Why Organizational Ties Matter for Neighborhood Effects: A Study of Resource Access through Childcare Centers[1]

Mario Luis Small (University of Chicago)
Erin M. Jacobs (MDRC)
Rebekah Peeples Massengill (Princeton University)

Working Paper

How does neighborhood poverty affect the poor's ability to access resources such as health care and job information? Most studies have focused on individuals or neighborhoods; we focus on organizations—specifically, whether organizations are less connected if located in poor neighborhoods. Our case study is childcare centers. We ask whether centers' organizational ties provide parents access to important resources, and whether neighborhood poverty affects this capacity. Based on qualitative fieldwork in 23 New York City centers, we develop hypotheses about this process. We test them on a representative sample of 293 centers. Findings uncover that centers provide important resource-access through their ties and that neighborhood poverty does not undermine this capacity. We suggest that organizational ties may help explain the inconsistent results of the neighborhood effects literature.

[1] This research was funded by Princeton University and by a grant from National Institute of Child Health and Human Development (#3 R01 HD039135-03S1; PI: Christina Paxson). We thank the members of the Fragile Families Working Group and of the Ohio State University Sociology Department Seminar Series, as well as Nicole Marwell, Sara McLanahan, and Devah Pager for comments and criticisms. Direct correspondence to Mario L. Small, 1126 E. 59 St., Department of Sociology, University of Chicago, Chicago, IL, 60637. Email: mariosmall@uchicago.edu.

One of the most important factors affecting well-being among the poor is the ability to access resources the middle class takes for granted, such as health care, legal representation, and information about jobs. How does neighborhood poverty affect this ability? The "neighborhood effects" literature has provided two answers (Sampson, Morenoff, and Gannon-Rowley 2002; Small and Newman 2001). One, social isolation theory, argues that neighborhood poverty disconnects people from middle-class social networks containing resources such as information about jobs and education (Fernandez and Harris 1992; Wilson 1987, 1996). The other, de-institutionalization theory, argues that concentrated poverty leaves neighborhoods without the middle-class capital or leadership to support strong local organizations (Wilson 1987; but see Small and McDermott 2006). Thus, residents have a harder time locating resources such as childcare and medical services (Ellen and Turner 2003; Ludwig, Duncan, and Ladd 2003). Through different mechanisms, both theories expect neighborhood poverty to reduce the available resources important to well-being.[1]

This study examines one factor neglected by the neighborhood effects literature: the networks of local organizations. While such networks concerned sociologists in the 1970s and 1980s (Laumann, Galskiewicz, and Marsden 1978), they have all but disappeared from the most recent research on neighborhood poverty. Recent reviews of that literature report very few studies on the topic (Sampson, Morenoff, and Gannon-Rowley 2002; Small and Newman 2001).

This neglect is problematic for two reasons. First, while local organizations matter because of the resources they sell or offer directly, they also matter because of those they give *access to* through their organizational ties (Chaskin et al. 2001). For example, a church may be connected to an organization that supports a food bank. Recent studies have supported this idea. In a study of 549 religious organizations, Ammerman shows that 65% had at least one tie to an

organization providing “food, clothing, shelter, and other direct aid”; 13%, to a policy advocacy organization; 38%, to a community benefit organization; 73%, to a health, culture, education, or youth organization; and 32%, to a self-help and growth organization (Ammerman 2005:165-66; see also McRoberts 2003). Delgado (1997; Delgado and Santiago 1998) shows that beauty salons and botanical shops in immigrant neighborhoods have ties to health organizations that provide health-related information, services, and free goods such as contraceptives. Organizational ties may substitute for what is unavailable through social ties.

Second, it is unclear how neighborhood poverty affects organizational ties. The de-institutionalization perspective would expect neighborhood poverty to weaken them, given the absence of the middle class. However, a neighborhood’s organizational ties are influenced not merely by the demographic traits of its residents but also by external institutional factors, such as pressures by the state and the non-profit sector, both of which may develop and sustain ties in otherwise disorganized areas (Logan and Molotch 1987; Smith and Lipsky 1993). This is especially likely if, as researchers have argued, the interaction among organizations in for-profit, non-profit, and government sectors has increased, since additional parties are potential actors (Austin 2000; Marwell and McInerney 2005; Smith and Lipsky 1993). Do such institutional factors have a measurable effect? If so, do they reinforce, cancel out, or counteract the effect of local demographic conditions? Tests of the general neighborhood effects hypothesis have yielded mixed results (Goering and Feins 2003), and the failure of most tests to account for organizational ties may be part of the reason.

This study examines how neighborhood poverty affects access to resources important to well-being from a perspective missing from the neighborhood effects literature. In social isolation theory, the *individual* is the unit of analysis, and the question is whether individuals

have access to fewer resources in poor neighborhoods; in de-institutionalization theory, the *neighborhood* is the unit, and the question is whether poor neighborhoods are more resource-deprived. In the present study, the *organization* is the unit, and the question is whether local organizations are less connected if they are in poor neighborhoods. The particular connections of interest are those providing the organization's patrons access to resources important to well-being. Contrary to existing perspectives, this approach explores both demographic and institutional factors.

The study examines one of the most important local organizations—the childcare center. After introducing our theoretical perspective, we present results of a qualitative study of 23 New York City childcare centers that examines whether and how centers provide their adult patrons access to resources through organizational ties. We formalize these findings into hypotheses and then test them on a unique quantitative dataset of the organizational ties of nearly 300 randomly-selected childcare centers in the city. Findings uncover that centers provide access to important resources through their ties, and that, due to the influence of institutional factors, neighborhood poverty is associated with more, not fewer organizational ties. We suggest that the neglect of organizational ties may help account for inconsistent findings in the neighborhood effects literature, since the impact of neighborhood poverty on an individual may depend on her ties to local organizations and on the ties of those organizations themselves.

THEORETICAL PERSPECTIVE

Our study is informed by a systemic perspective on the relationship between local organizations and society at large (Warren 1978) and an open-systems perspective on the factors affecting the behavior of local organizations (Powell and DiMaggio 1991).

Warren (1978) argues that large-scale secular transformations have changed how neighborhoods are connected to wider society. As bureaucratization and specialization have increased, neighborhoods become connected to society less through a "sense of community" than through the ties between local organizations and larger organizations throughout society. Thus, organizations as different as grocery stores, churches, schools, and local union offices represent versions of a common entity, local units that, through their vertical ties, link the neighborhood to wider society—to the national supermarket chain, the denominational board, the education department, and the national union, respectively.

These ties carry resources between local and external organizations in a rational and bureaucratic fashion. For Warren (1978:260), "resources" include capital, information, personnel, and even "products or services for distribution within the community." The model therefore implies that the resources available to a resident in a given neighborhood are shaped substantially by external systems, rather than just local demographics. The foods sold in groceries, the curricula taught in schools, the services offered in community centers, and the health plans accepted in local clinics would all be shaped by external systems (see Laumann, Galskiewicz, and Marsden 1978).

Our conception of the local organization itself follows an "open systems" perspective (Scott 2002). We conceive the local organization not as a coherent, closed system whose actors strive toward a single goal, but as a loosely coupled set of actors and institutional practices oriented towards multiple yet overlapping objectives, actors motivated by internal and external, economic and social factors (Meyer and Rowan 1977; Powell and DiMaggio 1991; Scott 2002). Specifically, actors are subject to normative pressures, manifested in their tendency to reflect the beliefs about appropriate functioning, service provision, and conduct developed by practitioners

through professional training (DiMaggio and Powell 1983). They are also subject to coercive pressures from powerful authorities such as the state, which presents explicit or implicit mandates (DiMaggio and Powell 1983; Logan and Molotch 1987). Thus, local organizations such as childcare centers may be motivated to develop vertical ties to entities outside their field or sector by heterogeneous pressures, such as professionally-agreed upon norms or mandates of the state or other powerful actors.

Based on these perspectives, we view the center as an organization with vertical ties that may carry resources "for distribution within the community" and subject to both economic and institutional pressures. Our expectations about organizational ties in poor neighborhoods differ from those of de-institutionalization theory. The latter expects the *demographic* conditions of the *local* neighborhood to be the primary causal factors, such that the higher the poverty rate, the less viable local organizations such as childcare centers. We expect the *institutional* conditions of both *local* and *external* organizations to play equally important roles, such that the higher the poverty rate the less or more connected local organizations, depending on the norms of local and external actors and the presence of coercive pressures. Our specific empirical questions are the following: Do childcare centers provide access to resources important to well-being through their inter-organizational ties? If so, how is this process affected by neighborhood poverty? We begin by explaining our focus on childcare centers.

CHILDCARE CENTERS AND ORGANIZATIONAL TIES

The childcare center presents an auspicious opportunity to examine these questions. First, childcare centers are *local* organizations, since, given client preferences, they typically serve residents within the neighborhood. For example, a survey of Maryland parents reported that

80.4% preferred a childcare center near their homes, with proximity being the most important factor in choosing a center (MCC 2003). Accordingly, 77.8% of the centers we surveyed reported that "all or almost all" of their clients live in the neighborhood. Second, the childcare center is an increasingly important organization for the poor in light of dramatic policy shifts over the last decade. The Personal Responsibility and Work Opportunity Act of 1996 toughened eligibility rules for welfare recipients and instituted a work requirement, forcing more low-income mothers to work, and heightening the importance of childcare. Third, unlike other local organizations, childcare centers may be for- or non-profit, publicly or privately funded, and religious or secular, yielding a rich variety of forms, sectors, and interests available to assess the expectations of a systemic perspective. Few neighborhood organizations afford this analytical leverage. For example, studies of churches always leave questions about their applicability to for-profit and governmental organizations. Finally, there is a small literature on which to build. Fuller and Liang (1996), Queralt and Witte (1998), Siegel and Loman (1991), and Small and Stark (2005) have studied the relationship between neighborhoods' socioeconomic status and presence of childcare centers. While these studies do not examine the connection between poverty and inter-organizational ties, their findings are relevant to our questions. Particularly, Small and Stark (2005) find that state pressures affect the presence of centers in poor neighborhoods.[2]

QUALITATIVE DATA AND FINDINGS

We interviewed, in person, directors or other personnel of 23 childcare centers in four New York City neighborhoods: one low-income black, one low-income white, one low-income Latino, and one upper middle class. (While we selected these neighborhoods based on race and

income; our fieldwork suggested, and quantitative tests confirmed, that race was largely irrelevant after organizational factors were accounted for.) Each neighborhood consisted of 3 to 5 census tracts selected according to social boundaries and our income/race criteria. Centers were observed between 1 and 8 times. In each center, we collected fieldnotes on physical conditions of the center, social interactions, and available resources. The staff interviews provided data on motivations for establishing inter-organizational ties, the nature of those ties, and the resources available to parents. We complemented these data with in-depth interviews with 64 parents, and selected key-informant interviews with leaders in the government or non-profit sectors in New York City. See Table A1 for basic neighborhood and center characteristics in the qualitative study.

Our fieldwork revealed a complex process in which centers provided access to multiple resources through their ties, and ties resulted from the influence of multiple actors. Before disentangling what we observed, we briefly describe the Family Focus Head Start, which highlights several of the issues at play.[3] On our first visit to the center, Rachel, the parent coordinator, described a center well connected to external agencies and providers. She arranged workshops and events for parents of the center's 200 children, and coordinated social services with other organizations in this poor, predominantly white neighborhood. Upon enrollment, parents completed a questionnaire regarding what workshops the center should offer. This practice resulted from Head Start regulations and her belief that this was empowering. The workshops were run by other organizations. For example, the owner of a haircutting business had recently led a well-received haircutting workshop (wigs were still displayed around the room on mannequins' heads). Parents appreciated learning a marketable skill and a way to cut costs at home, especially in large families. When mothers enrolled in the center, Rachel noted if they

were pregnant, which was not uncommon; when the newborn arrived, she referred them to a neighborhood nonprofit that sends free household and childcare help to mothers postpartum. She also referred parents experiencing emergency food or clothing needs to nearby nonprofit and government agencies. Through the center, therefore, parents accessed several resources conducive to well-being—including cost-saving skills, household post-partum help, food, and clothing—from other organizations.

Diverse resources

Our fieldwork uncovered that childcare centers' organizational ties provided access to a remarkably *heterogeneous* set of resources conducive to well-being. The resources included information, services, and material goods, and they centered on the following domains: housing, physical and mental health, health care, child development, schools, adult education, legal issues, government programs, immigration, employment, and the arts and entertainment. Table 1 presents the resources observed in our qualitative study.[4]

Table 1: Resources transferred through childcare centers

Not surprisingly, much of the *information* pertained to child-related issues, such as asthma, lead poisoning, and school enrollment. Other information addressed adult issues such as domestic abuse, health care, and work-life balance. This information was provided by businesses, health organizations, government agencies, schools, and others. The centers provided access to many *services*, most for free or at low cost, either on center premises or elsewhere. Many were services for which patrons would normally have to pay. Several

involved child-related issues, such as free health and dental exams, speech therapy, and cognitive development screening; others were relevant to parents, such as free or low-cost health and vision exams, assistance in dealing with landlords, temporary relocation apartments for women leaving abusive spouses, HIV/AIDS testing and treatment, adult literacy, and work training. Finally, centers provided access to *material goods*. Several centers collaborated with the city-wide "Cool Culture" program, which gave patrons free passes to approximately 50 museums and cultural outlets in the city (www.cool-culture.org). One center was tied to a soup kitchen that served parents regularly; another offered toys (sponsored by a department store) during Christmas.

The information, services, and goods accessible through childcare centers ranged from those specifically important to the poor (e.g., government programs) to those with no class target but of greater interest to middle class patrons (e.g., yoga classes). Many of the resources, such as screening for learning disabilities and school enrollment information, were important to patrons of all class backgrounds.

Referral ties and collaborative ties

How did centers provide access to these resources? The fieldwork uncovered many types of relationships between the center and the external organization. While fully articulating the possible relationships is a complex endeavor well beyond scope (Laumann, Galaskiewicz, and Marsden 1978), we can identify two general types of relations: referral ties and collaborative ties.

Formal referrals—through which centers forwarded the name of a parent to or formally informed the parent of an organization providing a resource—were ubiquitous. Some referrals stemmed from parental requests. For example, Francis, a white mother at Little Friends, a center

in a middle-class neighborhood, needed a referral for her child, who, in their bilingual Russian/English household, was not speaking by age two. An evaluator had recommended therapy; Francis then spoke to the center's director:

> [The director] had the name of a speech therapist who was located in [the neighborhood] so it would be very convenient for [the therapist] to see him at the school. So … the speech therapist [my son] has is actually the one that we got the recommendation from [the director] for.

Other times, referrals occurred at the request of a teacher or staff member after noticing something during the provision of care. We asked Denise, a black mother whose three children were in a center in a low-income black neighborhood, whether she had ever received a referral from the center: "Well, actually they referred me to check my kid's eyes. They got the Health Department to come..... That's something we gotta work on over the summer, 'cause my son has... a hand-eye coordination problem."

Often centers did more than refer parents; they collaborated with the organization by providing a room or arranging a meeting for the organization to provide or sell its resource. Collaborative ties were less common, though by no means rare. Often centers held workshops in which outside speakers led training sessions on mental health, nutrition, child discipline, or other issues. Other times, experts—such as speech therapists or dentists—conducted their practice at the center. One center prepared "a whole transition piece" for parents with children entering elementary school: it included school visits, presentations from school teachers, tours of school grounds, and enrollment assistance. Some collaborations resulted from parental request, but many did not. Lorraine, a middle-class white mother, explained why she appreciated the resources available through her son's center:

> They have… informational sessions about… New York pre-schools. They… have testers come in [because]… all the private schools need… IQ-type tests…, and it's all done there [at the center]. And they basically… hold your hand through the application process.

We asked Xavier, a black father whose daughter is at Happy Days Preschool, whether the center provided any resources directly: "Actually they did…. [My daughter] went for a… hearing clinic evaluation, actually… [The center] had a mobile unit come to the school and they tested her eyes and… hearing."

Role of the state and large non-profits

Not all childcare centers provided equal access to resources. The fieldwork was consistent with the theory that the state and the non-profit sector play a role. Two findings emerged. First, the state contributed to tie formation through coercive pressures. Second, large non-profits contributed to the process in response to government retrenchment and state contraction.

Many government-funded centers had mandates to establish ties. From their inception, Head Start programs were envisioned as collaborative enterprises. Accordingly, the federal government requires Head Start centers to provide resources for families, which effectively mandate that directors develop organizational ties. For example, the centers are required to determine whether "each child has… continuous, accessible health care" (Department of Health and Human Services 2005: Section 1304). If not, the center must help the parent find care. In addition, the center, working with the parent, is required to screen children to assess "developmental, sensory (visual and auditory), behavioral, motor, language, social, cognitive, perceptual, and emotional skills" (DHHS 2005: Section 1304). The government does not provide extensive funds for these assessments (Zigler and Muenchow 1992); instead, it expects

centers to “take affirmative steps to establish… collaborative relationships with community organizations,” such as “health care providers…, mental health providers, nutritional service providers… and any other organizations or businesses that may provide support and resources to families” (DHHS 2005: Section 1304). We observed a similar pattern with city-funded centers, which are managed by the same city agency as Head Start centers (the Administration for Children’s Services), and are subject to the same structure and rules.

Large non-profits in the city also encouraged centers to form such ties. Many have argued that non-profits have assumed actions once performed by the state, through their own or state funding (Salamon 1995; Smith and Lipsky 1993), partly due to the decline in federal funds for social services (Salamon 1993). Our interviews with heads of large non-profits suggested that this retrenchment contributes to the formation of ties between these organizations and centers. One of our informants, Robert, spent decades as the director of a major children’s non-profit in the city. He explained the current predicament:

> [Today] there is no money in day care centers for health or mental health…. Head Start eliminated years ago from the federal level any substantial amount of money for [these services], and greatly cut back on three categories of staff—social worker, family assistant, and family worker—that were once part of the Head Start machinery.

His and other non-profit organizations “have compensated for those limitations” by collaborating with businesses and other organizations that provide or sell resources. For large organizations interested in distributing multiple resources, forming ties is a way to cut costs. As Alexander, a high level officer currently at the same children’s non-profit, explains, his organization collaborates with others,

> Because in our communities we have an adult service, we have day care, we have public school, and we [often] have them in isolation one from the other. So, an effort that really created enough financial capital to improve the interconnectedness of the social system… would make much more efficient use of existing dollars.

Finally, our qualitative fieldwork suggested that directors' social networks may be an additional venue through which these ties are formed. One informant, for example, said that his "eyes were opened" to opportunities for additional funding and services by attending meetings with directors of other centers in the city.

Role of professional norms

Our fieldwork suggested that professional norms among practitioners in *all* sectors and at all levels of the hierarchy contributed to tie formation. Two norms were key: (a) a "holistic" approach to childcare, expressed in the idea that one cannot care for a child without caring for the family (as Alexander, mentioned above, explained, "we're always aware of the family, and we're always conscious of what we need to do for the family as the unit of service, even though most of our direction may be toward children"); (b) a belief in expertise and specialization, expressed in the idea that staff should not perform a role for which they are not qualified.

The dual mantra of holistic provision and specialization was ubiquitous. It was so pervasive it seemed obvious to respondents. During one of our visits to Kids' Place Preschool in a low-income neighborhood, the ethnographer wrote:

> [According to the director,] the center also refers [parents] for domestic violence issues. They work with "Victim's Services," which has a domestic violence program. I asked

> why the center does this. [The director] made a face that told me he thought it was an obvious question. "Because there's domestic violence," he said.

The ethos extended from center directors to the directors of large organizations. Kaitlin, an officer at the city homeless agency, explained a pilot project by which a small non-profit would "bring multiple agencies together at the local level in the event there are at least three government agencies involved in a household's life." She elaborated:

> [S]o, if there's a… brother getting out of jail, a child who's at risk of dropping out of school… and the mom is just getting referred to child welfare…—the brother's about to come back, that's gonna screw up the household. The kid's already acting out and the mother is having all this stress and then suddenly she has to defend herself to child welfare. The goal is that… the public agencies [will] come together to see the family holistically and then develop plans that are gonna support the family in the best way. So the probation officer, the child welfare specialist, the education guidance counselor, all [are] working together about how to bring resources that solve the problem . . .

She explained that a major funder "buys into this argument [and] gives us money to fund a program, as [have] a number of other foundations." We witnessed versions of this belief—in a holistic approach and in specialization—in both for- and non-profit centers.

Role of neighborhood

Our fieldwork uncovered that the actions of large external organizations were affected by the perceived poverty of the neighborhood. Businesses, non-profits, and the state all used perceived need in the neighborhood as a proxy when seeking populations to which to distribute or sell resources. Kyle was an officer in the city's education bureaucracy who addressed community

affairs. His office matched schools to businesses and non-profits. For example, it connected a large non-profit that prepared taxes pro-bono to a school in a high poverty neighborhood. Kyle explained that within the system it was well understood that this coordination should focus on poor *neighborhoods*. As he explained:

> And, again, we know where the areas… are [in which this is] happening. If you had to ask me what are the five areas where this is happening, where there's the greatest need: Harlem, Washington Heights… South Bronx, central Brooklyn, southeast Queens. …[T]hose are the five areas where… we have the most problematic schools, most challenging schools, where our kids are generally under-performing and also. …Seventy to 75%, I believe, of the prison rate of the State of New York [comes from] those five zip codes.

When he came across businesses or large non-profits seeking to distribute resources, his office directed them to schools in the poorest neighborhoods. An officer at the homeless agency makes a similar point when explaining where a new prevention program was piloted: "They've been in place for a year and they're in six of the [city's] fifty-nine community districts. But [these] six districts… are among the fifteen highest need districts in terms of homeless demand for shelter among families."

Notably, these were place-based strategies: it was the *neighborhood*, not the *organization* that served as a proxy. Kyle, for example, did not assess the percent of children in the school on free lunch to determine where to send businesses with resources; instead, he assessed whether the school was located in The South Bronx, Washington Heights, or other known high poverty neighborhoods. Below, we test the significance of this distinction.

HYPOTHESES

Returning to our two empirical questions, our qualitative research suggests that organizational ties provided access to resources important to well-being and that this process was not affected by neighborhood poverty as expected by the de-institutionalization perspective. Our fieldwork suggests examining not merely local demographics but also institutional factors, such as state pressures and professional norms. We formalize these qualitative findings into hypotheses below.

Our first hypothesis reflects our initial qualitative findings:

H1. Because of their organizational ties, childcare centers will provide access to multiple resources important to well-being.

The fieldwork also suggested that coercive pressures by the state and large non-profits would contribute to tie formation. While researchers have shown that organizations often ignore or distort state mandates to serve their needs (Dobbin et al. 1993), we observed a clear tendency among centers to conform to state pressures. The effect of these pressures should be greatest where state influence is strongest and market-derived demands like the need for profits are weakest (Frumkin and Galaskiewicz 2004). For example, while all centers are subject to government regulations regarding health standards in the facility, only government-funded centers such as Head Start are also required to ensure that patrons have health care . Therefore, we expect the following:

H2. For-profit centers will exhibit the fewest, and government centers the greatest number of active resource-rich organizational ties.

Nevertheless, it was also clear that professional norms played a role. Consistent with the idea of centers as loosely coupled entities, staff pursued these ties even when, as in the case of

"victim's services," it was not required, if staff believed there was a need. This leads us to hypothesize the following:

H3. Despite H2, sector differences will not fully account for the variance in number of ties—even after controlling for the center's sector, centers serving poor patrons will exhibit a greater number of ties than centers not serving the poor.

Finally, our fieldwork made clear the importance of location. We would expect centers with a high proportion of poor parents to maintain more ties than other centers, consistent with a standard demand explanation from neo-classical economics (Hansman 1987). However, we expect that demand at the center level will not fully account for the connectedness of the center, because of the neighborhood-based resource-distribution ethic that permeates organizational operators, such as Kyle, higher up the vertical chain. If many resource providers are using the neighborhood, not the center, to assess need, then, after accounting for demand, centers in high poverty *neighborhoods* should still exhibit more ties. In this respect, our expectations would differ from both a demand model (which would expect more resources in high-demand centers, regardless of location) and the de-institutionalization model (which would expect more resources in low-poverty neighborhoods):

H4. After controlling for the poverty level of the patrons served, centers in high-poverty neighborhoods will still exhibit more ties than those in other neighborhoods.

DATA AND METHODS

Data

We test these hypotheses using data from a unique random-sample survey of centers in New York City. The survey was conducted by an independent firm (SRBI); the sample, drawn from a

list of all licensed centers provided by the city's Bureau of Day Care. At the time of the survey (summer-fall 2004) there were an estimated 1,683 centers. The number of centers interviewed was 293, and the response rate was 60%,[6] which compares favorably to other organizational surveys (see Kalleberg et al. 1990). For example, for organizational surveys on issues related to childcare, Guthrie and Roth (1999) report a 57% response rate, and Kelly (2003) reports a 56% response rate. The telephone survey, conducted with the director, lasted approximately 25 minutes. We obtained data on basic organizational structure, services provided other than childcare, referrals to other organizations, ties to other organizations, and address. We geo-coded addresses and matched centers to census tracts (293 centers in 243 tracts); tract-level demographic data were appended from the 2000 Census of Population and Housing, Summary File 3.

Our measures of organizational ties take into account the focus of our study and the difficulties in obtaining this information. Two issues are worth emphasizing. First, we are only interested in those ties through which resources are *actively* transferred. Second, contrary to most of the literature on organizational ties, we are interested in resources that benefit the *patron*, regardless of their benefits to the stability or viability of the center itself (Inzerilli 1979).

We used the qualitative interviews to develop questions about formal referral ties and collaborative ties. We asked in the survey about six specific referral-tie-resources and five collaborative-tie-resources with an additional question for collaborative resources not asked about. Since our concern was *active* ties, we asked only about recently accessed ties. We asked respondents, "The next questions are about services (other than childcare) that the center may offer to parents and families, either as referrals or directly by the center. I'm going to start with referrals. In the last 12 months, has the center directly referred parents to a specific agency or

organization for any of the following reasons?" We then listed each of the six issues of interest to parents.[7] For each referral, we asked specific questions about the organization, including organization's sector (government, for profit, or private non profit), its name (verbatim), and its location. This helped prevent over-reporting of ties, since respondents who reported a false referral would have to lie multiple times to support the false statement. We then asked, "Now I'd like to ask about services the center may provide directly or by bringing in staff from outside organizations. This question does not include referrals. During the last 12 months, did the center provide..." each of five different services. As a validity check, we allowed the respondents to tell us about one additional service we did not suggest. For each, we asked whether the service was provided by the center or by an outside organization, and if the latter, we asked for the organization's sector and name. Figures will refer only to services provided by external organizations, not those provided by the center. Our questions yielded two outcome variables, each ranging from 0 to 6, denoting active referral ties and active collaborative ties.[8]

Methods

To test our hypotheses, we estimate Poisson regression models in which the outcome variable is the count of the number of active ties, for referral ties and collaborative ties separately (Long 1997). OLS assumes a normally distributed outcome variable that can take any value, whereas our outcome must be a non-negative integer. Poisson models are often employed when estimating counts. We assume that the outcome variable reflects an underlying rate, λ, or expected mean, so that $E(Y|\lambda) = \lambda$. Our model takes the form,

$$\log(\lambda) = \beta_0 + \beta_1(\textit{High poverty neighborhood}) + \beta_2(\textit{High poverty center}) +$$

β_3(*Government non-profit center*) + β_4(*Private non-profit center*) + Σ β_k(*Controls*) + e,

where the expected number of ties is a function of neighborhood poverty status and controls. The coefficients represent the increase in the log number of ties; for a one-unit increase in the predictor, the number of ties increases by a factor of exp (β_1). Private non-profit is the base category for center sector. Our measure of high poverty neighborhood is an indicator variable coded 1 if the center is located in a neighborhood with a poverty rate of 40% or higher. This measure represents the standard yardstick for high poverty status in studies of urban poverty (Jargowsky 1997; Wilson 1987; 1996). In our sample, it also represents the cutoff for the highest poverty quintile. Most importantly, the rate signaled the tracts in the poor neighborhoods that actors such as Kyle perceived to be those with the "greatest need." We do not expect a linear increase in number of ties as poverty increases; instead, we expect a sharp increase when centers are located in the poorest areas. Our proxy for need in the center is an indicator variable coded 1 if at least 30% of the children in the center were on government vouchers or some type of government subsidy (regardless of the center's location).[9] Thirty-nine percent of centers were in this category.

The models control for neighborhood characteristics. The variables *percent black*, *percent white*, and *percent Latino* control for the racial composition of the neighborhood. Since *residential instability* reduces the ability of both individuals and organizations to sustain local ties (Sampson, Morenoff, and Earls 1999; Shaw and McKay 1969), we control for the percentage of residents who lived in a different house five years before the 2000 Census. We control for *population density* (logged), since lower population densities may result in lesser need. Finally,

we control for the *borough* in which the center is located (Manhattan is the omitted category), as some resource providers are located in and focus on specific boroughs.

FINDINGS

Organizational ties

Centers surveyed maintained both referral and collaborative ties, and multiple resources were transferred through them. The first row of Table 2 shows that only 51 centers had made no formal referrals in the previous year; 83% of centers (242 of 293) referred parents for at least one issue, while 37% (109/293) referred parents for at least two. Collaborative ties were less common, with 150 centers having provided no service in partnership with outside entities in the previous 12 months. Forty-nine percent of our sample had at least one collaborative tie and 20% had at least two.

Table 2: Number of active ties of centers in the quantitative study, by type of tie

Table 3 presents the percentage of centers with active ties by type of resource transferred. On average, centers formally referred parents for 1.6 separate issues (bottom row), which varied widely. Child-related referrals were common; nearly 80% of centers reported referring parents for child learning disability services at least once during the previous year. Although centers were less likely to make referrals for issues not specifically related to children, many did so. Nearly 8% provided referrals to parents for drug problems while more than a quarter referred parents for mental health services. Further, referrals for immigration services, legal advice, and spousal abuse were provided in 15% to 18% of centers.

Table 3: Percentage of centers with active ties, by type

Centers also maintained collaborative ties to organizations that provided services to parents, averaging .8 of these ties. As with referrals, services directly related to children were most common: children in nearly 30% of centers received dental services provided by another organization during the previous year, while in approximately 5% of centers, children received physical health services. Further, nearly 25% of centers provided learning disability services by outside organizations. Parents also received services not directly related to children: in almost 1/5 of centers, they received spousal abuse services from an outside organization. Finally, 11% of centers provided at least one additional service through a collaborative tie. The variety and number of referral and collaborative ties shown in Table 3 support our first hypothesis.

Sector

We hypothesized that for profit centers would exhibit the fewest number of active ties. The results presented in the top two rows of Table 4—which show the coefficients for government-funded and private non-profit (with private for-profit as the baseline category)—support this hypothesis. Government funded centers made 49% (exp[.402] = 1.49) and private non-profit centers made 50% more formal referrals than for-profit centers. Turning to collaborative ties, while there was no difference in the number of services transferred by for-profit and private non-profit centers, government centers provided the most by a large margin, with 220% more service ties than for-profit centers.

Table 4: Poisson regression estimates of number of active ties of center, after controls

Our expectations are confirmed in a different form in Table 5, which presents the distribution of ties by the sector of both the childcare center and the outside organization. This table includes all three sector types because it does not present regression results. As shown in the bottom two rows, referral ties among all centers were more likely to be made to private non-profits (45.5% of all ties) or government organizations (43.5%) than to for-profits; collaborative ties exhibit a seminal pattern. It is notable, however, that the business sector was highly involved in the provision or sale of resources, particularly as collaborators with the center. Among all collaborative ties, 23.6% were to businesses.

Table 5: Distribution of active ties by sector of external organization

Center poverty

We hypothesized that the number of ties would also depend on the proportion of poor families served by the center. The third row of Table 4 shows that centers with a high proportion of poor patrons have 53% (exp[.422]) more referral ties than other centers. We do not find an effect on collaborative ties.

Neighborhood poverty

We hypothesized that centers in high poverty neighborhoods would have more ties, even after accounting for sector and demand, because institutional actors higher up the vertical chain use neighborhood poverty as a proxy for need. The fourth row of Table 4 shows that centers in

high-poverty neighborhoods had 28% (exp[.243]) more referral ties and provided 44% more collaborative ties than centers in non-poor neighborhoods.

Robustness checks

We examined several issues that could affect the neighborhood poverty finding or its interpretation. First, we considered whether the standard measure of neighborhood poverty, 40%, was too high.[10] We ran separate versions of the models with the threshold set at 30% and then 20%. (Available upon request.) For referrals, the threshold did not affect the significance of the coefficient and the size of the effect was roughly the same. For collaborative ties, the same was true except when the threshold was set at 20%. At that point, it seems, larger organizational actors are unlikely to consider the area one of distinct need.

Second, we examined whether operationalizing neighborhood poverty as a continuous variable would yield different results. We ran separate versions of the models with this specification (available); this effect was not significant. This is consistent with the theory that external organizational actors are imperfect observers of need. As we saw earlier, they did not rely on careful analyses of demographics; instead, they focused on specific neighborhoods commonly believed to be in need. This would lead one to expect a categorical break, not a continuous difference, when differentiating tracts by poverty level.

Third, and perhaps most critically, it is possible that this neighborhood effect results from the particular resources directors were asked about, some of which may be disproportionately needed by residents of poor neighborhoods. The survey included a question asking whether the center provided any service not specifically mentioned. If the specific issues we asked about are a source of bias, there should be no effect of neighborhood poverty when the outcome stems

from this open-ended question. We estimated a logit model, with the covariates in Table 4, predicting whether any other service was provided. (The natural log of the odds that any service was provided [log (π/1- π), where π is the probability that the outcome equals 1] is assumed to be a linear combination of the prior covariates.) Table 6 shows the results.

Table 6: Logistic regression estimate of probability of having an active collaborative tie not asked about, after controls

Results are consistent with those in Table 4. A center in a high poverty neighborhood has odds of having a not-asked about tie that are 5.37 times as great as those of a center in a non-poor neighborhood. This suggests that the neighborhood poverty effect is not an artifact of the specific resources asked about.

CONCLUSION

How does neighborhood poverty affect access to resources important to well-being? Most of the neighborhood effects literature has answered this question by focusing on either neighborhoods or individuals. This study, focused on organizations, has argued that an important part of the answer is the role of organizational ties. Childcare centers provided access to multiple resources through both referral and collaborative ties to other organizations. And, net of the poverty level of patrons in the center, those located in high poverty neighborhoods exhibited greater, not fewer, active ties. The study makes several contributions.

First, it shows the benefits of re-examining the neighborhood effects question from the perspective of organizational ties. In recent years, neighborhood effects researchers have placed great stock on quasi-experimental studies in which individuals searching for housing are randomly given vouchers to be used in poor or non-poor neighborhoods (Goering and Feins 2003). While such studies provide important evidence necessary to make causal claims, placing too much weight on this approach can lead researchers to ignore that resource access in urban areas is a complex process involving, among other things, local organizations. The voucher (and non-voucher) studies currently do not tell us whether a person in a poor neighborhood but tied to a well-connected organization would be worse off than one in a non-poor neighborhood but tied to a poorly-connected one, and our study suggests that this is the most likely scenario with respect to childcare centers.

In fact, our findings would suggest that standard tests should not always show a negative neighborhood effect, which is consistent with what has been reported. If other organizations were to exhibit the patterns childcare centers do, then ignoring the role of organizational ties in resource access would lead scholars to underestimate the negative consequences of neighborhood poverty—that is, the consequences associated with other neighborhood mechanisms—since organizational ties would be an attenuating factor. Part of the inconsistency in the neighborhood effects results (which vary depending on the data, the outcomes measured, and other factors) may result from differences in both individuals' connections to local organizations and the connections of those organizations themselves. Neighborhood effects research, then, should rely not only on multiple methods but also multiple units of analysis, with the organization as a conspicuously understudied unit.

Second, the study emphasizes the importance of considering not merely local but also extra-local factors, and the interaction between the two. The majority of studies on neighborhood effects focus on local conditions, either demographic characteristics derived from the census or resident responses to questions on social capital or collective efficacy (Sampson, Morenoff, and Gannon-Rowley 2002; Small and Newman 2001). Our study points to the importance of reconsidering the state and the non-profit sector, especially under the current political economy. The state and professional norms often encourage organizational collaboration, and social ties among professionals across the state and non-profit sectors likely enhance this collaboration.

Third, the study suggests exploring possible unanticipated consequences of de-concentration policies with respect to the ability of the poor to access resources important to well-being. Such policies are likely to have positive impacts on feelings of safety and access to higher quality schools, consistent with findings of the Moving to Opportunity studies (Goering and Feins 2003). However, they may also undermine *some* organizational channels through which non-profits and federal or local governments have distributed resources to the poor, since actors such as Kyle use concentrated neighborhood poverty as a proxy to reach poor individuals.

Our study's strengths and its limitations derive from its focus on a single case—childcare centers. The childcare center is arguably the most important neighborhood institution for low-income mothers, a fact that demands its empirical investigation. In addition, studying a single institution allowed for comparisons on a single set of metrics across different settings; and studying childcare centers specifically allowed for important sector comparisons, which, as we showed, was critical. Nevertheless, research on other types of organizations is needed to determine which neighborhood organizations are more likely to be well-connected, and to

examine their distribution across neighborhoods. The literature points to schools, churches, and community building organizations as major institutions of this type. Given our findings, we expect those with state ties and certain professional service norms to be better connected—these organizations include community centers, health clinics, and elderly care centers. Among both private non-profits and for-profits, we expect great heterogeneity, given the multiple factors affecting the professional beliefs and motivations of their staff.

Recent research on other local organizations reinforces the promise of the perspective advanced in this study (Marwell forthcoming). The works of McRoberts (2003) and Ammerman (2005) make a case for understanding how religious organizations provide access to resources through organizational ties, particularly in low-income neighborhoods. Among for-profits, the work of Delgado offers a similar way of understanding organizations in immigrant neighborhoods (Delgado 1997). This research should drive the literature on neighborhood effects to place organizational ties, again, at the center of analysis.

Notes

1. Both theories involve more complex issues than we can cover here; this paper does not test of all Wilson's propositions.

2. Childcare centers are "ideal," not "representative" cases of neighborhood institutions (Yin 2003; Small 2004); their uniqueness makes possible identifying patterns that might be difficult or impossible to observe in other organizations.

3. For anonymity, names of all centers and persons are pseudonyms. Minor identifying details, unrelated to the argument, have also been changed.

4. Table 1 and the discussion of the diversity of resources are based on findings reported in Small (2006).

6. The response rate was calculated as the number completed over the number of eligible targeted centers. The category "eligible" includes centers for which eligibility could not be determined (e.g., incorrect phone number); thus, this is a conservative calculation of the response rate. Raw numbers follow: 555 total centers were randomly sampled; 68 were determined to be ineligible (e.g., no longer in business); 44 were refusals; 293 were completed; and, for 150, eligibility could not be determined. We expect bias from non-response to be minor. Our sampling list contained limited information on the characteristics of centers. However, it contained general information on main funding source. Government funded centers had

somewhat higher completion rates (60%) than non-government funded centers (49%); both types had refusal rates of 8%. Eligibility was not determined in 27% of government funded centers and in 21% of non-government funded centers. If completion rates are positively correlated with connectedness, then the positive effect of government funding would be somewhat upwardly biased.

7. Referral issues included: "Children's learning disabilities"; "drug abuse or drug addiction for parents"; "mental health services for parents"; "immigration services"; "legal advice"; "spousal abuse." Services included: "dental services for children"; "physical health exams for children"; "screening, examination, or counseling for children with learning disabilities"; "counseling for mothers or parents who may have experienced spousal or domestic abuse"; "counseling, screening, or examination for child neglect or abuse in the home."

8. Our sample was missing data on number of referral ties (6% missing), number of service ties (11% missing), high proportion of poor children in center (13% missing), and sector (2 cases missing). To address this issue we employed multiple imputation, where each missing value was imputed 10 times based on random draws from a distribution of possibilities (Rubin 1987). The result was 10 datasets identical on observed values but differing on imputed values. Regression results were averaged across all datasets using *IVEware* software (http://www.isr.umich.edu/src/smp/ive/). Multiple-imputation has been shown to produce more reliable results and to rely on more realistic assumptions than single imputation, listwise deletion, or other alternatives (Rubin 1987).

9. This is the most parsimonious form of the variable given the complex forms in which childcare centers are funded. Most importantly, in 25% of the centers 100% of children receive free care. A continuous variable indicating the proportion of children on vouchers would exhibit a skewed and bimodal distribution.

10. A higher threshold would have excluded almost all neighborhoods; a 90th percentile neighborhood was 46% poor.

References

Ammerman, Nancy T. 2005. *Pillars of Faith.* University of California Press.

Austin, James E. 2000. "Strategic Collaboration between Nonprofits and Businesses." *Nonprofit and Voluntary Sector Quarterly* 29:69-67.

Chaskin, Robert J., Prudence Brown, Sudhir A. Venkatesh, and Avis Vidal. 2001. *Building Community Capacity*. Aldine de Gruyter.

Delgado, Melvin. 1997. "Role of Latina-Owned Beauty Parlors in a Latino Community." *Social Work* 42:445-53.

Delgado, Melvin and Jorge Santiago. 1998. "HIV/AIDS in a Puerto Rican/Dominican Community: A Collaborative Project with a Botanical Shop." *Social Work* 43:183-87.

Dept. of Health and Human Services. 2005. http://www.access.gpo.gov/nara/cfr/waisidx_05/45cfr1304_05.html, accessed Jan. 27, 2007

DiMaggio, Paul J. and Walter W. Powell. 1983. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality." *American Sociological Review* 42:726-43.

Dobbin, Frank, John R. Sutton, John W. Meyer, and Richard W. Scott. 1993. "Equal Opportunity Law and the Construction of Internal Labor Markets." *American Journal of Sociology* 99:396-427.

Ellen, Ingrid Gould and Margery Austin Turner. 2003. "Do Neighborhoods Matter and Why?" Pp. 313-38 in *Choosing a Better Life?*, edited by Goering, John and Judith D. Feins. Urban Institute Press.

Fernandez, Roberto and David Harris. 1992. "Social Isolation and the Underclass." Pp. 257-93 in *Drugs, Crime, and Social Isolation: Barriers to Urban Opportunity*, edited by Harrell, Adele and George Peterson. Urban Institute Press.

Frumkin, Peter and Joseph Galaskiewicz. 2004. "Institutional Isomorphism and Public Sector Organizations." *Journal of Public Administration Research and Theory* 14:283-307.

Fuller, Bruce and Xiaoyan Liang. 1996. "Market Failure? Estimating Inequality in Preschool Availability." *Educational Evaluation and Policy Analysis* 18:31-49.

Goering, John and Judith D. Feins. 2003. *Choosing a Better Life?*. Urban Institute Press.

Guthrie, Doug and Louise Marie Roth. 1999. "The State, Courts, and Maternity Policies in U.S. Organizations: Specifying Institutional Mechanisms." *American Sociological Review* 64:41-63.

Hansman, Henry. 1987. "Economic Theories of Nonprofit Organizations." Pp. 27-42 in *The Nonprofit Sector: A Research Handbook*, edited by Walter W. Powell. Yale University Press.

Inzerilli, Giorgio. 1979. "The Organization-Client Relationship as an Aspect of Interorganizational Analysis." *Human Relations* 32: 419-437.

Jargowsky, Paul. 1997. *Poverty and Place: Ghettos, Barrios, and the American City*. Russell Sage Foundation.

Kalleberg, Arne L., Peter V. Marsden, Howard E. Aldrich, and James W. Cassell. 1990. "Comparing Organizational Sampling Frames." *Administrative Science Quarterly* 35:658-88.

Kelly, Erin L. 2003. "The Strange History of Employer-Sponsored Child Care: Interested Actors, Uncertainty, and the Transformation of Law in Organizational Fields." *American Journal of Sociology* 109:606-49.

Laumann, Edward O., Joseph Galaskiewicz, and Peter V. Marsden. 1978. "Community Structures as Interorganizational Linkages." *Annual Review of Sociology* 4:445-84.

Logan, John R. and Harvey L. Molotch. 1987. *Urban Fortunes*. University of California Press.

Long, J. Scott. 1997. *Regression Models for Categorical and Limited Dependent Variables*. Sage.

Ludwig, Jens, Helen F. Ladd, and Greg J. Duncan. 2003. "MTO's Effects on Children and Parents: Evidence from Baltimore." Pp. 153-175 in *Choosing a Better Life?*, edited by John M. Goering, and Judith D. Feins. Urban Institute Press.

Marwell, Nicole P. Forthcoming. *Bargaining for Brooklyn*. University of Chicago Press.

Marwell, Nicole P. and Paul-Brian McInerney. 2005. "The Nonprofit/for-Profit Continuum: Theorizing the Dynamics of Mixed-Form Markets." *Nonprofit and Voluntary Sector Quarterly* 34:7-28.

MCC. 2003. "Child Care Demographics 2003: Maryland Report." Maryland Committee for Children.

McRoberts, Omar. 2003. *Streets of Glory*. University of Chicago Press.

Meyer, John W. and Brian Rowan. 1977. "Institutionalized Organizations: Formal Structure as Myth and Ceremony." *American Journal of Sociology* 83:340-63.

Powell, Walter W. and Paul J. DiMaggio, Eds 1991. *The New Instiutionalism in Organizational Analysis*. University of Chicago Press.

Queralt, Magaly and Ann Dryden Witte. 1998. "Influences on Neighborhood Supply of Childcare in Massachusetts." *Social Service Review* 72:17-46.

Rubin, Donald B. 1987. *Multiple Imputation for Nonresponse in Surveys*. Wiley.

Salamon, Lester M. 1993. *The Global Associational Revolution*. Johns Hopkins University Institute for Policy Studies.

Salamon, Lester M. 1995. *Partners in Public Service*. Johns Hopkins University Press.

Sampson Robert J., Jeffrey D. Morenoff, and Felton Earls. 1999. "Beyond Social Capital: Spatial Dynamics of Collective Efficacy for Children." *American Sociological Review* 64: 633-660.

Sampson, Robert J., Jeffrey D. Morenoff, and Thomas Gannon-Rowley. 2002. "Assessing "Neighborhood Effects": Social Processes and New Directions in Research." *Annual Review of Sociology* 28:443-478.

Scott, W. Richard. 2002. *Organizations*. Prentice Hall.

Siegel, Gary L. and L. Anthony Loman. 1991. "Childcare and AFDC Recipients in Illinois: A Digest of Findings and Conclusions." Institute of Applied Research.

Shaw, Clifford R. and Henry D. McKay. 1969. *Juvenile Delinquency and Urban Areas*. University of Chicago Press.

Small, Mario Luis. 2004. *Villa Victoria*. University of Chicago Press.

—. 2006. "Neighborhood Institutions as Resource Brokers: Childcare Centers, Inter-Organizational Ties, and Resource Access among the Poor." *Social Problems*. 53(2):274-92.

Small, Mario Luis and Katherine Newman. 2001. "Urban Poverty after the Truly Disadvantaged: The Rediscovery of the Family, the Neighborhood, and Culture." *Annual Review of Sociology* 27: 23-45.

Small, Mario L. and Laura Stark. 2005. "Are Poor Neighborhoods Resource-Deprived? An Empirical Test of the Case of Childcare Centers." *Social Science Quarterly* 86:1013-36.

Smith, Steven Rathgeb and Michael Lipsky. 1993. *Nonprofits for Hire*. Harvard University Press.

Warren, Roland L. 1978. *The Community in America*. Rand McNally College Publishing Company.

Wilson, William J. 1987. *The Truly Disadvantaged*. University of Chicago Press.

—. 1996. *When Work Disappears*. Knopf.

Yin, Robert K. 2003. *Case Study Research*. Sage Publications.

Zigler, Edward and Susan Muenchow. 1992. *Head Start*. Basic Books.

Tables:

Table 1: Resources transferred through childcare centers

TYPE OF RESOURCE
Information
Nutritional information (free)
Safety education (free)
Domestic abuse education (free)
Child health information (free)
Housing needs information (free)
School system information/education (free)
Services
Health care for child (free)
Dental care for child (free)
Speech therapy for child (free)
Domestic violence counseling (free)
Developmental services (low cost)
Health care for adults (free/low cost)
Substance abuse counseling (low cost/free)
Eye care (free/low cost)
HIV/AIDS testing and treatment (free/low cost)
Legal aid (low cost/free)
Adult literacy training (free)
Adult English language study (free)
Work training (free)
Housing support (low cost/free)
Assistance in dealing with government bureaucracy (free)
Material Goods
Meals (free)
Tickets to cultural events/circus (free/low cost)
Free admission year-round to cultural institutions
Employment
Toys (free)
Scholarships (free)

Source: Small (2006)

Note: Refers to resources which were transferred on an ongoing basis or at least once a year. *Excludes* services provided independently by the centers.

Table 2: Number of active ties of centers in quantitative study, by type of tie

	Number of centers	
	Formal referral ties	Collaborative ties
No ties	51	150
One tie	133	83
Two ties	50	34
Three ties	24	21
Four ties	16	0
Five ties	11	4
Six ties	8	1
Total centers	293	293

Source: Authors' survey

Table 3: Percentage of centers with active tie by type

Formal referral ties		*Collaborative ties*	
Children's learning disabilities	79.0%	Dental services for children	29.8%
Drug abuse/addiction for parents	7.8%	Physical health exams for children	5.2%
Mental health services for parents	26.8%	Children's learning disability services	24.6%
Immigration services	15.6%	Counseling for spousal abuse	8.1%
Legal advice	16.2%	Services for child neglect/abuse	6.8%
Spousal abuse	17.9%	Other services	10.9%
Average number of referral ties	1.6	Average number of service ties	0.8
N=293			

Source: Authors' survey. Active ties are those activiated at least once over previous 12 months.

Table 4: Poisson regression estimates of number of active ties of center, after controls

Variable	Referral Ties	Collaborative Ties
Center is a		
Government non-profit	.402**	1.163**
	(.157)	(.242)
Private non-profit	.404**	.437
	(.163)	(.277)
Center has high proportion of poor children	.422**	.218
	(.109)	(.154)
Center located in a high poverty neighborhood	.243**	.368**
	(.123)	(.164)
N	293	293

Note: Poisson coefficients. Models control for neighborhood proportion black, proportion white, and proportion Latino; residential instability, population density, and borough.

Note: Standard errors in parentheses. *p < .05 **p < .01

Table 5: Distribution of active ties by sector or external organization

	Number of ties to any organization	*Proportion of ties to* For-profit organization	Non-profit organization	Government organization
For profit centers (n=59)				
Referral ties	44	17.8%	8.9%	73.3%
Collaborative ties	21	33.3%	14.3%	52.4%
Private non-profit centers (n=99)				
Referral ties	146	12.3%	47.3%	40.4%
Collaborative ties	46	23.9%	54.3%	21.7%
Government non-profit centers (n=135)				
Referral ties	247	8.9%	51.0%	40.1%
Collaborative ties	166	22.3%	41.0%	36.7%
All centers (n=293)				
Referral ties	437	11.0%	45.5%	43.5%
Collaborative ties	233	23.6%	41.2%	35.2%

Note: Figures may not add to 100 due to rounding. Active ties are those mobilized by the center during the previous 12 months.

Table 6: Logistic regression estimate of probability of having an active collaborative tie providing a resource not asked about, after controls

Variable	Model 1	
	β	e^{β}
Center is a		
Government non-profit	1.148+ (.641)	3.15
Private non-profit	.952 (.698)	2.59
Center has high proportion of poor children	-.790 (.497)	.45
Center located in a high poverty neighborhood	1.681** (.614)	5.37
N	293	

Note: Logit coefficients. Models control for neighborhood proportion black, proportion white, and proportion Latino; residential instability, population density, and borough.

Note: Standard errors in parentheses. +p < .10 *p < .05 **p < .01

Table A1: Characteristics of neighborhoods* and centers in qualitative study

	Low-income white	Low-income black	Low-income Latino	Upper-middle class
Neighborhood characteristics				
Median household income	$21,000	$14,000	$23,000	$56,000
% in poverty	40	46	34	13
% black	0	66	7	5
% Latino	8	27	84	17
% white	88	2	5	69
% in same unit in 1995	74	68	65	56
Total population	25,000	7,000	17,000	23,000
Center characteristics				
Number of centers	6	6	6	5
Served low income parents	6	6	4	1
ACS/Head Start	3	2	3	1
Free services/sliding scale	5	4	4	1
Average slots per center	100	108	68	64

±Source: 2000 U.S. Census. Neighborhood figures are rounded to maintain confidentiality.