# Organizing Community-based Events in Participatory Action Research: Lessons Learned from a Photovoice Exhibition

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#### **ABSTRACT**

Participatory action research (PAR) approaches center community members' lived experiences and can spur positive change around pressing challenges faced by communities. Even though PAR and similar approaches have been increasingly adopted in HCI research that focuses on social justice and community empowerment, publicfacing events that are based on this research and center community members' voices are less common. This case study sheds light on how to initiate and organize events that build on existing PAR efforts, and what practical challenges might exist in this process. Building on a photovoice research project, we—a collaborative team of university researchers and staff members of a community organization in Eastside Detroit-co-organized a community-based publicfacing exhibition that featured community members' photographic narratives of personal and communal safety and surveillance. In this case study, we reflect on the challenges we experienced in planning and holding the exhibition. We contribute a set of practical guidelines to help researchers facilitate community-based events when conducting participatory action research in HCI.

#### **CCS CONCEPTS**

• Human-centered computing  $\rightarrow$  Field studies.

### **KEYWORDS**

participatory action research; community-based participatory research; photovoice; community event; exhibition; surveillance

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### 1 INTRODUCTION

Participatory action research (PAR) seeks to identify practical solutions to address communities' pressing concerns and challenges [3]. Central to PAR is its epistemological and practical groundings in the lived experiences and situated knowledge of individuals and communities, its philosophy of partnership, and its commitment to social justice [23]. As with similar approaches, such as community-based participatory research, PAR blurs the traditional boundaries between researchers and research participants. These approaches reposition the hierarchical researcher-subject relations as a collaborative partnership between researchers and community partners, empowering individuals and communities to shape decision-making processes and initiate collective actions in response to social issues [3, 14, 19]. PAR has been adopted by researchers in Human-Computer Interaction (HCI) and neighboring fields to design and evaluate sociotechnical systems in the context of alleviating poverty and economic disadvantages [5, 16], to address health inequity faced by underserved populations [12, 13], to facilitate civic engagement [1], to combat violence against sex workers [25], and more.

It is clear that PAR can serve as a valuable way to ground research in community perspectives and lived experiences. At the same time, it is critical that such approaches are beneficial to the communities in which they are embedded through initiating community collective actions, mobilizing community resources, and impacting broader stakeholders and policy-makers [3, 19]. One way to foster community engagement and catalyze social change is to organize community-based public-facing events based on PAR activities. These events can serve as a starting point for the broader community to come together to discuss the research findings, as well as action plans to address the identified issues [9, 19]. Such events can also serve as a shared space that brings people from different backgrounds and positions of power together [22]. In this light, organizing community-based events aligns with HCI scholarship's ongoing call for elevating the voices of underserved communities when drawing attention to sociotechnical harms and

designing solutions that center community needs [4, 8, 13]. However, limited information is available, especially in HCI, on the practical challenges involved in organizing such community-based events and how to successfully initiate and organize them.

In this case study, we unpack the benefits and challenges of organizing a community-based public-facing event that was based on a research project using photovoice. Photovoice is a PAR method that is relatively new to HCI [21]. In photovoice projects, community members document their everyday practices and reflect on their strengths and concerns through photo-taking and visual storytelling [15]. Through the sharing of photos and stories, the main goal of photovoice projects is to utilize visual means to facilitate active dialogue and community change [27]. We-a collaborative team of university researchers and organizers at a communitybased organization in Eastside Detroit-set up a photovoice project with 11 participants to unpack community members' practices of navigating personal and community safety, including the influence of ever-expanding surveillance infrastructure in Detroit on community members' navigation of safety. Given that the photovoice project unveiled community members' photographic narratives that speak to the safety and surveillance issues concerning the entire community and the city of Detroit at large, we and our participants saw a valuable opportunity to organize a community-based photo exhibition to foster community dialog around these important issues [17]. This case study documents the practical insights and lessons learned from planning, organizing, and executing this photovoice exhibition.

This case study makes empirical and methodological contributions to HCI research that adopts PAR approaches: (1) we show how we translated a photovoice research project into a community-based event and the benefits of doing so, (2) we discuss the challenges we faced in setting up such an event, and (3) we provide a set of practical guidelines for research teams seeking to organize similar events based on PAR and similar approaches. Through this case study, we hope to help develop the practice of organizing community-based events in HCI, since these events offer a unique space to foreground the often-underserved communities' sociotechnical needs and practices that we seek to serve through our research.

# 2 THE PHOTOVOICE EXHIBITION: CONTEXT AND SUMMARY

We begin by describing the broader context in which the exhibition was situated—the photovoice research project. Then, we describe the exhibition planning and activities.

## 2.1 Research Study Context

The photovoice research project aimed to understand how public safety and the expanding surveillance infrastructure implemented by the Detroit city government and police department were perceived by residents of Eastside Detroit. The project was conducted from May to June 2022 and involved a partnership between university researchers and staff members at a community-based organization in the Eastside. We recruited 11 Eastside residents from the community to take part in a photovoice project where they took

photographs related to safety and surveillance in their community and discussed their perceptions and concerns. The research project involved several activities. First, we held an onboarding workshop to provide participants with an overview of the project and invite their input on community issues, followed by an educational workshop that provided a primer on photo-taking. Then, participants had three weeks to take photos based on various prompts we provided. During this time, we provided them with multiple forms of support, including in-person and phone check-ins. At the end of this period, we conducted one-on-one interviews with participants to learn about their photographs and their experience with the photovoice project, as well as a workshop where all participants could share their photos and reflect on them as a group.

# 2.2 Summary of the Exhibition

The planning of the exhibition took a total of three months from June to August 2022. The community and research team met weekly over zoom during this period. We iteratively discussed the logistics of the event (including date, time, venue of the event, catering services, budget and funding, IRB ethics review), overarching goals and guiding questions of the event, exhibition schedule, exhibition floor plan and photographic display design, interactive activities to engage with attendees, the promotion and advertisement of the event, as well as the aesthetics and decoration of the exhibition space. In this process, we also maintained ongoing communication with photovoice participants to understand their visions and feedback on these aforementioned items. We especially asked for participants' input on how they would like to present their photographic stories, what they envision seeing during the event, and what we might have overlooked in the planning process.

The in-person exhibition was held at the community organization's community center on August 27, 2022. The exhibition included attendees from various groups, such as members of the community, including families and friends of the participants, as well as community organizers, academics, and media persons. The event was titled "Every Photo Has a Story: An Eastside Story on Safety and Surveillance from Behind the Lens", and was promoted as an opportunity to engage with the community on safety and surveillance issues. The event served as a social mixer and included catering service from a local small business (See Figure 2a), and comprised a few main activities, as follows.

The exhibition was centered around displaying the photographs taken and selected by community member participants during the photovoice project. Participants' photos were printed in size 8"x10" and displayed on stands around the exhibition space along with captions from the participants (See Figures 1). Participants also attended to answer questions from attendees and talk about their photographs. These photographs served as a starting point for attendees to reflect on their own experiences with community safety and surveillance and to participate in the interactive activities described next.

We included a few interactive activities as part of the exhibition. First, we provided several *sticky note boards* with the original photovoice prompts (i.e., "What does safety in your community mean to you?", "How do you feel about surveillance in your community?",

 $<sup>^1</sup>$ As co-owners of the research process, members of both the university and community teams are coauthors on research papers including this case study.

 $<sup>^2 \</sup>mbox{All}$  participants collectively brain stormed and voted for this title.



Figure 1: a) Left: View of the exhibition space; b) Right: Two exhibition attendees viewing a photograph display. Photo by authors.

and "What can we as a community do to be safer?"). Attendees could weigh in on these topics by writing or sketching responses on sticky notes and placing them on the poster boards (See Figure 2c). This allowed for an open and creative space for attendees to express their feelings, provide feedback, and respond to other attendees' notes. Our goal behind the sticky note boards was to broaden participation in the project by including the perspectives of community members who were not able to be part of the original photovoice project.

We also set up a *Polaroid instant camera stand*, where attendees could take photos during the event, print them out instantly, and take them home (See Figure 2b). We encouraged attendees to take photos of people, things, artifacts, and moments that they found meaningful during the event. A community member/photovoice participant also added an interactive activity that we had not foreseen—a *vintage camera display* (See Figure 2d). By bringing in her personal vintage camera collection, this participant also spurred conversations among attendees about individual and shared memories associated with the different cameras.

Finally, the exhibition also featured a looping video that provided a short overview of the project and included brief interviews with participants. The video provided attendees with the opportunity to learn about the project in a separate space during the exhibition. In the future, this video can also be published online as an enduring document of the event.

# 3 THE EXHIBITION AS A SHARED SPACE FOR COMMUNITY PARTICIPATION AND ENGAGEMENT

The exhibition functioned as a shared space where the community could come together and discuss issues of safety and surveillance. By providing a physical space as well as a dedicated event aimed at fostering these conversations, people were not only able to understand how others feel about safety and surveillance issues faced by the community but also to participate and share their own insights.

Through a short survey of attendees, we learned that people overall enjoyed the exhibition and that they had several takeaways from the event. For some, the exhibition served as a way to learn "that many people share the same safety concerns as I do," such as the public lighting and housing infrastructures. One attendee said that the exhibition showed them that "people are concerned about their neighborhood", and that this, in turn, influenced them "to be more concern[ed about] what [is] going on in my community."

Photographs featuring community members' varied viewpoints and concerns also influenced how some attendees saw their communities. Learning about other community members' feelings and stories offered a space for them to see safety and surveillance from different situated perspectives. Some found that the photographic stories influenced their perceptions of safety and awareness of the ubiquitous surveillance cameras; for example, one attendee said, "It made me more aware of my surroundings [...] and I've never realized there are so many cameras in the city." For others, the photographs represented something broader: "That we have wonderful citizens [who] want the best for their neighborhood."

Our photovoice participants were also enthusiastic about the prospect of their photographs and stories being featured in a publicfacing exhibition, and weighed in during the planning process. After the exhibition, participants were vocal in their appreciation for the space to share their photos and stories with their community. One participant told us that "This exhibition was real good, it was something new! It allowed the community to notice other people's areas and neighborhoods and what they need for safety. Everyone's photos were perfect. It really lets people know the importance of noticing what's going on in the community and looking out for one another." She continued, "We [the participants] were talking about keeping our photos at the Stoudamire [the community organization space] so that people can keep viewing them and learning about our stories." Participants also discussed among themselves and with the research team about the opportunity to host more photo exhibitions at their own community gardens and spaces, extend the critical discussion around community safety and surveillance with their neighbors and



Figure 2: a) Top Left: Catering services from a local small business; b) Top Right: Attendees took photos through instant cameras and shared photos with one another; c) Bottom Left: Attendees participated in sticky notes board interactive activities; d) Bottom Right: A Photovoice participant volunteered to bring in her personal vintage camera collection. Photo by authors.

other community members, and continue the photovoice project into the future.

Overall, community members and participants' positive perceptions of the exhibition demonstrate that using photographs and interactive activities in a dedicated event-based format can serve as a valuable way of initiating and fostering community dialogues.

# 4 CHALLENGES IN PLANNING AND EXECUTING THE EXHIBITION

In this section, we identify several salient practical challenges we faced in planning and executing the exhibition event. We reflect on what we did well and how we could have improved the process.

# 4.1 Navigating bureaucratic processes (such as IRB training) as a community-academic research team

Some challenges stemmed from the complexities of navigating common bureaucratic processes involved in doing academic research, given that our research team was comprised of both university and community teams. This was especially the case for receiving approval from the university's Institution Review Board (IRB), which was not straightforward for this project. Past literature has well documented the paradigmatic misalignment between existing ethics review processes and community-based/participatory approaches [2, 11, 20]. While ethics reviews serve a necessary and important goal in the research process, they can paradoxically hinder innovative methods that enable community-based participation [2, 10]. In our case, we navigated multiple rounds of back-and-forth changes throughout the ethics review process, leading to unexpected and additional work for both the community and university teams and a longer period until the planned research activities could begin.

In particular, the initial IRB review deemed that the community team was "engaged" in the project because they would be involved in participant recruitment and thus have access to participants' identifiable information and face potential ethics conflicts. However, the community team already had an ongoing engagement with community members (i.e., potential participants in the study) outside of this current project. Making this engagement official for the research project required the community team to work with the university to initiate and sign an engagement contract. All community team members also had to complete IRB ethics training. This process added uncertainties and extra labor to the research team in three major ways. First, the process extended the typical IRB timeline and delayed the start of the project, as the university had to initiate the contract, and then the community team had to review and complete the contract and the mandatory ethics training. Second, to complete the required IRB training, community team members had to create university accounts and navigate the IRB training, which was an unfamiliar process that was outside of their daily work. To simplify this process, the university team held a series of hands-on workshops to complete the ethics training with the community team members. While the community team had to take on additional labor, our approach effectively reduced some burdens and uncertainties. These workshops also allowed for useful discussions regarding participant consent processes, participation, and data protection among the research team, which are vital to community-based research but can be overlooked in such collaborations. Third, the university team had to schedule multiple meetings with the IRB reviewers to explain the rationale behind hosting an exhibition open to community members and people who were not part of the original photovoice study in response to the ethics concerns on participant anonymity. We emphasized to the IRB reviewers that the community and university teams considered this event an educational opportunity for the community and that participants wanted to claim ownership of their own knowledge and intellectual products (i.e., their photos, stories, and narratives). Working in close conjunction with IRB reviewers throughout this process allowed us to have an informed conversation about participatory research approaches, which can sometimes appear to conflict with mainstream research norms.

## 4.2 Negotiating budget, funding, and payments

Our photovoice project was funded by the National Science Foundation, and the exhibition event was not included in the original budget plan. This means we did not have sufficient funding for the additional work involved in planning and executing the exhibition. As such, the university team worked with the finance staff at the university to discuss alternative funding sources and mobilized resources to ensure that we had enough funding to host the event. The uncertainty surrounding funding complicated communication between the university team and the community team as each team was not sure how much budget was available, and in turn, what kinds of resources and services (e.g., catering and photo displays) we would reasonably be able to include within our budget.

Another challenge with problematic consequences stemmed from delayed payment. During this project, one community team member left the community organization and started his own free-lance business. He agreed to continue to support this project as a freelancer due to his professional experiences in professional photography and videography. However, the university team did not factor in this change in employment, which required more paperwork to establish him as a new payee. We started the payment process soon after the event, but due to the complexities involved,

it took over a month for him to receive payment. Such delays in payments can harm the trust that was built up between the university and community teams, and that is critical to successful collaboration.

# 4.3 Deciding on the presentation details of the exhibition

We faced two challenges from conflicting expectations between the community and university teams around the photo displays. First, we were constrained by the resolutions of the photos participants had taken during the study—during the study, these were transmitted to the research team through text messages and thus were too compressed to be printed at large sizes (i.e., 5"x7" and larger). However, the community team expected these photos to be much larger than was feasible (i.e., 16"x24"). This mismatch in expectations had arisen from unclear communication about the details of the displays.

This lapse in thorough communication also led to our second challenge around photograph displays—during set up for the exhibition, we found that members of the research team had different expectations about how the displays should look (e.g., how to organize photos on the display board, whether a frame is needed for the photo display, etc.). While we had discussed the general aesthetics in meetings beforehand, this still resulted in last-minute work on the day before the exhibition to find a solution that would be acceptable to the entire team (see Figure 3b for an example of the final photo displays). While challenging, we also see this as a part of the process of doing an event for the first time with a team that comprises members with many different viewpoints, expectations, and norms.

# 4.4 Promoting the event and engaging with the broader community

Both the community team and the university team relied on our respective networks to promote the event to different stakeholders. For example, the community team called and emailed individual community members, posted the event information on social media and email lists, and distributed flyers at the community center. The university team reached out to organizers at community organizations and coalitions that focus on safety and surveillance issues in Detroit and promoted the event information through university newsletters.

Even though we had a good attendee turnout on the day of the exhibition, we believe the event promotion could be further improved in three ways. First, while we intended to engage the broader community in the discussion of safety and surveillance, most of our attendees were middle-aged and senior community members, and most were women; these demographics match the participants in our photovoice study. To engage with men and younger generations, we believe it is critical to have early targeted promotion through our community organizations' youth department and other partnered community organizations that work closely with men and younger community members. Second, the community organization held two other events on the same day. We later found out that a couple of other community organizations nearby were having events during the same timeframe. While such overlap is



Figure 3: a) Left: All Photovoice participants received a certificate that recognizes their contribution; b) Right: An example of a photo display in the exhibition. Photo by authors.

not unusual, it nonetheless split both community and staff members regarding availability and support. Going forward, we should consider strengthening communication both within the organization and across organizations to avoid conflicting schedules, collectively strategize ways with other partnered organizations to promote multiple events at the same time, and mobilize community members and resources among different events when necessary. Finally, some participants and attendees reported transportation challenges in getting to the event, which might have affected the turnout. While the community team usually offers transportation support when hosting community events, we could not find a driver for our exhibition because staff members were split across multiple events, as noted earlier. Past HCI literature has shown us that underserved communities face systematic transportation challenges [6]. Providing tangible transportation support and factoring such support into event budgeting is critical in making space for community members and stakeholders with different backgrounds, especially those whose voices are overlooked and marginalized.

# 5 GUIDELINES FOR CO-ORGANIZING COMMUNITY-BASED EVENTS

In this section, we summarize six key practical guidelines to help future researchers prepare for, navigate, and sustain efforts in community-based participatory action research. Note that these guidelines are by no means complete or exhaustive, but we hope they can serve as a starting point for HCI researchers to think through facilitating community actions and advocating for community empowerment in their work.

• Engage with community members from the beginning to the end to center their voices and vision.

When conducting community-based participatory action research, it is critical to engage community members and participants in the

process of planning and execution [13, 14]. Central to communitybased events like our exhibition should be the voices, vision, and narratives of the community members. Instead of prioritizing the roles and perspectives of the community organization staff members and the university researchers, community members should be the focus of this effort. As such, the research team should closely work with community members and participants in all steps of the planning process, such as seeking their input on the title and theme of the event, the overarching goals and detailed activities in the event, and the presentation style of the photos and other deliverables. In addition, we should also emphasize the community's ownership of such events and make space for them to contribute. For example, one of the unplanned highlights of our event was one participant who voluntarily showcased her personal collection of vintage cameras (see Figure 2d). At the same time, we must recognize the ongoing efforts that community members contribute and the value of convening. The value of this type of input can sometimes span beyond monetary. One way we chose to recognize the value of such efforts was to design, prepare, and award certificates for their contributions (see Figure

Be open to a diversity of situated knowledge, identify collective capacity, and foster diverse contributions.

Each member of the research team brings unique situated expertise to the team. Yet, some of the expertise might be overlooked in the orthodox "research" setting but are critical to the success of participatory action research. In our case, Kisha's experience in event planning played a major role in designing the spatial layout of the event, negotiating with catering services, decorating the space, and more. Jaye's professional videography services contributed to creating an introductory video featuring participants'

narratives, which allowed attendees to learn more about participants and their stories. To facilitate such events, researchers must be open to different forms of situated knowledge and recognize how lived experiences can contribute to the project in different ways. We fostered such contributions by engaging the whole team in discussions about each member's skillsets and interests—thus identifying the team's collective capacity—and then provided members with opportunities to bring their expertise to bear on the project in varying ways. And importantly, recognizing and fostering collective capacity requires mutual trust and solidarity among all participants in a partnership, which often stems from the emotional and informal interactions beyond formal working relationships [12, 18]. This requires all team members to focus on the process in which the actions come into being, and foreground reflexivity and mutual respect in this process [7].

## Identify bureaucratic challenges and develop solutions early on.

Aligning with past HCI research that reminds us of the bureaucratic challenges faced by the community team in communitybased research [26], we have shown that research involving university-community partnerships may bring about new and unforeseen challenges and engender additional labor (as discussed in Sections 4.1 and 4.2). Indeed the power structure in which research projects are organized could perpetuate ongoing exploitation and knowledge extraction of the community [24]. To mitigate these challenges, it is vital at the outset of the research project to ask several key questions that must be answered for the partnership to be successful—for example, how will the university team be held accountable, how is the decision-making process transparent to the community, and how to avoid potential unintended harms brought about by the foreseeable and unforeseeable bureaucratic challenges. Some potential steps involve communicating with various institutional entities, including the finance and human resource teams, to understand the ins and outs of the bureaucratic processes involved in setting up and executing the project. At the same time, as we saw, unforeseen challenges may still occur despite planning. In these cases, researchers must be ready to adapt and maintain transparent and timely communication with the community team, so that no party is negatively impacted.

#### Reduce the burden of labor placed on community organizers.

In addition to identifying and mitigating bureaucratic challenges, as discussed above, it is also vital to reduce the burden of labor placed on community organizers. This may require open communication to assess the needs and resources of the community organizers and areas in which they would like support. For example, in this study, providing hands-on workshops to help the community team navigate the IRB training reduced their labor.

## Utilize multiple networks to promote the event across a broad set of stakeholders.

As discussed in section 4.4, promoting community-based events in participatory action research needs to consider practical constraints on community availability and resources. Researchers should work closely with the community team and relevant community organizations early on to avoid schedule conflicts and strategize ways to collectively promote events. The research team

must also be attuned to the needs of diverse community members and work to reduce constraints on their participation, such as by making the event accessible and providing transportation to resource-constrained members. In addition, the research team should utilize community resources and networks to draw in community members that are harder to reach—in our case, younger generations and men. Retrospectively, we could have been more intentional in including these voices in framing the objectives of our event (that featured middle-aged and senior women), such as by explaining why youth's voices and viewpoints are important in the discussion of safety and surveillance in the community, why senior participants would appreciate hearing from future generations, and why different viewpoints are important for the community.

Furthermore, promoting events that are based on participatory action research can also raise the visibility of the community organization's services and programs. In our case, a local community-based media outlet reached out to the community team after seeing the community organization's social media posts. The reporters interviewed the team and some participants to feature resident narratives of safety and surveillance in the city, the community team's ongoing support in community resilience, and the community-university partnership. Publicity opportunities like this can extend the reach of community actions to different stakeholders, including local policymakers and funders, and could be beneficial for informing policy changes and receiving funding to sustain community programming.

 Identify opportunities for sustaining engagement and impact in the future. Importantly, community-based events like this exhibition should not be seen as the end of a communityuniversity partnership; instead, such events are part of broader community action and should be connected with further reflection and programming. That is, we must recognize that communityuniversity partnerships are ongoing efforts. Through an infrastructural lens, we can consider such partnerships as both facilitating engagement and practical changes with the community as well as mobilizing resources both into and within the community [5]. Maintaining and sustaining this infrastructure requires all participants in the partnership, especially researchers, to engage in the ongoing reflection and practice of how to make sure the findings and knowledge generated from the research are grounded in community needs and learning. At the time of writing, the community and university teams are still exploring ways to connect the findings from the photovoice study to the community organization's existing programs, organizing community education events to further critical dialogues around safety and surveillance technologies, supporting community grant applications, and reaching out to local policy-makers to raise the narratives and situated needs of the community.

#### **6 CONCLUDING REMARKS**

With the growing interest in HCI that focuses on social justice, researchers and practitioners increasingly enter projects with the intent of disrupting uneven power dynamics in technology design and use and knowledge production broadly. PAR and community-based events offer unique spaces for community members and

stakeholders to engage in dialogues around pressing concerns faced by communities, disseminate community narratives and stories, develop shared understandings of these concerns, and initiate collective actions to address these challenges. Yet engaging in PAR and organizing community-based events based on such research can inevitably involve the navigation and negotiation of varied practical challenges. As shown in this case study, researchers, community staff members, participants, and funders are all involved in this negotiation process. In the case of our photo exhibition, while the shared good and benefits to the community undergirded our project, the planning and execution process was impacted by budgetary, structural, and other practical constraints common in academia and community organizing. Despite these challenges, the event was a success overall, and we hope that by sharing our lessons learned, we will create pathways for future HCI researchers, practitioners, and designers to have equitable and successful community engagements.

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### REFERENCES

- [1] Mara Balestrini, Yvonne Rogers, Carolyn Hassan, Javi Creus, Martha King, and Paul Marshall. 2017. A city in common: a framework to orchestrate large-scale citizen engagement around urban issues. In Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems. 2282–2294.
- [2] Susan Boser. 2006. Ethics and power in community-campus partnerships for research. Action Research 4, 1 (2006), 9–21.
- [3] Hilary Bradbury and Peter Reason. 2003. Action research: An opportunity for revitalizing research purpose and practices. *Qualitative social work* 2, 2 (2003), 155–175.
- [4] Kirsten E Bray, Christina Harrington, Andrea G Parker, N'Deye Diakhate, and Jennifer Roberts. 2022. Radical Futures: Supporting Community-Led Design Engagements through an Afrofuturist Speculative Design Toolkit. In CHI Conference on Human Factors in Computing Systems. 1–13.
- [5] Tawanna R Dillahunt, Alex Jiahong Lu, Aarti Israni, Ruchita Lodha, Savana Brewer, Tiera S Robinson, Angela Brown Wilson, and Earnest Wheeler. 2022. The Village: Infrastructuring Community-based Mentoring to Support Adults Experiencing Poverty. In CHI Conference on Human Factors in Computing Systems. 1–17.
- [6] Tawanna R Dillahunt and Tiffany C Veinot. 2018. Getting there: Barriers and facilitators to transportation access in underserved communities. ACM Transactions on Computer-Human Interaction (TOCHI) 25, 5 (2018), 1–39.

- [7] Lynn Dombrowski, Ellie Harmon, and Sarah Fox. 2016. Social justice-oriented interaction design: Outlining key design strategies and commitments. In Proceedings of the 2016 ACM Conference on Designing Interactive Systems. 656–671.
- [8] Sheena Erete, Aarti Israni, and Tawanna Dillahunt. 2018. An intersectional approach to designing in the margins. *Interactions* 25, 3 (2018), 66–69.
- [9] Rebecca Finkel and Kate Sang. 2016. Participatory research: Case study of a community event. In Critical Event Studies. Springer, 195–211.
- [10] Sarah Flicker, Robb Travers, Adrian Guta, Sean McDonald, and Aileen Meagher. 2007. Ethical dilemmas in community-based participatory research: recommendations for institutional review boards. Journal of Urban Health 84, 4 (2007), 478–493.
- [11] Adrian Guta, Stephanie Nixon, Jacquie Gahagan, and Sarah Fielden. 2012. "Walking along beside the researcher": How Canadian REBs/IRBs are responding to the needs of community-based participatory research. Journal of Empirical Research on Human Research Ethics 7, 1 (2012), 17–27.
- [12] Christina Harrington, Sheena Erete, and Anne Marie Piper. 2019. Deconstructing community-based collaborative design: Towards more equitable participatory design engagements. Proceedings of the ACM on Human-Computer Interaction 3, CSCW (2019), 1–25.
- [13] Christina N Harrington, Katya Borgos-Rodriguez, and Anne Marie Piper. 2019. Engaging low-income African American older adults in health discussions through community-based design workshops. In Proceedings of the 2019 chi conference on human factors in computing systems. 1–15.
- [14] Gillian R Hayes. 2011. The relationship of action research to human-computer interaction. ACM Transactions on Computer-Human Interaction (TOCHI) 18, 3 (2011), 1–20.
- [15] Kenneth C Hergenrather, Scott D Rhodes, Chris A Cowan, Gerta Bardhoshi, and Sara Pula. 2009. Photovoice as community-based participatory research: A qualitative review. American journal of health behavior 33, 6 (2009), 686–698.
- [16] Julie Hui, Nefer Ra Barber, Wendy Casey, Suzanne Cleage, Danny C Dolley, Frances Worthy, Kentaro Toyama, and Tawanna R Dillahunt. 2020. Community collectives: Low-tech social support for digitally-engaged entrepreneurship. In Proceedings of the 2020 CHI conference on human factors in computing systems. 1–15.
- [17] Amanda O Latz and Thalia M Mulvihill. 2017. Photovoice research in education and beyond: A practical guide from theory to exhibition. Routledge.
- [18] Christopher A Le Dantec and Sarah Fox. 2015. Strangers at the gate: Gaining access, building rapport, and co-constructing community-based research. In Proceedings of the 18th ACM conference on computer supported cooperative work & social computing. 1348–1358.
- [19] Sarah Maiter, Laura Simich, Nora Jacobson, and Julie Wise. 2008. Reciprocity: An ethic for community-based participatory action research. Action research 6, 3 (2008), 305–325.
- [20] Deborah G Martin. 2007. Bureacratizing ethics: Institutional review boards and participatory research. ACME: An International Journal for Critical Geographies 6, 3 (2007), 319–328.
- [21] Teresa K. O'Leary, Elizabeth Stowell, Jessica A. Hoffman, Michael Paasche-Orlow, Timothy Bickmore, and Andrea G. Parker. 2021. Examining the Intersections of Race, Religion & Community Technologies: A Photovoice Study. In Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems (Yokohama, Japan) (CHI '21). Association for Computing Machinery, New York, NY, USA, Article 698, 19 pages.
- [22] Robin Philipp, Nigel Gibbons, Pam Thorne, Laura Wiltshire, June Burrough, and John Easterby. 2015. Evaluation of a community arts installation event in support of public health. Perspectives in public health 135, 1 (2015), 43–48.
- [23] Peter Reason, Hilary Bradbury, et al. 2001. Inquiry and participation in search of a world worthy of human aspiration. Handbook of action research: Participative inquiry and practice (2001), 1–14.
- [24] Linda Tuhiwai Smith. 2021. Decolonizing methodologies: Research and indigenous peoples. Bloomsbury Publishing.
- [25] Angelika Strohmayer, Jenn Clamen, and Mary Laing. 2019. Technologies for social justice: Lessons from sex workers on the front lines. In Proceedings of the 2019 CHI conference on human factors in computing systems. 1–14.
- [26] Udayan Tandon, Vera Khovanskaya, Enrique Arcilla, Mikaiil H Hussein, Peter Zschiesche, and Lilly Irani. 2022. Hostile Ecologies: Navigating the Barriers to Community-Led Innovation. Proceedings of the ACM on Human-Computer Interaction (2022).
- [27] Caroline C Wang and Yanique A Redwood-Jones. 2001. Photovoice ethics: Perspectives from Flint photovoice. Health education & behavior 28, 5 (2001), 560–572.