Published in final edited form as:

J Community Pract. 2016; 84(1): 18–37. doi:10.1080/10705422.2015.1129005.

Surrounding community residents' expectations of HOPE VI for their community, health and physical activity

Akilah Dulin-Keita,

Department of Behavioral and Social Sciences, Brown University School of Public Health

Lonnie Hannon,

Department of Sociology, Tuskegee University

David Buys,

Division of Preventive Medicine, University of Alabama at Birmingham

Krista Casazza, and

Department of Nutrition Sciences, University of Alabama at Birmingham

Olivio Clay

Department of Psychology, University of Alabama at Birmingham

Abstract

Using a community-engaged participatory research approach, this study identified surrounding community residents' expectations for how a HOPE VI housing initiative might affect their community and individual health and physical activity. Fifty-nine women and men engaged in concept mapping, which is a mixed methods approach, where participants generate, sort, and rate ideas. Participants generated 197 unique statements. Thirteen thematic clusters related to expected changes for the community, health and physical activity emerged. Residents' rated 'Increased Pride in the Neighborhood' and 'Increased Safety' as the most important factors related to HOPE VI whereas 'Drawbacks of HOPE VI' was rated as least important. This research provides insight into the potential impacts of housing initiatives from the perspective of those most affected by such initiatives. The findings also highlight environmental changes as potential mechanisms that may improve residents' perceptions of the community and encourage healthy lifestyles.

Keywords

housing policy; mixed-methods; concept mapping; community engaged research; African American

International scholarship suggests that economic disadvantage adversely affects health, physical activity, social and community well-being (Andrulis, 1997; Braza, Shoemaker, & Seeley, 2004; Casagrande, Whitt-Glover, Lancaster, Odoms-Young, & Gary, 2009; Dulin Keita & Hannon, 2013; LaVeist, Pollack, Thorpe, Fesahazion, & Gaskin, 2011; Roux & Mair, 2010; Sallis et al., 2009; Sallis & Glanz, 2009; Teixeira & Wallace, 2013). In order to

reduce the negative effects of social and economic context on the community and health related outcomes, policies that encourage residential mixing among residents of different social class statuses (Goodchild & Cole, 2001), neighborhood renewal strategies (Kelaher, Warr, & Tacticos, 2010) and smart planning have emerged (Bair & Fitzgerald, 2011; Brazley & Gilderbloom, 2007; Reid, Liebow, & O'Malley, 2006; Skelton, Selig, & Deane, 2006).

One such initiative implemented in the United States is HOPE VI (Housing Opportunities for People Everywhere). Launched in 1992 by an act of the United States' Congress, the overarching goal of HOPE VI is to redress the effects of concentrated poverty on distressed communities (Arthurson, 2008; Galster, 2007; Van Kempen & Bolt, 2009). HOPE VI differs from gentrification because it is designed to create mixed-income housing developments in low-income communities with minimal displacement of surrounding residents. In contrast, gentrification is a process where higher-income households move into economically disadvantaged areas in an effort to raise their overall financial value (Galster & Booza, 2007; Hannon, 2014). The specific goals of HOPE VI are to replace severely distressed public housing, to revitalize public housing sites, to improve surrounding neighborhoods, to reduce the concentration of low-income families, and to build sustainable communities (Popkin et al., 2004). HOPE VI also incorporates principles of new urbanism to redesign communities into sustainable areas that include mixing housing types, creating walking paths, parks, sidewalks, and shopping areas (Popkin et al., 2004). In order to receive HOPE VI funding, the public housing development must meet certain criteria; the residents of the housing development must need high levels of social support services, the buildings must be deteriorated, and the surrounding community must be economically and socially disadvantaged and disordered (Howell, Harris, & Popkin, 2005; Popkin & Cove, 2007).

The HOPE VI objectives are predicated in part on the work of William Julius Wilson's historical analysis of inner-city decline (Greenbaum, 2011; Schwartz & Tajbakhsh, 1997). Wilson's work suggests that neighborhood economic disadvantage became more prevalent as inner cities faced periods of rapid decline that left members of society in areas of concentrated poverty (Wilson, 1987, 1996). Most often, the disadvantaged were poor inner city African Americans. A contributor to urban deterioration was the exodus of middle class blacks, whites and the working class to suburban areas. Inner cities experienced concomitant declines in industry with the most severe job cuts among low-skilled laborers. With the outmigration of the economic base, small retailers and stores shifted their resources to suburban areas (Dreier, Mollenkopf, & Swanstrom, 2001; Wilson, 1996). These social and economic changes accelerated economic decline and social instability in urban areas (Wilson, 1987, 1996). These patterns of residential segregation that originated in part from institutionalized American discrimination precluded many low-income African Americans from resources such as quality housing, good schools and aesthetically pleasing environments that promote well-being (Williams & Collins, 2001).

HOPE VI principles suggest that to affect social change, deconcentration of poverty is necessary. It is expected that an influx of middle-income residents and mixing housing stock in economically distressed communities will decrease social isolation of low-income residents, will reduce concentrated poverty and will stabilize communities (Chaskin & Joseph, 2010; Galster, 2003; Van Kempen & Bolt, 2009). Often, higher-income individuals

have more social capital (i. e. interpersonal trust between citizens, norms of reciprocity and density of civic associations) which is beneficial for neighborhoods (Kawachi, Subramanian & Kim, 2008). For low income residents, social capital is expected to be a resource to help them access information, advance economically and improve health (Kawachi et al., 2008). Collectively, these community transformations are expected to lead to more sustainable communities, greater community stability and improvements in the quality of life of socially isolated low-income residents (Chaskin & Joseph, 2010).

While some scholars and policy makers support deconcentrating poverty to address social and economic instability, the underlying thesis for HOPE VI is contested. Some scholars question the evidence to support the assumptions of this thesis (Schwartz & Tajbakhsh, 1997) and also suggest that these assumptions stigmatize and pathologize the poor (Greenbaum, 2011). To date, findings in support of HOPE VI are mixed. Research findings indicate that there are economic improvements and increases in housing values of surrounding neighborhoods (Schwartz & Tajbakhsh, 1997). However, not all HOPE VI communities attract middle income residents, the middle-income residents may not integrate with low-income residents and HOPE VI redevelopments may actually lead to gentrification (Fraser & Kick, 2007; Schwartz & Tajbakhsh, 1997).

Also, there is mixed support for the beneficial effects of HOPE VI efforts to relocate displaced project housing residents to other neighborhoods. Qualitative reports of displaced residents and survey studies indicate that relocation results in the loss of community social ties and social bonds, reduces access to protective resources, leads to poorer mental health and that relative to pre-relocation communities, there are marginal or similar economic conditions and opportunities (Clampet-Lundquist, 2004; Cunningham, 2004; Greenbaum, 2011; Jackson et al., 2009; Keene & Geronimus, 2011). Additionally, HOPE VI redevelopments do not replace the number of housing units within pre-revitalized communities, which is of significant concern because it reduces options for affordable housing for low-income people and racial/ethnic minorities (Popkin et al., 2004). However, other research findings suggest that residents relocated via HOPE VI and Moving to Opportunity housing policies have improved health outcomes, live in safer environments and have less exposure to drugs (Ludwig et al., 2011; Popkin & Cove, 2007; Zuberi, 2012).

The aforementioned research provides insights from residents who are displaced as a result of HOPE VI construction and residents who live in HOPE VI developments. However, to our knowledge, no research has examined perceptions of surrounding community residents who are also directly affected by HOPE VI policies. This is of particular concern as one of the stated goals of HOPE VI is to improve surrounding communities. To address this gap in the research, we conducted an inductive exploratory study to examine surrounding community residents' perceived implications of a HOPE VI development for their community, health and physical activity. We intend to use the insights gleaned from study findings to develop a conceptual framework to examine empirically, neighborhood dynamics and health behaviors in a transitioning community. At the time of data collection, the HOPE VI initiative was in the process of accepting applications for subsidized housing rentals. However, the full scale had not yet been implemented.

Methods

We received intramural funding from the University of Alabama at Birmingham, Community Health Scholars program to explore potential effects of HOPE VI. The research project took place in the Tuxedo neighborhood in Birmingham, AL. This neighborhood began in the early 20th Century as a community for steel workers. The neighborhood thrived until the mid-century decline in manufacturing that affected most of the country. During this time, the neighborhood transitioned from ethnic white to majority African American. The absence of manufacturing jobs adversely affected the local economy with store closings, declines in property value, and capital divestment.

Census tract level data from the 2000 US Census provide contextual information about the impetus for HOPE VI revitalization. In 2000, 2,088 individuals lived in the Census tract, the racial/ethnic composition was 98 percent non-Hispanic black, 2 percent non-Hispanic white, and 57 percent female. The median household income was \$11,250, a 55 percent of residents living below the poverty threshold; this level of census-tract poverty classifies the community as a ghetto-poverty tract (40 percent poverty) and indicates deteriorated and threatening environments (Fitzpatrick & LaGory, 2010). Thirty-eight percent of residents had less than a high school diploma and 24 percent were unemployed. This community received federal funds for HOPE VI revitalization because of the census tract characteristics indicating concentrated poverty, the unsafe conditions of the subsidized housing project and the surrounding community meeting the HOPE VI criteria for social distress.

Prior to implementation of the HOPE VI initiative, there was significant community outreach by the Birmingham Housing Authority. During the initial HOPE VI planning, there were a series of community meetings that were open to the public to keep community residents apprised of the HOPE VI development and to solicit community feedback. Additionally, the HOPE VI project established a community advisory board consisting of representatives from the local community. The HOPE VI construction was also highly visible to the surrounding community because it is located on a main thoroughfare which connects the community to one of the major highways.

The new HOPE VI development, renamed Tuxedo Terrace, replaces 488-units of severely distressed public housing built in 1960. At the time of HOPE VI application for funds, Tuxedo Court had a 66 percent vacancy rate due to the high levels of lead and structural hazards (Boulevard-Group, 2004). The HOPE VI development was initiated between 2004 - 2010 with the receipt of over \$20 million dollars in HOPE VI funds and with financial commitments from additional sources. The full implementation of the Tuxedo Terrace development provided 306 mixed-income housing units through 1) public housing replacement units, 2) affordable rentals, and 3) non-subsidized homes (36%, 36%, and 28% devoted to each type respectively) (Boulevard-Group, 2004; Housing Authority of the Birmingham District, 2014). At the time of data collection, the affordable rentals had been constructed and were in the process of accepting applications. However, the architectural designs for the single-family homes were approved, yet actual construction had not been implemented. In addition to mixed income housing, the development's design incorporated green spaces and parks which were not yet developed at the time of data collection

(Boulevard-Group, 2004). The Tuxedo Terrace will also have community and daycare centers and a maintenance facility; these were also not yet developed at the time of data collection (Boulevard-Group, 2004).

We used a community engaged research approach (Israel, Schulz, Parker, & Becker, 1998; Mulligan & Nadarajah, 2008). We conducted study-related events (i.e. recruitment and data collection) within the Tuxedo community. Beginning in late 2009, we formed a series of partnerships with local community organizations including one faith-based organization and one community business association. The University-based principal investigator met with the organization members to discuss the development of a project to examine HOPE VI. The local organizations were supportive and expressed interest in collaborating. Together, we created a strategic plan, developed the research agenda, and recruited residents. All study related materials received approval from the Institutional Review Board for Human Subjects at the University of Alabama at Birmingham.

Study inclusion criteria were that the participants had resided in the community for at least one year, self-reported African American ethnicity and were older than 18 years of age. All study participants provided their consent and received up to \$50.00 (\$25.00 debit card per meeting) for participation.

Concept Mapping Procedure

We used five steps of concept mapping process (see Table 1 Supplement for details) explicated in the work of Kane and Trochim (2007). Concept mapping is "any methodology that produces pictures/maps of ideas or concepts developed by an individual or group" (Trochim & Kane, 2005). This method was chosen because it incorporates abductive, deductive and inductive forms of logic, applies equal status to qualitative and quantitative methods (Brannen & Moss, 2012) and integrates a collaborative process between researchers and participants and balances power dynamics (Freeman & Jessup, 2004).

Step 1. Preparing for Concept Mapping. Prior to developing the focus prompt, the principal investigator of the study attended community meetings that were related to HOPE VI revitalization and community development (e.g. schools merging and/or new school construction), spoke with neighborhood associations and consulted with community organizations to learn of ongoing developments within the community and HOPE VI. Given the significant scholarship on the effects of the built and social environments on physical activity and obesity (Dulin Keita & Hannon, 2013) and health (Roux & Mair, 2010), as well as the dearth of literature capitalizing on urban redesign and health outcomes, we were interested in exploring physical activity and general health. We chose to focus solely on physical activity and not diet because at the time of HOPE VI development, there were no concrete plans to develop the community food environment. We also decided to broadly examine community instead of more specific factors such as crime, jobs, or bus services because we did not want to limit the residents to these topics. Instead, we were interested in having them discuss a broader array of potential intended/unintended community changes that may result from HOPE VI.

We worked with our community partners to recruit 59 participants from the community using snowball sampling and flyers. We placed flyers at local libraries, churches, recreation centers and health clinics and we attended community events and neighborhood association meetings.

Step 2. Generating the ideas. Participants responded to three focus prompts: "How do you think the new Tuxedo Housing will affect the community?", "How do you think the new Tuxedo Housing will affect health?" (health was defined as physical-, emotional-, and mental health) and "How do you think the new Tuxedo housing will affect participation in physical activity?" We used the nominal group technique (Gallagher et al., 1993) to elicit statements.

Upon completion of all sessions, each data coder (PI and study Co-investigators) reviewed the statements independently for relevancy to the focus prompts, clarity, duplicate statements, and compound statements. After the independent review, the research team came together to reach consensus for retaining statements based on the above-mentioned criteria.

Step 3. Structuring. This refers to sorting and rating the statements generated from Step 2 of data collection. All previously enrolled participants and new recruits were eligible to participate as long as they were representative of the population of interest (Kane & Trochim, 2007). Each participant received a stack of cards with one statement per card. For the sorting process, the meeting facilitator instructed the participants to sort the statements into piles based on similarity in meaning that made sense to the participant. After completion, participants rated each statement based on its importance using a Likert scale (5 = most important relative to the other statements to 1 = least important relative to the other statements). Participants also completed a survey that included questions about age, income, education, employment, home ownership and length of residence in the community.

Step 4. Statement Analysis. To create visual representations of the data and to conduct quantitative analyses, we used Concept Systems® software (Concept Systems Incorporated, Ithaca, NY).

Data Analysis

The resident characteristics were described using means and standard deviations for continuous measures and frequencies and percentages for categorical measures. For statement analysis, Concept Systems® software provided a stress value with a potential range from 0 (perfect fit) to 1 (poor fit) to indicate the goodness of fit of the mapped points to the individual sort data. Additional analyses conducted included cluster formation, bridging values, cluster ratings, t-tests and pattern match. The cluster analysis presents how the statements are grouped or 'clustered' together based on the average sorting by the participants. The research team determined the final cluster number keeping in mind parsimony, the theoretical meaning of each cluster, and interpretability (Kane & Trochim, 2007; Lebel et al., 2011). To identify the label for each cluster, the research team reviewed the statements within each cluster while independently; two volunteer study participants developed a label for each cluster that represented its main theme. The resulting cluster labels integrate the volunteers' suggested labels.

Clusters that are closer together are more similar in meaning whereas clusters that are farther apart on the map are less similar. The broader clusters represent broader concepts whereas the more compact clusters represent narrowly focused concepts. An average bridging value is assigned to each cluster and ranges from 0 to 1. The closer the bridging value is to 1, the more that the statements in that cluster link to statements in distant clusters whereas the closer the value is to 0, the more the statements are associated with close by, neighboring statements (Kane & Trochim, 2007). The rating data was used to indicate the average relative importance of each cluster rating. The more layered the cluster, the higher the participant-ascribed relative importance. We conducted t-tests to determine if there were significant differences in cluster ratings where n is equal to the number of statements and the mean is equal to the average rating of relative importance of the cluster. Significance was set at $\alpha < 0.05$. We examined a pattern match to compare overall cluster correlation between males and females. The correlation coefficient ranges from 0 (no correlation) to 1 (strong correlation).

Results

Initially, 71 community residents completed the phone screening. Of those residents, a total of 59 participated in concept mapping. One participant had missing data and was thusly excluded from all further analyses for a total of 58 residents. The average age of participants in the study was 45.5 years (± 14.3) (Table 1). Participant characteristics were fairly similar to the 2000 US Census data in that 37% reported annual household incomes of less than \$11,000 and 25% were unemployed. However, a larger percentage of participants were female (72%) and had higher levels of education (88% reported high school or more). On average, respondents lived in the community for 16 years (± 16.3) and 40% reported that they owned their home.

Forty-three of the 58 residents participated in step 2 (generating ideas) and developed a total of 272 statements related to community (n = 112), health (n = 74), and physical activity (n = 86). The final statement set was reduced to 197 unique statements for community (n = 92), health (n = 58), and physical activity (n = 47). Similarly, 43 of the 58 residents participated in step 3 (sorting and rating the statements). There were 27 residents who participated in both steps 2 and 3.

Figure 1 presents the 197-statement set as a final 13-cluster rating map solution. Cluster names, bridging values, examples of individual statements and statement ratings are presented in Table 2. The final stress value for our data was 0.32 after 17 iterations indicating good fit of the mapped points to the individual sort data (Rosas & Kane, 2012). The two clusters, 'Increase Pride' and 'Increase Safety,' were rated as most important with an average relative importance of 4.3. The cluster rated as least important was 'Drawbacks of HOPE VI' with an average relative importance of 3.3. The pattern match revealed a strong correlation in the ratings of cluster importance between men and women (r = 0.89). Ttests of significant difference in average cluster ratings of relative importance indicated that the cluster 'Revitalize Business,' was rated as significantly more important than the 'Affordable Housing' and 'Drawback' clusters. Additional t-tests results for all clusters are

presented in the Appendix with negative t-values indicating lower relative importance (see Table 2 Supplement for details).

Discussion

The objectives of this study were to examine surrounding community residents' expectations of HOPE VI policies for their community, health and physical activity and to develop a conceptual framework to examine empirically, changing neighborhood dynamics and health behaviors in a community undergoing revitalization. Specifically, some hypotheses from this study that can be empirically tested are that HOPE VI will improve community-level social capital (Sampson, Morenoff & Gannon-Rowley, 2002), collective efficacy (Bandura, 2000; Sampson, Raudenbush & Earls, 1997), neighborhood safety, the built environment and economic infrastructures and may increase neighborhood based physical activity and improvements in mental and physical health. The major themes that residents' rated as the most important initiatives related to HOPE VI included 'Increase Pride,' 'Increase Safety,' 'Revitalization of Community and Businesses,' 'Improve Public Services,' Neighborhood Aesthetics,' 'Diversity and Change' (i.e. racial and economic diversity) and 'Increase Physical Activity.' These emergent themes from concept mapping are also identified in the neighborhood, policy and health literatures as central to improving community environments and health and well-being of residents in disadvantaged communities (Coulton, Chan, & Mikelbank, 2011; Fitzpatrick & LaGory, 2010). The findings from this study suggest that community residents support revitalization policies that change the economic, social and physical aspects of their neighborhood. Residents also relate these policies to potential changes in individual health and physical activity.

Residents suggested that HOPE VI might improve community collective efficacy and stimulate surrounding community residents to improvement their own homes. These ideas were reflected by the cluster 'Diversity and Change' which addresses racial/ethnic and economic diversity and change and the cluster, 'Reduce Crime,' which discusses reduction in crime. Residents indicated that HOPE VI might reduce social barriers and increase social cohesion between residents of HOPE VI and the larger neighborhood community. Collectively, this indicates that residents may have more access to social capital and social support. Research does suggest that neighborhood associations are often activated during revitalization efforts (Kleinhans, 2004). Additionally, statements from the clusters reflect the expectation that the new development will improve the reputation of the community. This is also supported by qualitative reports that suggest that urban revitalization policies do in fact reduce the stigmas attached to the pre-revitalized community (Arthurson, 2008).

A growing body of literature associates social mixing and urban revitalization policy implementation with reduced crime (Popkin et al., 2004). However, prior research efforts are unable to identify HOPE VI as a causal factor for changes in communities (Popkin et al., 2004). Despite this, research findings suggest that violent crime rates in HOPE VI neighborhoods decline at a steeper rate relative to other areas of the city (Holin, Buron, Locke, & Cortes, 2003; Popkin et al., 2004). The statements in the current study and those from previous research also support perceptions that there are lower levels of criminal activity, gun violence, and increased psychological stability resulting from the demolition of

the housing project and the creation of mixed income developments (Chaskin & Joseph, 2010). As reduced crime rates may increase perceptions of personal safety, reduce anxiety and distress, and collective efficacy, future research should examine these mental health related outcomes and also examine if there are reduced reports of crime related injuries and mortality in revitalized areas.

Historical examinations of inner city decline indicate the concentration of poverty in urban neighborhoods as a causal factor for the outmigration of viable businesses to suburban areas (Wilson, 1996). In the current study, residents cite the importance of middle-income individuals relocating to the community to strengthen the economic base. This idea is reflected in the 'Diversity and Change' cluster. The statements from residents indicate that the creation of new businesses and improvements in the quality of schools depend upon middle-income residents. These expectations are similarly echoed by residents in other mixed income housing communities (Chaskin & Joseph, 2010). In addition, residents cite that the presence of middle-income individuals will bring a "better class of people" to the community as well as improve home values. The expectation for middle-income residents to role model behaviors and aspirations for previously socially isolated low-income individuals is outlined in the broader literature (Kleinhans, 2004). Residents from more established mixed income communities in the United States have reported that middle income residents show people a "better way of life" and create aspirations for participation in the labor force (Chaskin & Joseph, 2010). An increase in home values has also been shown to result from HOPE VI efforts and other social mixing policies (Bair & Fitzgerald, 2011). Fundamentally, these hopes require assistance from middle class residents who are willing to move to a mixed-income development.

In the current study, residents expect that HOPE VI will create better access to health promoting resources. This idea is reflected in the 'Generate Health Promoting Resources,' 'Improved Public Health Services,' and 'Revitalize Community and Businesses.' These expectations hinge upon the removal of socio-structural impediments in the community. Research findings consistently indicate that disadvantaged neighborhoods lack access to basic services such as supermarkets and fresh fruits and vegetables (Dulin Keita & Hannon, 2013; Moore & Diez Roux, 2006). Results from the concept mapping reflect expectations for new grocery stores within the community, casual dining restaurants, the creation of community gardens, and health clinics that provide services for residents. Study participants rate these statements as most important within the cluster for Improved Public Services, which indicates that residents perceive a high need for these services. These sentiments are echoed in qualitative reports from stakeholders, African American residents in Chicago mixed income housing developments, and among African American residents of low-income communities (Chaskin & Joseph, 2010; Lucan, Barg, Karasz, Palmer, & Long, 2012). According to many of the residents, the potential for better grocery stores and a revitalized built environment depend upon the arrival of middle-income residents. If the current HOPE VI development fails to attract middle class residents, then the healthy lifestyle expectations such as increases in physical activity, availability of healthy foods and improvements in physical- and mental health may not materialize. Future research should measure the inmigration of middle-income individuals to HOPE VI areas and the possible changes that result.

Statements from the clusters indicate that the level of social disorganization that existed prior to the construction of HOPE VI was a barrier to physical activity. The statements in the cluster, 'Increase Safe Play Areas,' referenced that reduction of previous community barriers would lead to safer parks for children to play and feeling less guarded in the new community. Indeed a large body of evidence underscores the relationships between neighborhood disorder, the built environment, and reduced participation in physical activity (Braza et al., 2004; Sallis et al., 2009; Sallis & Glanz, 2006, 2009; Dulin Keita & Hannon, 2013). According to findings from the concept maps, the increased sense of safety resulting from HOPE VI may increase participation in physical activity within the community. As well, the modifications to the built environment such as improved lighting, aesthetically inviting parks and walking paths within HOPE VI may potentially motivate more children and adults to engage in physical activity. These findings are also evidenced by qualitative research with residents in other HOPE VI communities (Marinescu et al., 2013).

While many of the expected changes resulting from HOPE VI are positive, previous research findings and study participant comments indicate that neighborhood revitalization attempts are not without their drawbacks. These concerns are reflected in the cluster, 'Drawbacks of HOPE VI.' Often, previous public housing residents do not return to the HOPE VI development because it does not replace all of the demolished units (Popkin et al., 2004). Displaced residents may also have fewer options for affordable housing. Additionally, research findings from the more well-established HOPE VI developments indicate a lack of integration or social contact between high- and low-SES residents (Brophy & Smith, 1997). Despite these issues, surrounding community residents perceived that drawbacks are the least important effects related to potential changes for revitalization efforts within the community.

Consistent with our community engagement approach to research, we held a community forum and invited community-based organizations, community members, neighborhood associations, and policymakers (e.g. Birmingham Housing Authority and local city councilmen). The objective of this forum was to disseminate findings described in the present study, to create dialogue about community perceptions of housing policies, and to interpret data (discussion available here http://www.soph.uab.edu/csch/videos/keita063011). The concluding remarks and ideas generated from this meeting indicated that HOPE VI progress to date and the community transformations were favorable; however, long-term involvement from policymakers, community organizations, and city leadership was needed for program success and sustainability.

Limitations

Though informative, this investigation is not without limitations. This study is limited to one geographical location experiencing HOPE VI redevelopment. However, community residents generated 272 statements related to HOPE VI and content saturation of ideas was achieved after the four generating ideas sessions. So, the findings may have direct relevance to communities undergoing similar types of community redevelopment. In addition, there are some limitations to concept mapping software: 1) the mapped data represent approximations of the overall sort data and there is some degree of error associated with this

process; and 2) there are outlier statements in clusters (e.g. a statement may not fully fit the theme of its cluster).

Implications and Next Steps

Despite the aforementioned limitations, the study findings significantly contribute to the gaps in the literature by examining the perceptions of surrounding community residents directly impacted by housing policies that attempt to revitalize their communities. The findings from this study identify key themes of interest that might influence surrounding community residents' behaviors and suggest empirically testable community level factors and health behaviors that might be influenced by HOPE VI housing policies. The findings provide in-depth insight into community residents' expected outcomes and provide evidence of community support for housing policies. This may suggest that these policies may be viable avenues to strengthen distressed communities, increase available social capital and to improve resident health. Using concept mapping to examine affected residents perceptions of policies is important because the findings 1) can challenge practitioners and policy makers to question their key assumptions, and question how policies are framed, 2) can provide insight into the priorities and expectations of people who are directly affected by policy and practice, and 3) can ensure that evidence used to develop policy, practice and program evaluation is ecologically valid in that it works in the contexts of people's everyday lives and environment (Davies, 2000; Kane & Trochim, 2007). Further, the community engaged concept mapping approach helped to create dialogue between community residents and policy makers surrounding its implementation and significantly informed the development of our future research (i.e. program planning and evaluation, intervention and measurement development) grounded within the experiences of the communities of interest.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

We thank all of the community residents and community organizations for their participation and enthusiasm for this work. Support for this project was provided by the Centers for Disease Control and Prevention, Prevention Research Centers Program, cooperative agreement number 1-U48-DP-001915. Funding was also provided by the Resource Centers for Minority Aging Research Program of the National Institute on Aging, 3P30-AG031054-02S1 to the UAB Deep South Resource Center for Minority Aging and NIH grants T32DK062710, R00-DK83333. The findings and conclusions in this manuscript are those of the author and do not necessarily represent the official position of the Centers for Disease Control and Prevention and NIH grants.

References

Andrulis, D. The urban health penalty: New dimensions and directions in inner-city health care.. In:
Andrulis, D., editor. Inner city health care. American College of Physicians; Philadelphia, PA: 1997.
p. 1

Arthurson, K. The role of qualitative research in identifying residents' perspectives about social mix.. In: Maginn, P.; Thompson, S.; Tongs, M., editors. Qualitative housing analysis: An international perpsective (Studies in qualitative methodology). Vol. 10. Emerald Group Publishing Limited; United Kingdom: 2008. p. 209-225.

Bair E, Fitzgerald JM. Hedonic estimation and policy significance of the impact of HOPE VI on neighborhood property values. Review of Policy Research. 2011; 22(6):771–785.

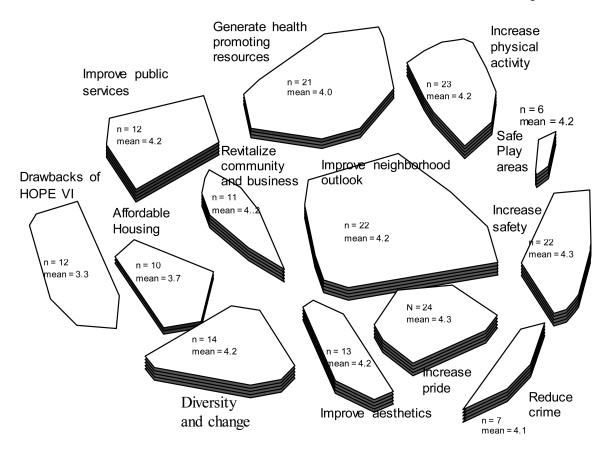
- Bandura A. Exercise of human agency through collective efficacy. Current Directions in Psychological Science. 2000; 9(3):75–78.
- Boulevard-Group (Producer). Tuxedho HOPE VI. 2004. Retrieved from http://www.boulevardgroup.com/downloads/Tuxedo-Terrace.pdf
- Brannen J, Moss G. Critical issues in designing mixed methods policy research. American Behavioral Scientist. 2012; 56(6):789–801.
- Braza M, Shoemaker W, Seeley A. Neighborhood design and rates of walking and biking to elementary school in 34 California communities. American Journal of Health Promotion. 2004; 19(2):128–136. [PubMed: 15559713]
- Brazley M, Gilderbloom JI. HOPE VI housing program: Was it effective? American Journal of Economics and Sociology. 2007; 66(2):433–442.
- Brophy P, Smith RP. Mixed-income housing: Factors for success. Cityscape: A Journal of Policy Development and Research. 1997; 3:3–31.
- Casagrande SS, Whitt-Glover MC, Lancaster KJ, Odoms-Young AM, Gary TL. Built environment and health behaviors among African Americans: a systematic review. American Journal of Preventive Medicine. 2009; 36(2):174–181. [PubMed: 19135908]
- Chaskin RJ, Joseph ML. Building "community" in mixed-income developments: Assumptions, approaches, and early experiences. Urban Affairs Review. 2010; 45(3):299–335.
- Clampet-Lundquist S. HOPE VI relocation: Moving to new neighborhoods and building new ties. Housing Policy Debate. 2004; 15(2):415–447.
- Coulton C, Chan T, Mikelbank K. Finding place in community change initiatives: Using GIS to uncover resident perceptions of their neighborhoods. Journal of Community Practice. 2011; 19(1): 10–28.
- Cunningham, M. An improved living environment? Relocation outcomes for HOPE VI relocatees (Rep.No.1). Urban Institute; Washington, DC: 2004.
- Davies, P. Contributions from qualitative research. In: Huw, T.; Davies, P.; Nutley, S.; Smith, P., editors. What works? Evidence-based policy and practice in public services. The Policy Press; Bristol, UK: 2000. p. 291-316.
- Housing Authority of the Birmingham District. 2014. Retrieved from http://www.habd.org/
- Dreier, P.; Mollenkopf, J.; Swanstrom, T. Place maters: Metropolitics for the twenty-first century. University Press of Kansas; Lawrence, Kansas: 2001.
- Dulin Keita, A.; Hannon, L. Neighborhood effects on obesity among racial ethnic minorities: A lifespan approach.. In: Fitzpatrick, K., editor. Poverty and health: A crisis among America's most vulnerable. Vol. 2. Praeger; Santa Barbara, CA: 2013. p. 105-137.
- Fitzpatrick, KM.; LaGory, M. Unhealthy cities: Poverty, race and place in America. Routledge; New York, NY: 2010.
- Fraser JC, Kick EL. The role of public, private, non-profit and community sectors in shaping mixed-income housing outcomes in the US. Urban Studies. 2007; 44(12):2357–2377.
- Freeman LA, Jessup LM. The power and benefits of concept mapping: measuring use, usefulness, ease of use, and satisfaction. International Journal of Science Education. 2004; 26(2):151–169.
- Gallagher M, Hares T, Spencer J, Bradshaw C, Webb I. The nominal group technique: a research tool for general practice? Family Practice. 1993; 10(1):76–81. [PubMed: 8477899]
- Galster G. Investigating behavioural impacts of poor neighbourhoods: Towards new data and analytic strategies. Housing Studies. 2003; 18(6):893–914.
- Galster G. Neighbourhood social mix as a goal of housing policy: A theoretical analysis. European Journal of Housing Policy. 2007; 7(1):19–43.
- Galster G, Booza J. The rise of the biopolar neighborhood. Journal of the American Planning Association. 2007; 73(4):421–435.
- Goodchild B, Cole I. Social balance and mixed neighbourhoods in Britain since 1979: a review of discourse and practice in social housing. Environment and Planning D-Society & Space. 2001; 19(1):103–121.

Greenbaum S. Social capital and deconcentration: Theoretical and policy paradoxes of the HOPE VI program. North American Dialogue. 2011; 5:9–13.

- Hannon, L. Life and Society. Cognella; San Diego: 2014.
- Holin, M.; Buron, L.; Locke, G.; Cortes, A. Interim assessment of the HOPE VI program cross-site report. United States Department of Housing and Urban Development; Washington, DC: 2003.
- Howell E, Harris LE, Popkin SJ. The health status of HOPE VI public housing residents. Journal of Health Care for the Poor and Underserved. 2005; 16(2):273–285. [PubMed: 15937391]
- Israel BA, Schulz AJ, Parker EA, Becker AB. Review of community-based research: assessing partnership approaches to improve public health. Annual Review of Public Health. 1998; 19:173–202.
- Jackson L, Langille L, Lyons R, Hughes J, Martin D, Winstanley V. Does moving from a high-poverty to lower-poverty neighborhood improve mental health? A realist review of 'Moving to Opportunity'. Health Place. 2009; 15(4):961–970. [PubMed: 19427806]
- Kane, M.; Trochim, WM. Concept mapping for planning and evaluation. Sage; Thousand Oaks, CA: 2007.
- Kawachi, I.; Subramanian, SV.; Kim, D. Social capital and health. Springer; New York, NY: 2008.
- Keene DE, Geronimus AT. "Weathering" HOPE VI: The importance of evaluating the population health impact of public housing demolition and displacement. Journal of Urban Health. 2011; 88(3):417–435. [PubMed: 21607787]
- Kelaher M, Warr DJ, Tacticos T. Evaluating health impacts: Results from the neighbourhood renewal stratgey in Victoria, Australia. Health Place. 2010; 16(5):861–867. [PubMed: 20472489]
- Kleinhans R. Social implications of housing diversification in urban renewal: A review of recent literature. Housing and the Built Enviornment. 2004; 19:367–390.
- LaVeist T, Pollack K, Thorpe R Jr. Fesahazion R, Gaskin D. Place, not race: Disparities dissipate in southwest Baltimore when blacks and whites live under similar conditions. Health Affairs (Millwood). 2011; 30(10):1880–1887.
- Lebel A, Cantinotti M, Pampalon R, Theriault M, Smith LA, Hamelin AM. Concept mapping of diet and physical activity: Uncovering local stakeholders perception in the Quebec City region. Social Science and Medicine. 2011; 72(3):439–445. [PubMed: 21030123]
- Lucan SC, Barg FK, Karasz A, Palmer CS, Long JA. Concepts of healthy diet among urban, low-income, African Americans. Journal of Community Health. 2012; 37(4):754–762. [PubMed: 22101636]
- Ludwig J, Sanbonmatsu L, Gennetian L, Adam E, Duncan GJ, Katz LF, McDade TW. Neighborhoods, obesity, and diabetes -- a randomized social experiment. New England Journal of Medicine. 2011; 365(16):1509–1519. [PubMed: 22010917]
- Marinescu LG, Sharify D, Krieger J, Saelens BE, Calleja J, Aden A. Be active together: Supporting physical activity in public housing communities through women-only programs. Progress in Community Health Partnerships. 2013; 7(1):57–66. [PubMed: 23543022]
- Moore LV, Diez Roux AV. Associations of neighborhood characteristics with the location and type of food stores. American Journal of Public Health. 2006; 96(2):325–331. [PubMed: 16380567]
- Mulligan M, Nadarajah Y. Working on the sustainability of local communities with a "community-engaged" research methodology. Local Environment. 2008; 13(2):81–94.
- Popkin, S.; Cove, E. Safety is the most important thing: How HOPE VI helped families (Re. No.2). Urban Institute; Washington, DC: 2007.
- Popkin, S.; Katz, B.; Cunningham, M.; Brown, K.; Gustafson, J.; Turner, M. A decade of HOPE VI: Research findings and policy challenges. Urban Institute and The Brookings Institute; Washington, DC: 2004.
- Reid CK, Liebow E, O'Malley G. Building community during HOPE VI redevelopment: Lessons from a Seattle case study. Human Organization. 2006; 65(2):192–202.
- Rosas SR, Kane M. Quality and rigor of the concept mapping methodology: a pooled study analysis. Evaluation and Program Planning. 2012; 35(2):236–245. [PubMed: 22221889]
- Roux AVD, Mair C. Neighborhoods and health. Biology of Disadvantage: Socioeconomic Status and Health. 2010; 1186:125–145.

Sallis JF, Bowles HR, Bauman A, Ainsworth BE, Bull FC, Craig CL, Bergman P. Neighborhood environments and physical activity among adults in 11 countries. American Journal of Preventive Medicine. 2009; 36(6):484–490. [PubMed: 19460656]

- Sallis JF, Glanz K. The role of built environments in physical activity, eating, and obesity in childhood. Future Child. 2006; 16(1):89–108. [PubMed: 16532660]
- Sallis JF, Glanz K. Physical activity and food environments: Solutions to the obesity epidemic. Milbank Quarterly. 2009; 87(1):123–154. [PubMed: 19298418]
- Sampson RJ, Morenoff JD, Gannon-Rowley T. Assessing "neighborhood effects": Social processes and new directions in research. Annual Review of Sociology. 2002; 28:443–478.
- Sampson RJ, Raudenbush SW, Earls F. Neighborhoods and violent crime: A multilevel study of collective efficacy. Science. 1997; 277(5328):918–924. [PubMed: 9252316]
- Schwartz A, Tajbakhsh K. Mixed-income housing: Unanswered questions. Cityscape. 1997; 3(2):71–92
- Skelton, I.; Selig, C.; Deane, L. Social housing, neighbourhood revitalization and community economic development. Canadian Centre for Policy Alternatives-Manitoba; Winnipeg, Canada: 2006
- Teixeira S, Wallace JM. Data-driven organizing: A community–university partnership to address vacant and abandoned property. Journal of Community Practice. 2013; 21(3):248–262.
- Trochim W, Kane M. Concept mapping: an introduction to structured conceptualization in health care. International Journal for Quality in Health Care. 2005; 17(3):187–191. [PubMed: 15872026]
- Van Kempen R, Bolt G. Social cohesion, social mix, and urban policies in the Netherlands. Journal of Housing and the Built Environment. 2009; 24(4):457–475.
- Williams DR, Collins C. Racial residential segregation: A fundamental cause of racial disparities in health. Public Health Reports. 2001; 116(5):404–416. [PubMed: 12042604]
- Wilson, WJ. The truly disadvantaged. The University of Chicago Press; Chicago: 1987.
- Wilson, WJ. When work disappears: The world of the new urban poor. Knopf; New York, NY: 1996b.
- Zuberi A. Neighborhood poverty and children's exposure to danger: Examining gender differences in impacts of the Moving to Opportunity experiment. Social Science Research. 2012; 41(4):788–801. [PubMed: 23017851]



Cluster	Legend
Layer	Value
1	3.27 to 3.49.
2	3.49 to 3.70

3 3.70 to 3.92 4 3.92 to 4.13

5 4.13 to 4.34

Figure 1.

13-Cluster Solution of Expected Outcomes Related to HOPE VI, with the Number of Statements per Cluster and Cluster Rating

Dulin-Keita et al.

 $\label{eq:Table 1} \mbox{ Table 1}$ Demographics for Community Residents Surrounding HOPE VI (N = 58)

Page 16

Domographic	Moon (SD) or n (%)
-	
` ,	` ′
•	
•	23 (40.4%)
0-11 years	7 (12.3%)
12 years or high school completion	11 (19.3%)
Technical training/some college	21 (36.8%)
College graduate	13 (22.8%)
Post-graduate	3 (5.3%)
Missing	3
Household Income	
< \$5000	13 (22.8%)
\$5,000 - \$10,999	9 (15.8%)
\$11,000 - \$13,999	7 (12.3%)
\$14,000 - \$22,999	9 (15.8%)
\$23, 000 - \$28,999	4 (7.0)
\$29,000- \$37,999	5 (8.8%)
\$38,000	6 (10.5%)
Missing	4
Median Household Income	\$14,000 - \$22,999
Technical training/some college College graduate 13 (22.8%) Post-graduate 3 (5.3%) Missing 3 Household Income < \$5000 13 (22.8%) \$5,000 - \$10,999 9 (15.8%) \$11,000 - \$13,999 7 (12.3%) \$14,000 - \$22,999 9 (15.8%) \$23, 000 - \$28,999 4 (7.0) \$29,000- \$37,999 5 (8.8%) \$38,000 6 (10.5%) Missing 4	
Disabled	12 (21.1%)
Employed	19 (35.2%)
Retired	4 (7.0%)
Unemployed	14 (24.6%)
Student	5 (8.8%)
Missing	4

 Table 2

 Clusters and Example Statements Representing Key Themes within each Cluster

		^a Average Rating
1.	Revitalize community and businesses (average bridging value = 0.34).	
	There should be systems in place to have vital community, not become a breeding ground for crime (e.g. in the beginning the Brickyard was an ideal place for residents.	4.49
	It will revitalize once thriving small business.	4.23
	A lot of deteriorating housing has been torn down.	4.05
2.	Improve public services (average bridging value = 0.56).	
	Hopefully in a positive way, where we will get much needed grocery stores and finer restaurants.	4.33
	Because there will be more people, there will need to be more stores in the community.	4.28
3.	Provide affordable housing (average bridging value = 0.45).	
	Offers people affordable housing.	4.51
	It will help low income families with their housing needs.	4.31
	Integrate multiple levels of socioeconomic status, and then the neighborhood will improve.	4.03
	Drawbacks of HOPE VI (average bridging value = 0.81).	
	Don't want it to be like Central City Metropolitan Gardens or we will be back in the same predicament as before with the Brickyard.	4.15
	If the residents in Tuxedo are separated by income, then there won't be any changes in perception across groups.	3.49
	Income bracket is not fair because some people can't afford to move back	3.49
	There may still be a pool of children for gangs to draw from.	3.46
	Not a youth friendly apartment complex, it appears to be just a place to stay.	2.92
	The facelift may be superficial because it pushes out the people who represent the community.	2.82
5.	Improved aesthetics (average bridging value = 0.30).	
	New homes with better material and paint (the brickyard had lead paint and weather damage.	4.46
	Beautifies the community and raises the standard of living.	4.18
	Reduces urban blight.	4.13
	Dad's may go outside and fix up their own houses because Tuxedo looks so nice.	4.13
6.	Diversity and change (average bridging value $= 0.45$).	
	As long as there is communication, it will create bonding and togetherness where the neighbors can watch out for each other and prevent crime.	4.51
	Mixing incomes has a positive effect on the economy.	4.36
	It will be a good impact because it's about change and many have been waiting on change to occur.	4.36
	The new development can bring back the community to where it was in the 1950's (stronger families, lower crime, and where people know each other).	4.21
	Increase safety (average bridging value = 0.28).	
	Don't have to worry about someone shooting through your door or waiting inside your home to rob you.	4.54
	Physically feel safer, there are less assaults and less drugs.	4.49
	There are a lot less drug dealers now and a lot less crime than before.	4.38
	Feel safe and want to get out exploring sit on their front porches.	4.26
	Improve neighborhood outlook (average bridging value = 0.15).	
	Influence the younger generation to build a newer and safer environment take better care of where they live and see what more could be accomplished.	4.46
	The way the new development is painted evokes beauty.	4.23

Dulin-Keita et al.

^aAverage Ratings There is a more relaxed and serene environment. 4.38 Gives a different presence by travelers who see the new community rather than stacked housing projects. 4.15 **Reduce crime** (average bridging value = 0.47). A lot of crime has stopped with the closing of the project-housing because the people who were committing crimes 4.41 are not here anymore. Crime will be minimized because everyone is talking (it will reduce neighborhood based street fights). 4.18 Now we are able to sleep at night without worry. 4.10 It used to be scary to drive near the project-housing but now it is well-lit and secure. 3.85 $\label{eq:continuous_price} \textbf{Increase neighborhood pride} \ (average \ bridging \ value = 0.11).$ The new Tuxedo increases pride. 4.56 I am proud of the new housing development. 4.46 Give occupants self-esteem, because you see better and feel like you deserve better. 4.46 The aesthetic beauty of the development reduces stress. 4.15 Increase leisure physical activity (average bridging value = 0.32). The new development will be essential in improving the physical activity of my neighborhood. 4.28 It is a good place to exercise because it looks good and is clean. 4.23 It will help strengthen bodies and minds knowing there's a safe place to exercise walkable area with good support 4.18 4.05 Outer perception of the new development and the opening up of the parks will encourage me to walk more and play 4.05 with my kids. **Safe play areas** (average bridging value = 0.40). Safe play areas for children (e. g. no broken glass or syringes at the new park). 4.54 Police should be aware that physical activity is increasing in the neighborhood so that black males jogging won't be 4.36 Tuxedo Terrace is a good community to walk in, before you couldn't pay me to go into the previous project-4.03 Less guarded jogging through the new housing development. 3.85 Generate health promoting resources (average bridging value = 0.42). With the proposed items such as swimming pools, walking tracks and bike trails, people will become more 4.41 Another hospital to keep residents from traveling across town for access. 4.18 Continued growth of the community will increase physical activity, now you can walk to resources. 4.13

Page 18