

BRIEF REPORTS

Developing a Participatory Action Research Analytic Network to Advance a More Inclusive Process to Housing Research

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Community residents have repeatedly organized and identified policy solutions to address rapidly increasing housing pressures within the greater Boston area. However, resident expertise is often dismissed as anecdotal. Since 2015, The Healthy Neighborhoods Research Consortium (HNRC) has used a participatory action research (PAR) approach to articulate research questions, design mixed methods instruments, collect and analyze data, and share findings to meet community-identified research priorities. We argue in favor of research processes that enable resident experiences and expertise to be used in conjunction with quantitative data analysis, and that support real-time action to address the harms of gentrification in their communities. The goals of this brief are to describe the HNRC's process for developing a "PAR Analytic Network" — a program focused on building community residents' power to create new academic partnerships for the purpose of answering their broader systems-level questions. Based on our experience we offer four recommendations: 1) Apply a PAR approach to identify research question(s) of mutual interest; 2) Community control over the academic partner selection process; 3) Academic Partners: Trust the PAR process; and 4) Community Residents: Identify the Silver Linings.

The greater Boston area has the third most expensive housing market in the U.S. (Lavery, 2023). The region's rapid increases in home prices and rents are widening existing social and economic inequalities for racially marginalized populations (Kennedy et al., 2023; Muñoz et al., 2015; Robinson & Steil, 2020). Gentrification — the process of profit accumulation within the real estate market — is a byproduct of racial capitalism (Dantzer, 2021; Rucks-Ahidiana, 2022). In a racially capitalistic society, neighborhoods are assigned a value based on their racial composition. In other words, predominantly white neighborhoods are assessed as more desirable and appraised higher than predominantly Black and Latinx neighborhoods due to the higher racial hierarchical standing of "whiteness" (Howell & Korver-Glenn, 2020; Rucks-Ahidiana, 2022). In turn, a racialized housing market is constructed where neighborhoods are evaluated on whether the capital investments by individuals, real estate developers, financial institutions, and governmental entities will generate a profit and

attract other forms of development and business. Central to this racialized process is the dispossession, displacement, and disempowerment of long-term residents from their neighborhoods and within the decision-making process over their neighborhood's changes (Binet et al., 2021, 2022; Dantzler, 2021).

Community residents and housing advocates continue to organize around combatting the region's housing pressures and identifying policy solutions that could lead to transformative changes in their communities (e.g., resident leadership in decision-making, Community Land Trusts, Greater Boston Anti-Displacement Toolkit) (Chou, 2023; Kennedy et al., 2023; O'Brien et al., 2019). However, resident expertise is often dismissed as anecdotal. There are structural barriers to generating scientific evidence that align with how residents envision their communities, such as: extractive relationships with research institutions; power imbalances in conducting research on topics of high importance to their community; restrictive data access policies; navigating the grant funding process; and, if funded, the administrative burden of managing these funds as stipulated by the sponsor (Arkin & Gianopoulos, 2023; Daepf et al., 2022; Mah, 2017; Wilmsen, 2008). The value of a participatory action research (PAR) approach is it recognizes the plurality of knowledge, brings the lived experiences of "the most systematically, excluded, oppressed, or denied" (Kindon et al., 2010, p. 9) into the research process to highlight the forces affecting their daily lives, and produces results that will lead to action. Although "participatory" approaches have the potential to support quantitative data analyses, existing practices tend to confine community partners to the role as the "end-user" of data products as opposed to leading the direction and outcomes of the research process (Whitman et al., 2018). Having community residents, who are most impacted by the outcomes of a problem, lead the research process grounds the interpretation of findings in the local context and cultivates meaningful findings that enable communities to advance their advocacy and organizing efforts (Torre et al., 2012).

Therefore, we argue that the traditional research power dynamic should be upended, especially in housing research. When residents advance the research process, our lived experiences and expertise help determine how gentrification is defined and measured, inform data needs and uses, and produce findings that will lead to real-time action to address the harms of gentrification.

The objective of this brief is two-fold. First, we describe the process for developing the PAR Analytic Network (PAN), a program focused on building residents' power to create new partnerships with academics for the purpose of answering their broader systems-level questions related to gentrification. Second, we provide key insights learned, including practical and ethical strategies.

Healthy Neighborhoods Study

Since 2015, the Healthy Neighborhoods Study (HNS) has operated under a Healthy Neighborhoods Research Consortium (HNRC), where partners have shared ownership and responsibility for a community-driven research

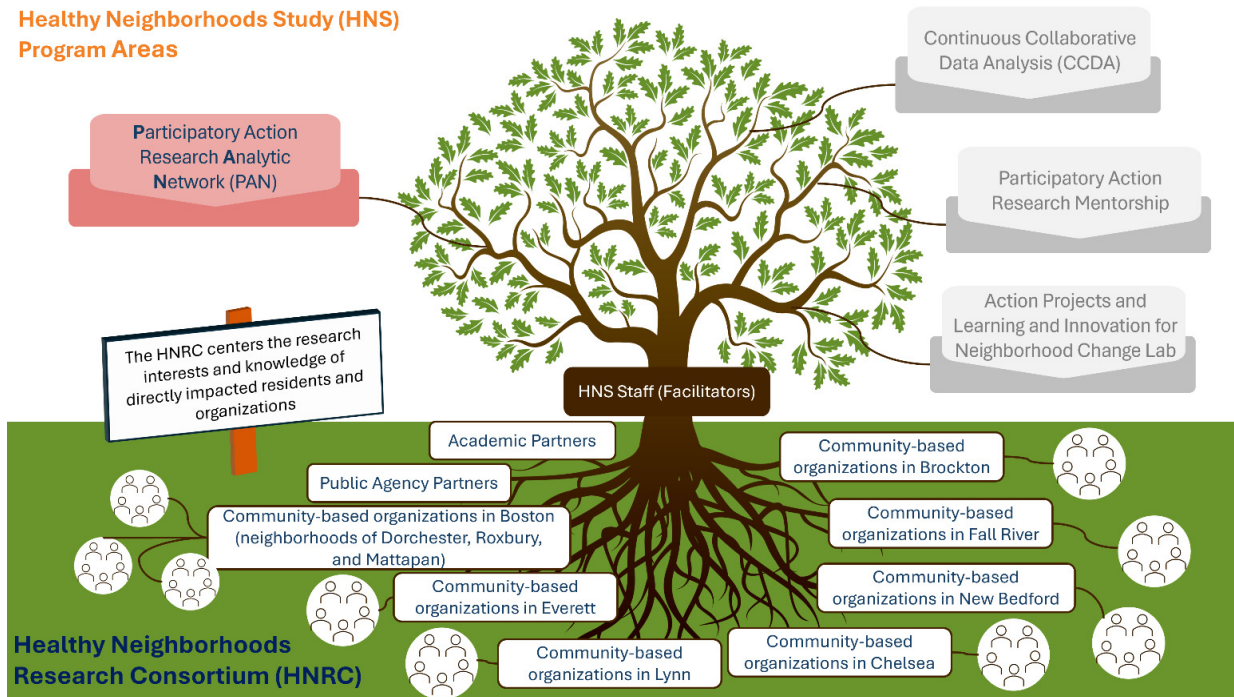


Figure 1. Structure of the Healthy Neighborhoods Research Consortium

agenda (Figure 1). The HNRC consists of co-investigators from nine community-based organizations located across nine low-income, racially/ethnically diverse communities in metropolitan Boston (i.e., the cities of Chelsea, Everett, Lynn, Brockton, Fall River, New Bedford, and the Boston neighborhoods of Roxbury, Dorchester, and Mattapan), 45 Resident Researchers, academic partners, and public agencies who work together to generate research questions, design mixed method instruments, collect and analyze data, and share findings to meet community-identified research priorities. The HNRC’s operational infrastructure ensures that the focus is on building and maintaining relationships. Our core mindset is the co-created knowledge generated in this work is in service of and builds power for the people who will be most directly impacted by development. Therefore, we commonly believe that the experience and local knowledge of each member of the HNRC is valued.

Resident Researchers, who range broadly in age, culture, languages spoken, and history within their communities, are recruited (maximum of five) by a site coordinator at the nine community-based organizations. Annually, Resident Researchers complete 12 hours of training in research ethics, data collection, and linking research to action. The HNS has different program areas with associated working groups of Resident Researchers that assist the HNRC in meeting their community-identified research priorities (e.g., PAR mentorship, Continuous Collaborative Data Analysis). Resident Researchers self-select into a total of two working groups that are of interest to them. All grant agreements with funders (e.g., Robert Wood Johnson Foundation) and subawards with partners compensate co-investigators, specifically Resident Researchers and community-based organizations, for their time. In addition,

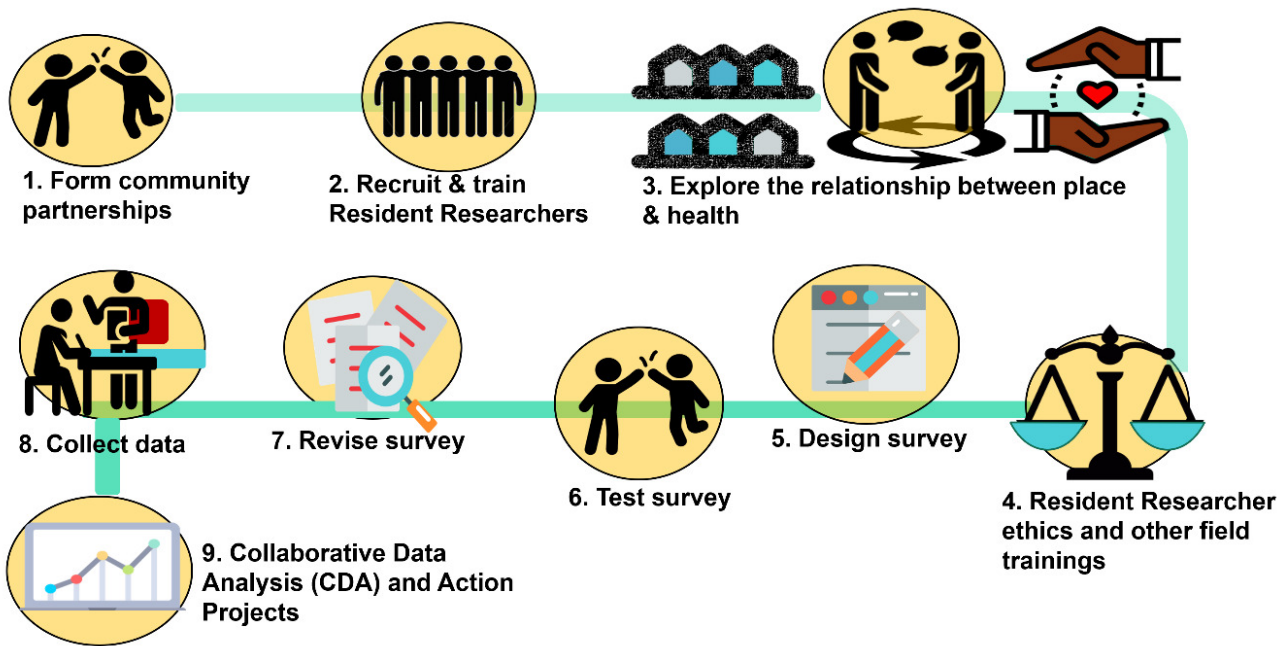


Figure 2. Healthy Neighborhoods Study (HNS) PAR Process

the HNRC supports emerging opportunities for different partners to lead new collaborative projects with other members of the consortium. Further, the operational structure of the HNRC prevents one organization from making budgetary decisions on behalf of the entire HNRC without the consent of the other co-investigators.

The HNS PAR process (Figure 2) involves: 1) Building partnerships with community-based organizations in each of the nine study neighborhoods; 2) Conducting collaborative workshops to set our shared research agenda, generate research questions, and design mixed method instruments; 3) Developing sampling plans for data collection; 4) Analyzing data with academic team members, but Resident Researchers make key decisions how the results are interpreted; and 5) Resident Researchers apply these findings to meet local priorities and advance advocacy efforts for equitable urban redevelopment without displacement (Arcaya et al., 2018; Binet et al., 2019). After six years of successful data collection and action on social and built environment health risks, the HNRC became increasingly interested in leveraging the HNS participatory processes to answer systems-level research questions. Therefore, in 2021, we developed a new program area called the PAR Analytic Network (PAN), where the HNRC invested in new academic partnerships to answer research questions that the HNS survey and interview data alone could not answer. The goals of PAN were to: 1) Collaborate with research teams who supported a PAR approach to research, where they would test resident-derived hypotheses and insights about the relationship between neighborhood change processes and the social determinants of health and wellbeing using secondary and administrative data; and 2) Only partner with research teams that Resident Researchers saw as having a long-term relationship with the HNRC.

PAR Analytic Network

The PAN working group consisted of eight Resident Researchers who elected to join the team that would eventually build PAN as well as three HNS staff (two academics and a practitioner). The PAN working group determined what these academic partnerships should look like and how to prioritize the types of questions new academic partners would be expected to answer. The role of HNS staff included: 1) Soliciting proposals from researchers at universities who had an interest in community-engaged research and access to the data needed to answer the HNRC's research question: "What are the systems of benefit and harm influencing development in HNS neighborhoods, and how do they work?"; 2) Providing general guidance (e.g., presentation templates) and expectations of the interview process to the research teams; and 3) Facilitating logistical and communication support through the academic partner selection process. Resident Researchers interviewed potential research teams to determine whether the proposed project will answer a part or all of their research question and whether the academic partner was interested in building and maintaining a long-term relationship with the HNRC.

Potential academic partners were required to give a 20-minute presentation to the PAN working group via Zoom detailing the components of the research question their study will answer, proposed analyses in lay terms, anticipated results, study limitations, and what their findings will enable community partners to say or do. The PAN working group met after each proposal presentation. If the Resident Researchers had difficulty in understanding the research team's proposal, the potential academic partner was asked to either submit additional documentation and/or revise their presentation to a more lay format for Resident Researchers to review asynchronously. Once Resident Researchers felt they had a better understanding of what each research team was proposing, they met to reflect on: 1) How well each proposed project fit the intent of the HNRC's research question; and 2) Whether the proposed project was well-defined enough to invest their resources into the partnership.

The PAN working group funded a total of three academic partners; each research team was given \$20,000 to complete the project within 8–10 months. HNS staff had weekly research meetings with the new academic partners. In these meetings, the research team provided progress updates and received research support and feedback, as needed, from HNS staff. Midway through their projects, the academic partners presented their preliminary findings, data visualizations, and/or tool mock-ups at an in-person, four-hour Collaborative Data Analysis (CDA) workshop with members of the HNRC (e.g., a mix of Resident Researchers, staff from community-based organizations, and public agency partners).

The CDA workshop consisted of: 1) A full-group introduction to set the context; 2) Three consecutive 45-minute sessions where HNRC members rotated between the research teams to provide feedback on each project; 3)

A concluding full-group activity led by the HNS staff; and 4) A social hour where the research teams were able to engage with HNRC members over a meal. Each research team was assigned an HNS staff member to contribute suggestions on how to engage with their audience and provide support during their session, as well as documentarians to record feedback during presentations. Academic partners used the information gathered during the CDA to produce their final deliverables. In the end, two of the three academic partners were either unable to answer their originally proposed part of the research question or did not complete the web-based interface that would have allowed residents to query their analysis within the given timeframe.

For example, one academic partner had data limitations that resulted from the degree of missingness within their proposed dataset. Consequently, they were not able to fully answer all of the questions they originally asked; however, they were able to provide general context on the real estate market within the HNS neighborhoods. For the second academic partner, the data cleaning and coding required to answer the HNRC's research questions were more time-intensive than originally planned (i.e., had to learn a new programming language for textual data). The research team was able to complete the analysis as originally planned, but not the web-based interface during the given timeframe. The PAN working group is collaborating with this partner to continue advancing the work.

Reflections and Recommendations

Members of the PAN working group that were interested in publishing our findings (n=4) and HNS staff (n=3) met twice to reflect on our process of developing PAN. We discussed what aspects of this research process worked well and what we would recommend to residents, community-based organizations, academics, governmental entities, coalitions, and consortiums who are interested in using a similar approach to engage in new research partnerships. Overall, we found that some aspects of the process worked well while others needed further refinement. Below we share four recommendations based on key insights learned from the perspective of the PAN working group and HNS staff:

Recommendation 1: Apply a PAR approach to identify research question(s) of mutual interest

There were three notable elements of the HNS PAR process that contributed to our success in developing PAN. First, the HNRC **defined** and **developed** the research question for the PAN program that was relevant and helpful for all nine communities. This is important because we initially determined our collective knowledge gap and subsequently designed a research question that builds upon earlier HNS PAR cycles.

For example, members of the HNRC previously wanted to understand the mobility patterns of residents within HNS communities. Therefore, we partnered with the Federal Reserve Bank of Boston to use Equifax Credit

score data to develop a Massachusetts Migration Mapper (Daepf et al., 2022). The findings from this research partnership validated our understanding of residential mobility patterns. However, it didn't provide information on what triggered these geographic patterning of moves within HNS housing markets. Second, we **grounded** all key decision-making in the experiences and interests of Resident Researchers. Finally, the decision-making on the PAN research agenda was **collaboratively** developed by the Resident Researchers. The role of HNS staff was to listen to their ideas and priorities and actualize them within the structure of PAN.

Recommendation 2: Community control over the academic partner selection process

Resident Researchers should be setting the metrics of success for PAN. Specifically, they should be developing the interview questions, conducting the interviews, and scoring the proposed projects from potential academic partners based on the following:

- Will the research team's proposal will answer part or all of their research question(s)?
- How well did the proposed project fit the intent of the HNRC's research question(s)?
- Did the research team's preliminary findings demonstrate their capability to complete their proposed research aims?
- How will the research team handle new data limitations? Or unforeseen changes to their proposed timelines?
- Is this research team interested in building and maintaining a long-term relationship?

We scored projects using a red, yellow, and green light rating scale (The Healthy Neighborhoods Study, 2020). Resident Researchers would hold up a "red light" card in response to a question if they disagreed due to major concerns (e.g., project feasibility, probability of failure in acquiring the necessary local data), a "yellow light" card if they are unsure and have questions, and a "green light" if they agree and would like to continue. If there is any confusion or disagreement within the group, we use this as an opportunity to discuss and work through the concerns.

In addition, Resident Researchers should work together to develop a game plan on the end products that will be most useful. This plan then is used to provide guidance to research teams when they are "stuck" in the data analysis/meaning-making phase. For instance, have academic partners provide their agreed-upon deliverables in segments. Therefore, if a research team has unforeseen data limitations, HNS staff are able to solicit proposals from other researchers who have access to different datasets and/or analytical approaches to ensure that the remaining aspects of the HNRC's question(s)

are answered. Likewise, invite non-HNRC members (e.g., city officials, representatives from different governmental entities, community members) to provide pertinent information about their community (e.g., potential barriers to data acquisition, political context) that would be helpful to the research team.

Recommendation 3: Academic Partners: Trust the PAR process

For all the research teams, this was their first time engaging in a project where residents are leading the entire research process. Consequently, this was a new endeavor that required a different approach from their norm, such as deferring to Resident Researchers on key decision-making, especially when their project is not going according to plan (e.g., prioritizing the research outcomes that are of high interest to the HNRC, such as identifying the different types of players engaging in the HNS real estate market and the strategies used by these players). It required our academic partners to trust Resident Researchers' expertise as they pivoted to an alternative plan that supported the HNRC's organizing and action goals. In hindsight, something we think would have helped our academic partners is having them visit our communities prior to initiating their project to learn about our specific context — the history and culture, as well as how development patterns are occurring in our communities. During their visit, Resident Researchers can share their thoughts and experiences over a meal to initiate the **trust**-building process as they move forward in this new partnership.

Following the in-person CDA workshop, we held a debrief and reflection activity during one of our weekly research meetings. Academic partners, who are also co-authors on this brief, were asked to share their reactions to the CDA workshop by answering the following questions: 1) What surprised them most?; 2) What was most satisfying?; 3) What was their biggest challenge?; and 4) How did the community participation shape their project? Below are some of the responses:

- *“Blown away on the length of engagement by residents and would like to repeat this work locally.”*
- *“Folks know their stuff! They were fact checking our findings with their own knowledge.”*
- *“They were ready with specific examples and questions... they met our expectations.”*
- *“Residents sharing their story after hearing our presentation helped us figure out our final deliverable.”*
- *“Biggest challenge: Remembering that things need to be interpretable and shared succinctly.”*

- *“Would like the final deliverable to be useful, but also acknowledge that the tool will miss things and can’t identify all of the links residents know are happening.”*

Recommendation 4: Community Residents: Identify the Silver Linings

It is important for residents to create their own roadmap that has built-in triggers on when to prompt academic partners about whether they should continue a particular research trajectory or change course. If Resident Researchers are deeply integrated in the research process, they can ground their academic partners’ assumptions, measures, and findings based on activities that are occurring in real-time.

Even with all these safeguards in place, there is still the possibility that an academic partner may not be able to fulfill every aim originally proposed. Although this was disappointing, Resident Researchers were able to use these high-level findings to determine what aspects were applicable to their neighborhood by conducting independent research using archival data (e.g., newspaper articles, social media platforms). Based on the insights Residents Researchers learned through this research process, they were able to engage with other members of their broader community on the same topic. In addition, the tools and findings produced through PAN were used as inputs in the development of other advocacy tools that we are currently in the process of piloting locally and regionally, such as the Affordability Report Card. This scorecard was designed to be used by residents, community organizations, and community developers to assess and maximize the alignment of proposed and existing housing developments with a community standard for affordability and resilience.

Conclusion

Our work contributes to a broader literature focused on making the research process more inclusive and highlights the need for urban redevelopment that aligns with the community’s standard for housing affordability and resilience (Binet et al., 2022; Costanza-Chock, 2020; Daepf et al., 2022; D’Ignazio & Klein, 2020; S. Williams, 2020). Achieving health equity in the context of gentrification will require deeply understanding the community’s needs as well as designing solutions and strategies that build community power over neighborhood changes (Binet et al., 2022; Innes & Booher, 2010; P. C. Williams et al., 2022). By leveraging the lessons learned here, and prioritizing community-based research, we believe this change is possible.

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Declaration of Interest Statement

There are no conflicts of interest.

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