for a clearer sense of comparison; as noted, this and the overall study design raised the possibility of socially-desirable answers. Thus, surveys included a Marlowe-Crowne Social Desirability Index (SDI) (Strahan & Gerbasi, 1972; Cronbach's $\alpha=.513$). For SOC, the 8-item, validated Brief Sense of Community Scale¹⁰ (BSCS) was used (Peterson, Speer & McMillan, 2008; Cronbach's α pre-NC=.904 and post-NC=.804). A 6-item collective efficacy scale was adapted from Perkins, et al. (1990); scales for neighboring (4 items) and participation (8 items) were adapted from Brown, Perkins and Brown (2003) (Cronbach's α for collective efficacy pre-NC = .933 and post-NC=.724; for neighboring pre-NC = .452 and post-NC=.117; for participation pre-NC=.698 and post-NC=.279). Other questions, including those LCW was interested in, were also included.

Qualitative Interviews

Sample—Semi-structured interviews, lasting 52 minutes on average, were conducted with participants, facilitators and staff, however this paper focuses on participant interviews. Overall, 11 interviews were conducted: 6 with NC participants, 2 with NC facilitators, and 3 with LCW staff members. In order to explore a diverse set of experiences, a combination of maximum variation (Miles & Huberman, 1994) and convenience sampling was used for participant interviews. Of the six past participants interviewed, three were males, three females; two were interviewed in Spanish; one participated in 2006, one in 2008, two in 2011, and two in 2012. Two had been hosts and participated in more than one NC group; four attended at least three meetings, and two attended less than three (one went to only one meeting, and one went to two).

Most were more highly educated than the survey sample, except one who had only a high school diploma. Of the four who provided a household income, two were between \$30,000 and \$40,000 and two between \$50,000 and \$75,000; the one who did not report his income had only a high school degree, worked construction, and lived in a lower-income part of town.

Coding theory and general process—Coding was done with MAXQDA software. As suggested by Charmaz (2006), open coding and then focused coding were used, informed by grounded theory and the constant comparative method recommended by Glaser and Strauss (1967). Initial open coding was conducted to identify emergent themes, though some theoretical coding was used based on McMillan and Chavis' (1986) SOC dimensions. Subsequently, a full coding framework was developed and provided to a second coder to code three interviews. Discussion between coders about general themes and categories, facilitated by a MAXQDA intercoder analysis, helped solidify the coding structure for the final, focused coding stage.

¹⁰Based on ongoing research, the scale was changed from a 5-point range of strongly disagree to strongly agree to a similar 5-point range of never to almost always.

Results

To start, the first research question is addressed regarding whether NC is associated with increases in SOC and SC; this is analyzed quantitatively and qualitatively. For the second question, survey and interview data are used to consider if NC processes may have affected SOC.

Quantitative Findings about SC Increases

Social desirability and SC intercorrelations—Table 3 shows intercorrelations between reported changes in all four SC dimensions and the social desirability index (SDI). All of these correlations were nonsignificant, suggesting participants did not provide significantly socially desirable answers. The largest correlation, while nonsignificant, was between neighboring and SDI ($r=.12$, ns); some SC dimensions had nonsignificant negative correlations with the SDI.

This analysis did reveal significant correlations between all SC measures, excluding the variable for meeting participation. Reported changes in collective efficacy and neighboring had the highest correlation ($r=.798$, $p<.01$); other significant correlations ranged from .421 ($p<.05$) for change in participation and neighboring to .709 ($p<.01$) for change in SOC and neighboring. SC changes and number of NC meetings attended were not significantly correlated, but there was a clear trend relationship between total meetings and change in three of four SC dimensions: SOC ($r=.359$, $p=.09$); collective efficacy ($r=.288$, $p=.17$); and neighboring ($r=.259$, $p=.23$). Total meetings attended and participation change had a small correlation ($r=.049$, $p=.81$). Yet, as noted, number of meetings attended was not precisely measured due to inexact survey questions.

t Test of SC changes—Turning to a key question of the study, is participation in NC associated with reported increases in SOC and/or the other SC dimensions? Differences between pre- and post-NC responses for SOC and the other three SC measures were tested using a paired-sample *t* Test (see Table 4). Significant change was reported for SOC, collective efficacy and neighboring ($p<.01$). Participation overall showed nonsignificant change, as was the case for meeting participation in four types of neighborhood organizations; however, significant change was found for more action-oriented participation in neighborhood organizations ($p=.02$).

The above analyses largely support the hypothesis that participation in NC is associated with increased SC. Considering Townley, et al. (2011) found that predominantly Latino neighborhoods appear to have lower SOC, this finding may be particularly meaningful, given all survey respondents but one were Latino. However, clear limitations of the sample, including overrepresentation of highly-involved participants, narrow the breadth of these findings.

Qualitative Findings about SC Increases

For interviews, explicit questions were asked about SOC and all areas were coded for SOC. The other three SC dimensions were coded for but not included as deliberate questions. All

four are presented separately below. The six interviewees are referred to as NC1 through NC6.

Sense of community—The author asked participants questions about each of the four SOC dimensions: membership, shared emotional connection, needs fulfillment and influence.

Membership: For the membership dimension, five of six participants said NC made them feel more like a member of their neighborhood. One outlier, NC5, said she always felt like a member; NC2 said the same, but continued to say NC reinforced that feeling because “it allows you to grow and actually identify what is affecting everyone.” Both demonstrated potential self-selection into NC, however this did not appear to be the case with the other four. For example, in response to a question about if participants felt like members before NC, NC4 said:

Well, before you got, I don't think they, anybody feel that before, because you, you think that you are invisible...Like nobody knows, that you don't even exist, except by your close friends, for instance. But ah, when we had that group, it's ah...it was great...

This response speaks to a more profound desire for membership than was obvious among others, yet it shows the ability of NC to affect someone with such intense levels of disconnection.

Shared emotional connection: All participants said NC positively affected shared emotional connection (SEC). NC6 said “we feel like a family” and NC3 said she “formed a really nice friendship with a guy that participated.” When asked about the story exercise, NC3 said “we shared beautifully and everything was lovely there.” NC4 said SEC depended on people's ability to bond with others, saying NC only affected it a “little bit” for him—but that more meetings would affect it more. NC5 explained more significant effects on SEC:

I think it made me closer, especially when we were like, I learned things about my neighbors that I didn't know...where they came from, how they...end up coming here, you know...They shared their stories, uh, maybe people that I thought they were like, I don't know, that they were not friendly and they really were friendly, they were just shy.

As NC5 demonstrates, the story exercise clearly played a hand in SEC, in part by simply allowing her to learn “things about [her] neighbors that [she] didn't know.”

Needs fulfillment: All but one interviewee said NC increased their ability to fulfill their needs. The outlier, NC3, felt her needs were not largely met because actions were not taken to deal with problems on her street, such as cars speeding by; this was clearly supported by survey data detailed below that actions did not meet the needs of a number of participants. NC2 pointed out that meeting needs via NC “might be the only way to get ah, your neighbors involved in the community.” Two participants noted a related theme that, as NC5 put it, NC allowed her to get to know people “so that if we ever need something, you know, they're gonna be there for us.” NC2 expanded on this with a specific example: “I didn't

know that was a person who was a nurse. So now I know...if I'm sick I could run over to that person and knock on the door and be like hey look, I'm not feeling well." This is not only a concrete example that NC2 feels that his needs can be fulfilled via NC, but it is also an example of the neighboring dimension of SC.

Influence: There were more missing responses for the influence dimension than for the other SOC dimensions, along with some mixed answers. The author overlooked asking NC1 the influence question and the translator incorrectly asked the question to NC6. NC3, similar to needs fulfillment, did not believe her influence was much greater. NC5 clearly seemed to think her influence had increased. For NC2, who became a city councilor at some point after NC, he said he always had felt influential; but, he extended this analysis to the neighborhood level and said he thought NC had increased the influence of the neighborhood. NC4 responded to the question about influence by saying: "Yeah, yeah, but like I said, we have to do a follow-up, we have to continue. And ah, ah...I have a feeling that it kind of stalled." He explained that it stalled by not continuing to meet in some form after the first three NC meetings.

Collective efficacy—Turning to the other SC dimensions, all participants except for NC3 were coded for one or more statements suggesting an increase in collective efficacy. Participants talked about gaining a voice and learning they can make a difference for issues such as street signs (NC2, NC4), problems with trash (NC1), or collectively asking a neighbor to turn down their music (NC6). "We discovered that we can do *a lot*," said NC4.

Some of this, however, led to neoliberal themes, best captured by NC5's explanation of how neighbors were considering purchasing a snow blower to clear their sidewalks. She was conflicted about whether the city of Lawrence should do this, though they had in the past. She said, "we pay a lot of taxes," and noted that she and others had unsuccessfully gone before the city council. Although she thought the city was in the wrong, she was unable to articulate a way by which citizens could pressure leaders to change their policy. Similar attitudes were voiced by NC1 and NC2, usually in the form of resolving issues "without having to go to the city" (NC2).¹¹

Neighboring—Most interviewees seemed to experience some degree of neighboring via NC. There was not much evidence of neighboring for NC1 and NC6, however not much time had passed since they had participated in NC. NC3 did not articulate much in the way of neighboring, but demonstrated a form of it by calling a friend she made at NC in the middle of the interview to encourage him to participate in the study. NC4 said he sees people in the streets or in the supermarket now and is able to talk and connect with them.

NC5 talked about regular in-person, phone and text communication with neighbors about criminal activity, providing an important example:

¹¹A subsequent article will explore this further, but Warren, Thompson and Saegert (2001) note problems that arise when SC is viewed as an alternative to public investment. Others cite flaws of solely consensus-based approaches to change, opposed to conflict-based (such as traditional community organizing; e.g., Stoecker, 2003).

We used to, I don't know call each other... There were times also we were having people getting into the other people's backyard, like the guys that were drug dealing and there was a time where my mom had to say, you know, "What are you looking for?" Because the lady up the street, she lives alone. And she's like 80 and something years old. So, we were concerned... and I end up calling the cops, "Can you please send a patrol over."

This example clearly goes beyond simple relational interactions to neighboring that affects safety and crime. NC2 provided evidence of continued cookouts being organized after NC:

In 2010, so, ya know, I've never been shy, but I wouldn't be like an intruder going into someone else's backyard and hey, they're cooking, I want food. But now, like I could just say hey neighbor, and you know what they would say? "Hey, come over." Before, ya know, they were having the food, and I would just walk by and do nothin'.

In terms of degree of neighboring, these examples are outliers among the small interview sample but are corroborated by significant changes in neighboring reported in the survey findings.

Participation—As previously noted, the fact that coming to NC is in and of itself a form of participation means that NC involves additional participation. Similarly, the common occurrence of organized collective action via NC is a form of participation; all participants except NC3 reported taking actions via NC. Even for NC3 though, she said, "I've talked about this program, I've said that they participate... that they go to the community to participate." NC4 noted that homeowners like him were more likely to participate in NC, though NC5 said it was useful for renters too (of 20 survey respondents, half were homeowners and half were renters).

Summary of SC Increases

Together, quantitative and qualitative findings show that NC is associated with increases in all four dimensions of SC. Though NC most prominently focuses on SOC, the other three dimensions of SC also appear to be positively affected. Up to this point, findings have been presented that suggest NC is associated with increases in reported SC for highly-involved attendees. Next, participant surveys and interviews are analyzed to answer the question: What actions and processes within NC may have led to reported increases of SOC in particular?

Processes at NeighborCircles

Interview and survey questions were designed to examine processes that may lead to SOC. Survey questions were formed a priori based on the idea that deliberate components of NC will increase SOC to the degree they represent behavioral versions of McMillan and Chavis' (1986) four SOC dimensions. Thus, interview and survey questions targeted processes that may lead to a sense of membership, shared emotional connection, needs fulfillment, and/or influence.

Membership processes—Sixty-two percent of 26 respondents said they got to know *more than five* new people or people they did not know well; all 26 said they got to know at least two or more new people or people they did not know well. Why didn't they know those people well or at all before? Of the options, most (60% of 25 respondents) said they did not know them because "It is hard to know *how* to get to know neighbors well" (emphasis added). Referring to the idea of membership, NC1 said: "I will say that they will, they felt like they were a member as soon as they got to the first meeting and find out what the neighborhood association¹² is all about." Other processes involve hosts inviting neighbors to NC and participants signing a document to commit to all three meetings; those who return often see the same neighbors or "members" because it is designed to be a smaller, more intimate group of 10 to 12 people.

Shared emotional connection (SEC) processes—Survey respondents were asked, "At NC, some people say they interact with others on a casual level, while some say they interact on a deeper level—what would you say?" Out of 24 respondents, 16 (67%) "mostly interacted with others at NC on a deeper level." Respondents were also asked if they had a chance to "tell [their] story to the larger group." At the first of three NC meetings, participants are supposed to tell the story of how they came to live on their current street; the survey question was used to check: 1) if this was happening and 2) if participants saw this as "telling their story." Of 24 respondents, 70% said *yes*, they had a chance to tell their story, 25% said *somewhat*, and one person said *no*.

Needs fulfillment processes—One survey question asked: "Some say the NC meetings and/or the actions taken by their NC group met some of their needs, while some say they did not—what do you say?" Interestingly, 80% (20 out of 25) chose "Yes, the meetings met some of my needs," while only 44% (11 out of 25) chose "Yes, the actions taken met some of my needs"; given that 61% (17 of 28) said they got involved with NC to take some type of action, this suggests either some actions taken were not meeting needs, or actions simply were not being taken (as was reflected in some interview data). However, of 27 respondents, 19 (70%) said they took action during or soon after NC with participants (and 82% said they took action since NC).

Influence processes—Lastly, the process of influence was examined by asking survey respondents *if they influenced* aspects of NC and/or *if they were influenced by* aspects of NC. Out of 28 estimated¹³ respondents, 54% said they influenced or affected the community issues talked about at NC, while only 32% said they influenced or affected the actions taken. Similarly, out of 28 estimated respondents, 57% said they were influenced or affected by the community issues discussed, with only 29% reporting being influenced or affected by the actions taken.

¹²NC was incorrectly referred to as a neighborhood association a number of times, showing that it was understood by some as similar—though NC1, for example, had never been to an actual neighborhood association.

¹³This an estimate because participants were asked to check a box to show affirmation; thus, if no box was checked, this could mean "no" or something similar, or it could mean they skipped the question. To be conservative, the percentage calculation was treated as though all who left the question blank intended to say "no."

Taken together with the reported increases in SOC and SC, these processes shed light on concrete ways by which SOC in particular might be increased. As noted, the processes appear to largely represent the behaviors or actions that are implied by the attitudinal dimensions of SOC.

Discussion

Numerous scholars reviewed above suggest SOC interventions are needed. However, the minimal research on SOC interventions tends to focus on traditional organizations, which Brodsky, et al. (1999) suggest do not reach less engaged citizens—and often involve interventions not even intended to affect SOC. Therefore, this study appears to be rare among SOC research as an analysis of an intervention with the clear goal of increasing SOC and SC. Focusing on generalizability to “theoretical propositions” (Bryman, 1988, p. 90), not populations, the quantitative and qualitative findings for highly-involved participants in this study support the theory that SOC and SC interventions have critical potential—this is reinforced by Sampson’s (2008) aforementioned view that “interventions in the local community are unlikely to succeed if they attempt to penetrate the private world of personal relations” (p. 165).

Quantitative findings included high correlations between all SC dimensions except some forms of participation; however, the fact that participation related to actions taken with a neighborhood organization was significantly correlated with the other SC dimensions suggests action may be more important for SC than meetings. However, given the poor internal consistency for the neighboring and post-participation scales used, findings for action and meetings may have been stronger if scales with greater reliability had been used.

This study also highlighted processes of NC that may have contributed to reported increases in SOC. The findings support the idea that, at least in part, processes using behavioral forms of McMillan and Chavis’ (1986) attitudinal dimensions may be a way of building SOC (and possibly SC). Additionally, of the aforementioned 20 antecedents Proeschold-Bell and Roosa (n.d.) note are causally related to SOC-like dimensions, NC either fully or partially includes 9 of them: 1 for shared emotional connection (SEC) (interaction among members); 5 shared by SEC and needs fulfillment (opportunities to communicate; group distinctiveness; clear roles; clarity of group goals; and group success); 2 for needs fulfillment (cohesive, expressive environment; and self-disclosure); and finally, 1 for membership (acceptance by members).

Implications

This study has several implications for SOC and SC interventions and future research. In terms of practice, Miller and Shinn (2005) note the need for research that identifies powerful ideas and central aspects of interventions, allowing flexibility around those core components. One such powerful idea from this study is simply that interventions may be needed to build meaningful relationships between neighbors—though perhaps between others as well. A related powerful idea is that the cognitive form of SC (i.e., SOC), may *not* be best created by a cognitive method—such as telling people they should care about or

build SOC—but by a deliberate, behavioral intervention; this and the potential for behavioral interventions to create SC in general should be further tested.

More concretely, Lipsey (1993) suggests “small theories” to describe processes for local programs. Specifically, relating NC back to SOC, findings suggest it roughly included the following processes: 1) membership (i.e., a host inviting neighbors to come into her/his home, followed by repeat meetings that provide a member-like experience with neighbors); 2) shared emotional connection (i.e., fostering opportunities to connect emotionally, such as sharing food together and relating one’s story to the NC group); 3) influence (i.e., being able to present one’s issues and suggested actions to the group, while also hearing issues and suggested actions of others); and 4) needs fulfillment (i.e., satisfying needs via meeting, discussing issues, and taking collective action on issues that matter to the group). This is a nascent description and both the varying fidelity in program delivery and limitations of the study suggest the need for further research to test it—ideally, casual research that takes into consideration limitations noted below.

In terms of testing the process, the potential to experiment with the NC model should be considered, both in terms of program components and settings. The powerful idea of deliberately building neighborhood relationships and SC is likely best left as the core, but additional program components should be weighed, such as: meeting more than three times (as suggested by the majority of survey respondents); keeping NC dynamic and useful for broader neighborhood relationships by mixing groups up every three to six months; dealing with findings of limited action and needs fulfillment by providing clearer stepping stones from completion of NC to other involvement, such as social or civic engagement (perhaps by being educated about various local options, such as neighborhood associations, community organizing, etc.); and considering incorporating facilitated dialogue about difficult issues (such as the Everyday Democracy model¹⁴ of discussing issues such as race, faith and immigration).

Additionally, use in different types of neighborhoods (e.g., public housing, mixed-income) and in different types of organizations or settings (e.g., community organizing, community centers) should be eventually attempted and studied. Indeed, the question of what type of organization is best to create that “more organized citizenry in low- to moderate-income neighborhoods” (Ferguson & Stoutland, 1999, p. 48) is a central question that will be addressed in a subsequent theoretical article. Regardless, any experimental efforts should be approached with care and deliberate evaluation, in part due to limits to this study and in part due to the fairly homogeneous population in this study; Miller and Shinn (2005) recommend “study[ing] ways that treatments must be modified to work in new settings” (p. 176). As suggested above, this or any other future study of a NC-like program should build on the exploratory design of this research to develop more rigorous descriptive and explanatory research.

This article focused more on SOC than overall SC. However, more efforts should be made to connect the two via research and action, as called for by Perkins, Hughey and Speer (2002).

¹⁴More on the Everyday Democracy model can be found online at www.everyday-democracy.org/

In that same paper, the authors note the need for community psychologists and community developers to collaborate—a perfect means by which SOC and SC interventions could be further connected. For NC, comparative case studies should be considered in the various other locations where the Annie E. Casey Foundation has used the model.

Limitations

As previously noted, generalizability of this pilot study is limited, as is the statistical power given the sample. It is potentially biased towards staff and has shortcomings in regard to neighborhood measurements, with 40% of respondents engaging in NC five or more blocks from their home (though they may have still been participating with neighbors); this suggests a limitation in validity for the SC constructs, given that some items are neighborhood-oriented. The study would also have been much stronger with a pre-post analysis and/or a control group.

One overall limitation was the analysis of individual- as opposed to community-level indicators, which falls short of suggestions regarding SOC measurement (e.g., Brodsky, et al., 1999) and SC measurement (which are particularly important to consider at the collective level, as noted by Sampson, et al. (2005)). Additionally, because it was not anticipated that so many participants would have done more than one NC group, the questions in the survey did not fully address this. Some questions distinguished between first and second NC groups, but others used the language “before NC” and “after NC,” which is not precise enough. Low alpha reliability of scales for neighboring, post participation and, to a lesser degree, SDI, was another limitation.

Conclusion

Sense of community and social capital interventions merit much more attention, particularly given our increasingly heterogeneous society (Alesina & Glaeser, 2004) and the ideal of mixed-income, diverse neighborhoods (DeFilippis & Fraser, 2010). Whether we build a country that only becomes more divided as it becomes more diverse may depend on our approach to SOC and SC going forward. This study provides evidence that SOC and SC can be deliberately formed, at least for highly-involved participants. It is an important task to build on this work, experiment with the NeighborCircles model, and push forward on the ever-present challenge of fostering more local, pragmatic, inclusive forms of community.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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	Cognition/Trust	Social Behavior
Informal	Sense of community	Neighboring
Formally Organized	Collective efficacy	Citizen participation

Figure 1.

Table 1

Survey Demographics

Variable	<i>n</i>	Frequency	Percent
Hispanic, Latino, or Spanish origin (general)			
Hispanic, Latino, or Spanish origin		27	96.4%
Non-Hispanic, Latino, or Spanish		1	3.6%
Total	28	28	100%
Education			
High school diploma or less		8	28.6%
2 year college degree or vocational certificate		5	17.9%
4 year college degree or more		10	35.7%
Missing		5	17.9%
Total	28	28	100%
Combined household income			
\$10,000–\$20,000		7	25.9%
\$20,000–\$40,000		8	29.6%
\$40,000–\$75,000 or more		5	18.5%
Don't know		1	3.7%
Missing		6	22.2%
Total	27	27	100%

Note: Given demographics include missing data, these are conservative estimates.

Table 2

NC Attendance for Study

Variable	<i>n</i>	Frequency	Percent
Total reported NC groups ^a			
1		10	35.7%
2 or 3		10	35.7%
4 or more		7	25.0%
Missing		1	3.6%
<i>Total</i>	<i>28</i>	<i>28</i>	<i>100.0%</i>
Total estimated NC meetings ^b			
1–2		3	14.3
3–4 ^c		10	42.9
5 or more		12	42.8
<i>Total</i>	<i>28</i>	<i>28</i>	<i>100.0</i>

^aNC groups are comprised of at least 3 meetings, according to the model.

^bTotal meetings attended not available because some reported attending but did not provide exact meetings per group. So numbers may be conservative, with some having participated in 10 or more meetings.

^c17.9% (n=5) attended exactly 3 meetings.

Table 3
Intercorrelations for reported SC change dimensions and Social Desirability Index (SDI)

	Correlations					
	SOC change	Collective efficacy change	Neigh. change	Partic. change ^a	Partic. mtng change ^b	Partic. work change ^c
SOC change	1.00	.682 **	.709 **	.491 *	.34	.511 **
Collective effc. change	.682 **	1.00	.798 **	.510 **	.22	.710 **
Neighboring change	.709 **	.798 **	1.00	.421 *	.26	.489 *
Partic. change ^a	.491 *	.510 **	.421 *	1.00	.885 **	.746 **
Partic. mtng change ^b	.34	.22	.26	.885 **	1.00	.35
Partic. work change ^c	.511 **	.710 **	.489 *	.746 **	.35	1.00
SDI	-.01	.10	.12	-.09	-.10	-.04

^aParticipation overall in neighborhood meetings and work.

^bParticipation in meetings for one of four groups: neighborhood associations, religious groups, youth-related groups, or crime-related groups.

^cParticipation in neighborhood work or action (for one or more of the same four groups).

* p < 0.01 level, 2-tailed.

** p < 0.05, 2-tailed.

Table 4

t Test for Dependent Samples: Reported Pre to Post Changes in SC Dimensions

	Mean	SD	95% Confidence Interval of Difference				t	df	Sig. (2-tailed)
			Std. Error	Mean	Lower	Upper			
SOC post - SOC pre	1.63	1.00	0.20	0.20	1.22	2.05	8.16	24	0.00 ^{††}
Collective effic. post - CE pre	0.63	0.72	0.14	0.14	0.34	0.93	4.43	24	0.00 ^{††}
Neighboring post - Neigh. Pre	0.91	0.82	0.17	0.17	0.56	1.26	5.43	23	0.00 ^{††}
Partic. post - Partic. pre ^a	0.05	0.17	0.03	0.03	-0.01	0.12	1.69	27	0.10
Partic.M post - Partic.M pre ^b	0.03	0.24	0.05	0.05	-0.07	0.12	0.59	27	0.56
Partic.W post - Partic.W pre ^c	0.08	0.17	0.03	0.03	0.02	0.15	2.54	27	0.02 [†]

^aParticipation overall in neighborhood meetings and work.^bParticipation in neighborhood meetings (i.e., for one of four groups: neighborhood associations, religious groups, youth-related groups, or crime-related groups).^cParticipation in neighborhood work or action (for one or more of the same four groups).^{††} $p < 0.01$, two-tailed.[†] $p < 0.05$, two-tailed.