Keynote Address Sixteenth National Symposium on Doctoral Research in Social Work Ohio State University College of Social Work April 24, 2004

Community in Social Work Research

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Introduction

It is a great honor to address this annual symposium for doctoral research and to be back at Ohio State University where I received my MSW degree quite a few years ago. When OSU launched this event I recall thinking that it was a great tribute to the important contribution that each cohort of doctoral graduates makes to the body of knowledge and I was impressed by the quality of the work presented at the first symposium that I attended. Over the years this symposium has showcased many individuals and their ideas that have gone on to have major impact on the enterprise that we call social work research. Because the symposium features the work of the newest researchers in our field, the presentations here reflect methodological advances and conceptual innovations that invigorate the scientific base of the profession. It is a place where one can get insight into what will become the cutting edge of research in the near future.

In my talk today I want to focus on an area of social work research that is of great interest to me and some of the doctoral students with whom I work: research on social work and communities. It is an area where technology and methodology are pushing us forward conceptually. And it is an area where social work researchers are challenged to keep up with the developments in other disciplines. Yet it is key that social work leave its own imprint on community research. In particular, social work researchers need to study community interventions and to build an evidence base for this aspect of practice. I plan to focus my remarks on methodological developments and advances that pertain to **place based communities**: city neighborhoods, suburban subdivisions, and smaller villages and towns. I acknowledge that these are not the only types of communities addressed by social work practice. However, they are vitally important: as contexts for human development, and as units for social and political action.

In the past decade, there has been an explosion of research pointing to the devastating effects of disadvantaged neighborhoods on their residents—making community inequality a growing social justice concern. In Britain and elsewhere in the European Union, government policy now has an explicit goal to reduce disparities among communities. In fact, a Social Exclusion Unit established in 1997 as a cabinet office in the UK has the stated goal that "within ten to twenty years, no-one should be seriously disadvantaged by where they live." And the UK government requires that evidence based practices be used to restore these communities. While this level of policy awareness has not yet penetrated the US, more knowledge is urgently needed to reduce disparities and build effective communities. Social work should be front and center in this effort.

Where does community fit within social work research?

Social work research on community is complicated by the fact that community may be the agent of change, the target of change or the context for change. Figure 1 presents a diagram of the various points of entry for research on community change. The central concept of community can come in as a dependent variable, independent variable, mediating variable or a moderator variable.

On the right hand side of Figure 1, the symbol labeled "people" indicates that it is also important to demonstrate how community change affects the well being of individuals. Stakeholders often call for evidence that individuals have benefited from community interventions. This is due, in part, to the fact that there is ambivalence as to the value of community and a lack of consensus about what constitutes a desirable or healthy community. Outcomes for individuals have greater face validity and there is more value consensus about what is desirable. Policy makers and funders often think of healthy children and adults, employment gains, and reductions in problem behaviors as the ultimate benefit of community interventions.

It is also vital, as shown in Figure 1, for research to demonstrate the mediating processes through which community impacts upon individual outcomes. Knowledge about the workings of mediating processes in communities will allow interventions to be crafted toward greater precision and effectiveness. Community conditions or processes may also moderate the impact of direct practice interventions, and research is needed on the conditions under which interventions are more or less effective and why.

Moreover, it is incumbent upon social work research to uncover negative community influences that may appear to be individual risk factors. Interventions targeted at the individuals' risk factors may be less effective and less efficient than those that eliminate or reduce the root causes in the context (Shinn & Toohey, 2003). Without systematic evidence about community influences on direct practice, practitioners gravitate toward individual interventions. Aside from efficiency concerns, such approaches may be an injustice when some individuals are called upon to compensate for harmful environments that others do not have to tolerate. The unfairness is particularly evident when the neighborhood one lives in is constrained by segregation. Studies on locational attainment show, for example, that African Americans are less likely than other groups to be able to translate their education and earnings into locations with amenities and good conditions for their children (Alba, Logan & Bellair, 1994).

Finally, as symbolized by the reverse arrow in Figure 1, community change may be produced as a result of individual change, especially in the aggregate. For example, movement of residents in and out of communities may change the attributes and processes of the community, especially when that movement produces shifts in the age, socio-economic status, ethnicity, culture or other demographics that may change norms, expectations, relationships and practices within the community. Furthermore, individual residents acting on their own or as groups are powerful sources of community change.

Challenges of Research on Community and Social Work Practice

The above model reveals the pivotal place of community in social work practice research. However, research to inform this practice has been hampered by a number of practical, technical and theoretical factors including:

- Defining community boundaries. The specification of community as a unit for study and action has been unclear and problematic. Researchers have either been vague about the units that constitute the community or have relied on arbitrary statistical definitions that do not represent the importance of place. These ambiguities have undermined the credibility and statistical power of community studies and biased downward the estimates of community effects.
- Specifying interventions. Community interventions have been difficult to specify so that they can be replicated. The fact that community interventions have many actors, complex objectives that generally call for community participation has made them challenging to document. They tend not to comply with the prevailing template for researchable interventions that can be captured in protocols and evaluated for fidelity and compliance. This has lead to an over-reliance on descriptive case studies.
- Developing community measures. Research cannot move forward without careful measurement, but methods to measure community attributes and processes have not been given as much attention as the psychometrics of individual behavior. There is nowhere near as full a compendium of measures for relevant community concepts as individual traits, nor is there a depth of information on their properties. Norms that would allow any particular

community to be compared with general trends seldom exist. Community intervention researchers have tended to invent their own tools, often pulling on a variety of disciplines and practical methods, but making studies difficult to compare and build into an evidence base.

- Applying multi-level statistical models. Statistical models that appropriately deal with community level data have not been applied widely. Until recently, statistical tests of community effects were either reduced to models of individual perception, or consisted of ecological correlations among aggregated counts or rates. Neither type of model addressed the interesting questions about places as communities, residents as individuals and the relationships among them. Moreover, one-level models often violated statistical assumptions.
- Establishing the counterfactual. Community research has also foundered on the grounds of causal attribution. Many of the principles of solid research design (Shadish, Cook & Campbell, 2002) that support causal inferences have been impractical in the study of community interventions. The gold standard of randomized experiments was virtually untried until recently, and the question of neighborhood and community effects has been bogged down in debates about selection bias and simultaneity.
- Assessing spatial and geographic processes. Community research up until
 now has been surprisingly divorced from where the communities are actually
 located, and what processes within or between them are fostered or impeded
 by space or distance. Individuals are certainly perceptive of place and space
 and they factor these into their behaviors and decisions, but geography has
 been virtually unaccounted for in the research on community interventions to
 date. Important influences of proximity and distance have been overlooked.

Lest these seem like insurmountable obstacles and discouraging trends, the development of tools and methods to overcome these obstacles has taken off in recent years. Fueled by concerns about social exclusion and community sustainability, advances in computing power and the hard work of practitioners who believe in the importance and possibilities of community, there are a number of conceptual and technical breakthroughs of which the field should be aware. These are discussed below.

Defining Community and Neighborhood Boundaries

Research involving communities faces the challenge of establishing boundaries for the purposes of data collection and analysis. A common method of doing this when multiple communities are being studied has been to rely on a statistical definition of a community, such as a census tract, school zone or zip code. A limitation is that these units are unlikely to be identical to the spaces that influence residents' lives or the actual boundaries for action. Alternatively, in case studies of single communities, there is often a lack of specification of community boundaries at all. Actions and actors are described, but it is not clear where they are located and how they relate to the entire area that is the community. The problem is that if the community unit is not correctly specified for the

purposes of the research, the effects will be obscured. Generally speaking, much research on community has used areas that are too large to be effective in terms of social intervention or effects. Community effects are thus biased downward. Moreover, it is important for researchers to realize that the community boundaries may change over time, or vary depending upon the purpose to which they are being put.

Advances in Geographic Information Systems (GIS) technology make it possible to use information from community members or other stakeholders to construct the boundaries of communities and to collect and analyze data that fit these socially constructed spaces. For example, Coulton, Korbin, Chan and Su (2001) asked random samples of neighborhood residents to draw out their personal views of their neighborhoods on GIS generated maps. These maps were digitized and analyzed using spatial statistics. Figure 2 displays one of these communities in which the residents maps have been overlayed. The area in gray is a common area included by all residents. The circle has a radius the size of the average neighborhood map, and is drawn around the centroid of all the maps. Communities defined by resident perceptions had different attributes than their respective census tracts or block groups.

The use of GIS tools to uncover socially meaningful boundaries can make community research more authentic, accurate and replicable. Vague or inappropriate boundaries undermine the power and generalizability of community research, but GIS combined with local perceptions are important tools to derive clear and relevant definitions of community units.

Fidelity and Replicability of Community Interventions

Community interventions pose challenges for research because they are often implemented through a participatory action process that is incremental and emergent by design. Numerous individuals and groups may be involved in a complex and diverse set of activities which are difficult to document and measure in sufficient detail so that they can be replicated. Although these initiatives are typically guided by a set of principles and draw upon practice experience, the tacit knowledge of members of the community is often an important ingredient in shaping the intervention. Converting these sources of knowledge to an intervention plan that can be studied has proven daunting.

Several approaches to evaluation have the potential to improve the precision with which community interventions are described and documented while holding fast to the principles of participation. The Aspen Institute's Roundtable on Comprehensive Community Initiatives for Families and Children has issued a series of reports that describe a "theory of change evaluation" method (Connell, Kubisch, Schorr & Weiss, 1995). In this technique, all participants in an intervention are solicited for their implicit theory about how they expect to achieve the desired improvements in their community. The change process is laid out in a series of early, interim and ultimate outcomes along with benchmarks that can be measured or observed. Often the benchmarks are ones that the community can be involved in monitoring. The so-called outcomes are changes that in other parlance may have been labeled inputs or process measures, but they are

occurrences that are believed to be necessary and sufficient to push the process of change in the desired direction (Weiss 1995).

The "logic model" and the measures that are made on each outcome can provide the type of detailed documentation needed for specifying replicable interventions. For example, the implementation of the Cleveland Community Building Initiative was studied in four neighborhoods using measures derived from a theory of change. The fact that the same measures were applied in each place allowed the comparison across the neighborhoods of the degree to which the intervention had fidelity to the theory.

Measuring Community Attributes, Structures and Processes

Too much of the research on local communities relies upon simple, compositional measures of the population based on census geography. Numerous studies claim to test community effects even though the only aspects of the community represented in the empirical models are socio-economic status and demographic composition of the population. However, to study community interventions, an array of social, economic and physical structures and processes need to be measured. Social work researchers must invest considerably more resources toward developing relevant and accurate measures of those aspects of community that are relevant to practice. Few currently available instruments capture what makes a community a desirable place to raise children, or enables an area to demand its fair share of services, maintain responsive institutions or cope with threats or disasters. Concepts such as healthy communities, sustainable communities, and civil society are scientifically hollow words without the specification of their concepts and measures.

The term "ecometrics", coined by Raudenbush and Sampson (1999a) conveys the importance of raising community measurement to greater prominence. It needs to garner the same attention that has led to the large inventory of well-validated instruments pertaining to individual behaviors, abilities, attitudes and so forth. Myriad individual measures rest on a strong foundation of psychometric theory and development. The measures available for communities are not nearly as well developed. One of the reasons for this gap is that communities are made up of physical, social and economic structures and processes that are difficult to observe, classify and quantify. Moreover, the underlying theories of community change and influence are not as well developed as those of human development. Also, there have been practical challenges to collection of data on multiple communities, which is necessary to the validation of community measures.

There are several promising developments, though, regarding measurement of communities. These advances rest on the recognition that community concepts cannot be treated simply as if they were perceptions or characteristics of individuals. For example, it is now understood that special attention needs to be given to establishing the reliability of aggregate measures. When members of a community respond to a survey and their responses are combined to represent an attribute of their community, the reliability of the individual measures is a necessary but not sufficient condition for a reliable measure of the aggregate. In other words, it cannot be assumed that some quality well measured on

individuals can simply be summed or averaged to capture that aspect of community. Generalizability theory can be applied to calculate the reliability of these aggregate measures (O'Brien 1990), and reliability coefficients can also be modeled equivalently through hierarchical linear modeling (Raudenbush & Bryk, 2002). For example, Coulton, Korbin & Su (1996) queried random samples of residents within 20 block groups on 10 dimensions of their neighborhood as a social environment for raising children. Generalizability coefficients confirmed the reliability of many of these scales when 20 respondents per block group were used as informants. Several scales though, showed poor aggregate reliability, even though they were based on scales that displayed good internal consistency reliability (i.e. Cronbach's alpha) at the individual level.

Finally, there are several collaborative efforts to make data and measures that are suitable for community analysis more readily accessible. The National Neighborhood Indicators Partnership involves researchers and community organizations in 35 cities (www.urban.org/nnip). The Partnership is devoted to providing systematic and ongoing measures of community well being that go beyond the usual census based measures and incorporate observation, administrative records, surveys and other data sources (Coulton & Hollister, 1998). The member cities all make the indicators available for use in social change efforts and support the fundamental democratization of information.

Another effort to advance the field of community measurement is an online catalog provided by the Aspen Institute's Roundtable on Comprehensive Community Initiatives for Families and Children (www.aspenmeasures.org). This searchable inventory of measurement tools grew out of the groups' multi-year investigation into the challenges of evaluating community initiatives. They found that a significant barrier for evaluation was the lack of a common set of validated measures for community concepts. The group concluded that investment in measurement was a necessary first step toward building creditable knowledge about how interventions could change communities.

Multi-level Designs and Analysis

In crafting social interventions, it is vital to be able to distinguish between the influence of individual, micro-level attributes or risk factors and effects of the larger context. It would be ideal to know what individuals bring with them, regardless of context, which outcomes are mainly a consequence of the context individuals are exposed to and which are due to particular combinations of individual attributes and context. In fact, achieving a beneficial articulation between persons and their environments has been an organizing principle of social work practice. Multilevel modeling, now readily available, allows researchers to examine individual and community influences within one model. These statistical models are based on nested research designs. In the case of community research, residents (level 1) are nested within communities (level 2). Communities might also be nested within larger regions such as labor markets or states (level 3). The total variance in any outcome can be decomposed into each level, for example, the variance that is between communities and within communities. At each level, a structural model can be specified and estimated. The structural model includes variables at each level that are hypothesized to influence the dependent variable. If

communities are assigned to treatment and control conditions, this can be modeled at level 2 as a dummy variable. If individuals have been assigned to treatment and control conditions, this would be modeled as a dummy variable at level one. Cross-level interaction effects are tested to determine whether the effects of variables at one level are moderated by variables at the other level. It is also possible to model indirect effects in hierarchical models such as the relationship between community structure, mediating social processes and individual outcomes (Raudenbush & Sampson, 1999b).

Multilevel modeling is essential to identifying the degree to which community features may promote or undermine the effectiveness of social work interventions with individuals and families. This is vitally important, because interventions are often piloted without regard to where the subjects live. Yet, when successful interventions are taken to scale, they are going to be implemented in many communities that will have specific features and circumstance. Community variation is one possible reason why interventions that work in carefully controlled demonstrations may be more or less effective elsewhere (Hawkins et. al., 1992). Although there are quite a few social work intervention studies that include neighborhood characteristics, only a few use multilevel statistical modeling or the kinds of nested designs that allow for the decomposition of variance or the assessment of cross-level interactions. Moreover, to the degree that the sample is clustered by neighborhood, these single level designs are incorrectly specified and violate the independence assumptions.

Establishing the Counterfactual

Although the question of what is solid evidence for practice is open to debate, many proponents see the randomized experiment as the gold standard. The reason is that a plausible counterfactual is needed to prove a causal relationship. The counterfactual represents what would have happened to the community or its residents in the absence of a condition or intervention of interest. A control group, created through random assignment, is arguably the best approximation of this counterfactual (Hollister & Hill, 1995; Granger 1998). Studies of community interventions or effects have faced serious challenges in the establishment of the counterfactual. Case studies and observational designs have predominated, leading to the inability to rule out selection bias, reverse causality and other threats to causal inference. However, the ideal of random assignment is very difficult to achieve when communities are the unit of analysis, either as independent or dependent variable. There are several recent developments, though, that hold promise in this regard.

Although it has been difficult to imagine the random assignment of communities to treatment and control groups, it is not too unrealistic to think of comparisons as the basis for a counterfactual. There is growing interest in whether the effectiveness of interventions can be studied using a combination of matched comparison communities and time series designs. By combining these techniques, communities that receive an intervention can be matched with comparison communities and tracked on important outcomes over a baseline period. Following the onset of the intervention, they can be tracked on these same outcomes going forward. By having an interrupted time series, the design is stronger than a simple pre-post test, because the baseline trend can serve as a

counterfactual. By adding the matched comparison communities, the trend is not only observed in intervention communities but can be compared with trends in communities without the intervention, addressing concerns about history and maturation influences (Shadish, Cook & Campbell, 2002).

In the community development field this approach has been tested using a difference in differences model (Galster, Temkin, Walker & Sawyer, 2003). In three cities, trends in housing values were compared for intervention neighborhoods and other neighborhoods that were not part of the community development initiative. The authors concluded that the comparison neighborhoods provided a better counterfactual when there was a longer pre-intervention time series available for comparison. Moreover, the matching was more effective when the baseline trend was stable enough to be clearly ascertained.

A similar approach has been successfully applied in the Jobs Plus initiative (Bloom 1996). Treatment and comparison public housing communities were compared on employment outcomes before and after an intervention that was geared toward transforming the community into one that supported employment. Time series analysis was made possible by measuring employment trends in these communities for multiple years prior to and after the intervention to determine the difference in differences. The comparison of each community with itself over time through repeated measures presumably controls for unobserved, non-time varying, differences in the treatment and comparison communities other than the intervention, thus presenting a more compelling counterfactual than case studies or simple pre and post test designs. These methods do require archival data to create a historical time series that is long enough to identify the trend, and thus may not be feasible in some instances.

A refinement of the matching algorithm involves matching multiple block groups or census tracts pulled from an entire region or large city to the block groups or census tracts that are within a target area for intervention. Working with small block groups rather than trying to find a match for the entire target area provides more degrees of freedom and many more units to pick from. The matches can be made using a number of characteristics, based either on direct matching or a propensity score model. Thus, the design does not require finding matches for target areas as a whole, which might be quite infeasible, but for the many (smaller) units of geography within an intervention community.

Moving to Opportunity (MTO) is an important experiment that tackles these problems head on. Congress mandated this randomized mobility experiment largely based on the impressive findings of a quasi-experiment in Chicago public housing known as the Gautreaux Program, in which a court decision forced a lottery process for moving some African-American public housing residents to white neighborhoods in the suburbs. When contacted ten years later, the employment rates of women who moved to the suburbs were significantly higher than women who moved within the city (Rosenbaum & Popkin, 1991; Rosenbaum 1995). Moreover, the movers themselves described how being closer to jobs and living in safe and orderly environments fostered their employment and improved outcomes for their children (Rubinowitz & Rosenbaum, 2000). Yet these impressive results were not incontrovertible due to selection biases in the study design.

MTO implemented a randomized experiment in five cities to determine whether public housing residents' outcomes could be improved by enabling them to move to low-poverty census tracts. There were two treatment conditions and a control condition. The first treatment group was offered housing vouchers and mobility counseling to relocate to neighborhoods with poverty rates of less than 10 percent. The second group was offered Section 8 vouchers to move anywhere outside of public housing. The control group was not offered vouchers at all. Results are beginning to emerge in several early reports for each city (Ludwig, Duncan & Ladd, 2003; Katz, Kling & Liebman, 2003; Leventhal & Brooks-Gunn, 2003; Hanratty, McLanahan & Pettit, 2003; Rosenbaum, Harris & Denton, 2003) and in a combined interim five-year impact evaluation (Orr, et al., 2003). Overall, the results are mixed. The treatment group shows strong improvements in sense of safety and neighborhood satisfaction, modest impacts on some aspects of health and behavior, and no effects on parental employment and income.

Although MTO sets an important precedent as to the feasibility of experimental research on communities, it has several limitations as an informative test of whether and how community matters. Most importantly, the study does not actually model the influence of community characteristics and social processes beyond the fact of a lower poverty rate. Moreover, even the influence of this economic factor is diminished because many families in the treatment group actually did not relocate to a low poverty neighborhood, as the lease up rate was only about 50 percent (Orr, et al., 2003). Even when the analysis is of the treatment on the treated (TOT), rather than the intent to treat (ITT), it is apparent that the movers frequently ended up in racially segregated neighborhoods within the boundaries of the central city where school systems and other municipal services were similar to their previous neighborhoods (Orr, et al, 2003). Additionally, the new neighborhoods were lower in poverty, yet they were also geographically proximate to previous locations and seldom in more distant suburbs. Also, the impact analysis does not model whether the community processes differed in the new locations and how these differences affected the outcomes; and the design does not really allow for this multi-level modeling to be done without selection bias because, within the parameters of moving to low poverty areas, the treatment group chose their own locations. Many members of the Section 8 comparison and the control groups as well moved to better neighborhoods of their own choice.

Nevertheless, the massive and successfully implemented MTO experiment represents a very important advancement in designs to study residential relocation and, indirectly, community impact. It demonstrates that the removal of financial barriers to mobility can only go so far in overcoming the structure of the economically and racially segregated metropolis, but that even modest improvements in neighborhood economic status can provide welcome relief from the stressful and dangerous conditions in public housing. The experimental nature of the design provides clarity about what is known and unknown and moves the debate and remaining research questions to a new level. No longer is the field bogged down in the perpetual debate about causal attribution and bias. MTO has again established the power of the experiment and demonstrated that it can actually be carried out on quite a massive scale with an intervention as profound as changing neighborhoods.

Spatial Patterns and Processes

Most social work practice research to date treats place-based communities as independent entities without explicit investigation into the role that proximity or contiguity plays in social work interventions or their impact. Within communities, conditions are assumed to be constant, rather than varying depending on geographic location. However, social processes and services within and between communities may be affected by geography, and interventions may be more or less effective depending on their spatial properties. Moreover, statistical assumptions may be inadvertently violated when spatially related data are analyzed using ordinary statistical models. Recently available spatial statistics and GIS tools can be used to investigate these patterns.

A potentially useful application in social work research is the determination of the role that distance plays in the success of community interventions or well being of community residents. Using GIS tools, the distances among residents or local organizations or between communities and other places can be calculated and used in various analyses of social interventions or outcomes. For example, several studies have used GIS tools to develop measures of the geographic distance to regional job openings in inner city neighborhoods (Coulton, Leete & Bania, 1999; Allard, 2002). These indexes of job access have been shown to potentially moderate the success of social programs, such as welfare to work. Also, distance matrixes to services have been used to construct service access measures. Living in a neighborhood with better geographic access to services has been shown to raise their level of utilization, for example, using this technique (Allard, Tolman & Rosen, 2003). Geographically specific business information also has been used to demonstrate that access to amenities such as shopping and personal services is restricted in African-American neighborhoods, possibly to their detriment. Improved geographic access to jobs, services and amenities could serve as an important outcome measure for community interventions.

Spatial statistics can also be used to investigate the degree to which phenomenon are spatially clustered. Local area autocorrelation statistics (Moran's I) and contiguity analyses can reveal whether particular events or phenomenon are spatially related (Griffith 1987). For example, Sabol and Mikelbank (2003) examined spatial clustering and interaction of sellers and purchasers of illegal drugs across neighborhoods in Cleveland (Figure 3). They used GIS software and SpaceStat (Anselin, 1992) to calculate local autocorrelation statistics and weighted measures of contiguity between the residential neighborhood and the neighborhood in which the drug offense was committed. The areas with darker colors in the map are indicative of clustering of buying and selling activity. The bar charts show whether the buyers of drugs come from near or far to engage in these behaviors. Breaking up such negative spatial patterning might be an important and measurable outcome of community interventions.

Geographic spread is also a phenomenon that can be captured using spatial statistics and GIS tools. The pattern of geographic dispersion of an outcome might be used fruitfully in the study of community interventions. For example, neighborhood employment interventions have worked to link communities with suburban employers with the result that neighborhood residents are able to travel further to get good jobs (Reardon 2001). Employment dispersion can be quantified using a spatial descriptive

statistic, the standard deviation ellipse (SDE). This technique was illustrated by Coulton, Bania, Leete and Cook (2001) who examined the geocoded employer addresses of former welfare recipients (Figure 4). The SDE, computed using Crime Stat v. 1.0 (Levine 2000), represented the degree to which these addresses were dispersed in latitude and longitude from the geographic centroid of the addresses. Results showed that the African American residents were relatively isolated from the metropolitan labor market compared to white residents. Another example of a spread measure as an outcome of intervention comes from a study of the impact of supported housing on community crime patterns. Galster, Petit, Santiago & Tatian (2002) used GIS to calculate an index of the degree to which crime incidents radiated around supported housing developments. They demonstrated that the spread of crime depended on how the housing was situated within the neighborhood. In this case, a spatial index was used to study the effect of varying approaches to supported housing, a community intervention.

Conclusion

We are up against a general skepticism about whether disadvantaged communities can change for the better. That may be why MTO, which moved people out of tough neighborhoods, was the central policy solution of the 90s. Yet, there are thousands of local initiatives that are trying to reinvigorate and restore communities on the ground. And the concept of building community still resonates here and around the globe. What is needed is a broader knowledge base of community change, built on convincing evidence.

New tools are becoming available every day to enhance the needed community research—and newly prepared doctoral researchers are well positioned to take advantage of them. I urge you to incorporate community measures and concepts into your research. The community may be a potentially influential factor in the behaviors, policies and practices that you study. Cutting edge methods such as GIS and multi-level models make it possible for you to model community influence processes that heretofore have been inexplicable. And it is now possible for you to implement more rigorous research designs to study community interventions than you may have thought possible in the past.

As recent doctoral graduates and new researchers in the field you will find yourself on the cutting edge. We need you to help increase the capacity in the field for research. Since many of you will also become the teachers of the next generation of social work practitioners and researchers, I hope that you will see to it that GIS and spatial statistics become a part of the curriculum. Courses on measurement methods should cover principles of ecometrics not just psychometrics. And students need to be taught to conceptualize their work within the multiple layers of human ecology that include the community. And social work researchers need the kinds of facilities and equipment that can support this type of analysis.

Research that includes community also requires boundary spanning structures and processes. It is inherently multidisciplinary. The greatest insight and authenticity can only be achieved by working with communities and with practitioners in those communities.

The vision and values of social work must under pin research on communities. Social work has deep roots in community and has given voice more than other professions to the profound importance of local communities for human development and social justice. As such, social work should be the leader in advancing scientific knowledge about how and why communities can change. And why it is valuable to do so.

Thank you again for letting me discuss my area of research and its challenges. I want to wish you all a productive day of sharing the findings from your doctoral research; I can see by the program that we are going to have an outstanding symposium.

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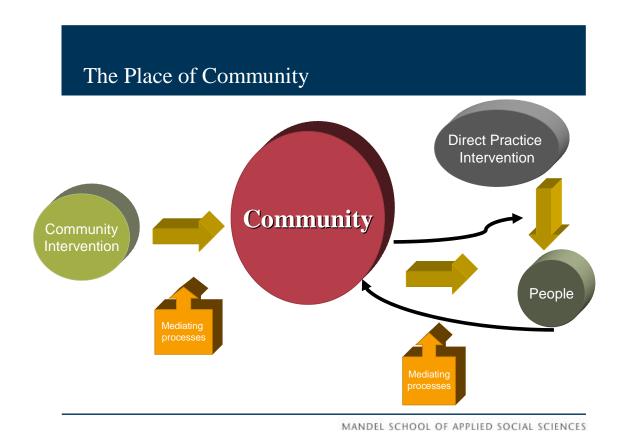


Figure 1: Model of Community in Social Work Research

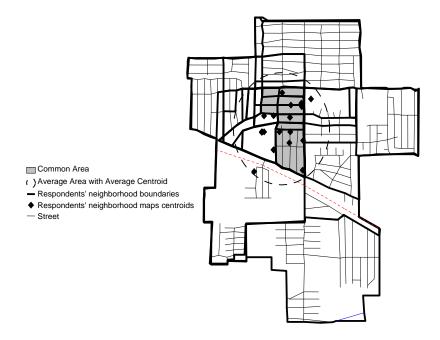


Figure 2. Using Resident Perceptions for Neighborhood Boundaries

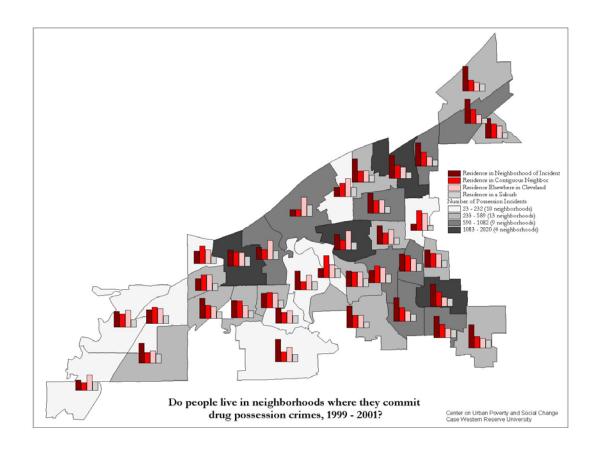


Figure 3. Example of clustering and contiguity in spatial analysis

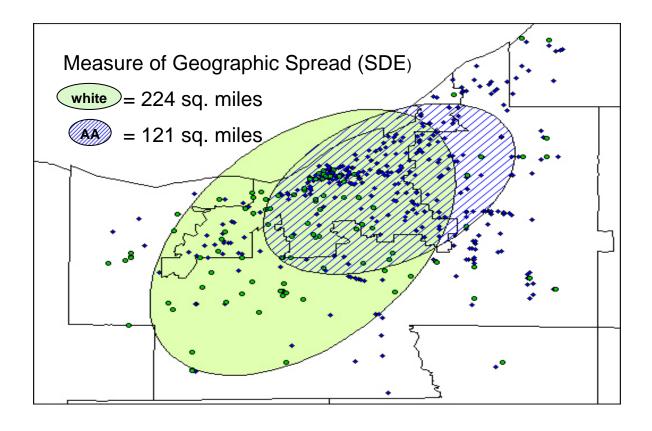


Figure 4. Example of spread of employment locations using the Standard Deviation Ellipse