

The Exhibit and Beyond: Attendees, Collaborating Organizations, and Decision Makers Responding to a Photovoice Project

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ABSTRACT

Photovoice aims to impact those who view photographs and stories in culminating exhibits. This multi-phase research project, completed in partnership with city government and community partners, explored photovoice impacts on exhibit attendees, collaborating organizations, and decision-makers. Results show increased levels of awareness, concern, and willingness to take action among exhibit attendees. Additionally, collaborating organizations and decision-makers saw the power of “thicker” public engagement processes, like photovoice, to provide useful data to aid decision-making.

Keywords: photovoice, public participation, community voice, transportation, university-city partnerships, impacts on decision-making

Photovoice is a visual research methodology that invites participants to use photography to tell stories about their lives, experiences, and issues that matter to them (Latz, 2017). Wang and Burris (1997) define it as:

a process by which people can identify, represent, and enhance their community through a specific photographic technique. It entrusts cameras to the hands of people to enable them to act as recorders, and potential catalysts for change, in their own communities. (p. 369)

Photovoice, as a method of understanding participant experience, has been used widely in the fields of community health, social science research, community building, and citizen empowerment (Annang et al., 2016; Coronado et al., 2020; Roger, Wetzel, & Penner, 2018). Photovoice practitioners describe three key outcomes of this method of community engagement: 1) individual empowerment of participants; 2) increased community awareness of social problems; 3) engagement of decision makers in understanding social issues from the perspective of the participants (Catalani & Minkler, 2010). However, most photovoice research explores

individual empowerment through participation and increased collective awareness of social problems and their root causes. Although engaging decision makers and increasing community awareness is commonly cited as an outcome, limited research assesses how decision makers or others are impacted (if at all) by viewing the photographs, or if stories shared by photovoice participants affect their decision-making (Liebenberg, 2018). Similarly, limited research assesses how deliberative public participation processes, including photovoice, affect public policy (Nabatchi & Amsler, 2014). By understanding how decision makers and others respond to the photographs, stories, and findings of photovoice processes, researchers and practitioners can improve the forums and formats of photovoice to better align with the stated outcomes of photovoice as a method of public participation.

In this study, we assessed how a range of stakeholders who viewed and engaged with a photovoice project, from exhibit attendees to collaborating organizations to city-level decision makers, responded to products of the project: photographs, stories, and the results of qualitative and quantitative assessments of the process. The photovoice project was a collaboration between a university, city government staff members, and transportation advocacy organizations, exploring the experiences of residents living along one of the deadliest traffic corridors in a large city in the western United States. Institutional Review Board (IRB) approval was solicited and granted for this project. Through a mixed-method exploratory study, we answer three research questions:

1. How do exhibit attendees of photovoice projects respond immediately after hearing and seeing the photographs and stories presented by participants?
2. What do staff members from collaborating organizations observe through their participation in the photovoice process?
3. How do decision makers respond to a presentation of the findings of photovoice projects, including impacts on partici-

pants; themes and stories from participant photographs, artist statements, and accompanying work; and responses from exhibit attendees?

LITERATURE REVIEW

The Photovoice Process

Photovoice is a participatory process where participants use cameras to document their lived experiences around a project topic or theme (Hergenrather, Rhodes, Cowan, Bardhoshi, & Pula, 2009). Photovoice has roots in Freire's (1970) "education for critical consciousness," feminist theory, and documentary photography (Wang & Burris, 1994). Since its inception in the late 1990s, photovoice has become widely used in fields from public health to environmental sustainability (Carlson, Engebretson, & Chamberlain, 2006). In this participatory process, participants serve as the experts and teachers, rather than facilitators or researchers filling these roles, because their photos and personal reflections are centered through the process (Harper, 1986). Participants whose lives are affected by the topic being explored share their views through visual and oral depictions, thus ensuring that engagement processes more accurately involve those most affected (Greene, Burke, & McKenna, 2018). By using photos as artifacts of daily experience, participants can convey important information to those who routinely make decisions that affect their daily lives. The process is grounded "in the understanding that policies derived from the integration of local knowledge, skills, and resources within affected populations will more effectively contribute to healthful public policy" (Wang, 1999, p. 187). The culminating exhibit, displaying the photographs and accompanying narratives, explicitly aims to impact decision makers. Holding an exhibit to display participants' photographs, where the participants themselves are present to discuss their stories, centers the voices of those who should be the most important actors in designing efforts to address their needs but who are often

not at the table or treated as stakeholders. Using images to represent lived experience can also provide the “possibility of perceiving the world from the viewpoint of the people who lead lives that are different from those traditionally in control of the means for imagining the world” (Ruby, 1991, p. 50).

How Cities Engage Residents in Decision-Making

Public participation in government decision-making is a core tenet of democracy because it involves those who will be affected by decisions (Arnstein, 1969), yet public participation does not always occur during decision-making processes. This engagement is essential to the democratic knowledge production process (Chevalier & Buckles, 2013). Moreover, equitable public policy decisions necessitate that policy makers include all voices of those who are affected. Photovoice is a promising method for achieving these ends; however, consistent with Nabatchi and Amsler (2014) and Barrett, Wyman, and Coelho (2012), who point to limited understanding about how the design of more intensive public participation processes affect policy outcomes, there is little research that demonstrates whether or how photovoice projects ultimately influence or shape public policy. For this reason, it is important to ask what public participation is, what motivates governments to engage their residents in decision-making, and what public participation looks like.

Nabatchi and Leighninger (2015) define public participation as “an umbrella term that describes the activities by which people’s concerns, needs, interests, and values are incorporated into decisions and actions on public matters and issues” (p. 14). Direct public participation emphasizes citizens engaging in decision-making in contrast to indirect participation through activities like voting or donating money. As a core ideal of democracy, public participation emerged to uphold democratic values such as accountability, transparency, and order (Lukensmeyer & Torres, 2006; Nabatchi & Leighninger,

2015). Yet, public participation processes are carried out with varying motivations by different sponsors (e.g., mayors, city council members, city planners, community organizers, public agencies, non-profit organizations, etc.) and conveners (e.g., consultants, university scholars, etc.) (Lukensmeyer & Torres, 2006; Nabatchi & Amsler, 2014; Scott, 2019). In a context of numerous potential sponsors and conveners who have varying motivations, direct public participation typically takes three forms: conventional, thin, and thick (Nabatchi & Leighninger, 2015).

Conventional participation provides citizens with transparency and government accountability, often through public meetings and hearings. The oldest and most common form, conventional participation is now embedded in public institutions and is often legally required. Thin participation provides opportunities for individuals to share their opinions (e.g., petitions, surveys, polls, and complaint forums) and is increasing with rising Internet use and social media. Beyond gathering perspectives about issues, thick participation emphasizes relationships and engages participants in group activities to facilitate deeper understanding and provide opportunities to deliberate issues. This occurs through learning with and from each other, and collaborating to make decisions, and achieve goals (e.g., citizen juries and assemblies, participatory budgeting, world cafés, and charrettes). Thick participation is the least common form because it is resource intensive and time-consuming, but it is also the most meaningful and powerful form of participation (Lukensmeyer & Torres, 2006; Nabatchi & Leighninger, 2015; Scott, 2019). Overall, research is lacking on how thick deliberative processes impact public policy because it is difficult to show causal links between a given deliberative process and a targeted policy (Barrett, Wyman, & Coelho, 2012; Nabatchi & Amsler, 2014).

Photovoice is a thick form of public participation that provides an arts-based approach for participants to share their voice.

To create the conditions for building relationships and deeper knowledge, there are often a small number of participants engaged in workshops, discussions, photography, and documenting their stories, which provide opportunities for participants to deliberate with others and build deeper awareness across multiple perspectives on an issue. In the culminating exhibit(s), deliberation extends beyond the participants to include community members and decision makers with whom participants share their work. Moreover, photovoice projects *can* serve as a kick-off to deeper, more robust engagement from participants through subsequent exhibits and other follow-up activities.

Photovoice Impact on Decision Makers

Photovoice is often described as a powerful research tool for policy change efforts (Latz, 2017; Wang & Burris, 1994). For this project, we treated city government employees as the decision makers because they have the ability to enact change through their daily actions based on their roles and responsibilities. These actions could be influenced by the stories and concerns of photovoice participants. The goal of photovoice exhibits is for attendees to understand participants' experiences in new ways that can change how they perceive community members and/or the challenges they are facing. By enhancing this understanding, strategies for action may be designed to better serve community interests. As Wang and Burris (1994) have noted, "Whose voices participate in the policy dialogue determines which actions are chosen" (p. 182). Photovoice exhibits can elevate community experiences, ensuring that participants' voices and experiences are part of this dialogue.

The impact of photovoice exhibits on policy change is nuanced. Wang (1999) describes how a key component of impact on policy makers occurs through individual, specific interaction with the images and participants (if they are present). This impact is also influenced by what continued opportu-

nities exist for policy makers to share knowledge gained from these images. As Mitchell (2015) and Rose (2012) note, "audiencing" is one of the most understudied aspects of participatory visual research, like photovoice, despite central goals of social change and impact beyond the circle of the participants. Photovoice studies typically include limited description of how images are shared, who they reach, and if they result in any change (Liebenberg, 2018). In a literature review of 37 studies that implemented photovoice methodology, primarily focused on health, Catalani and Minkler (2010) uncovered that none of the articles adequately discussed or evaluated the impacts of the photovoice project on change at the macro level, despite this being a main goal of photovoice projects. This is problematic because the very focus of deploying photovoice as a tool for public participation means researchers should be equally concerned with how the community experience is received and what results come from it (Liebenberg, 2018).

METHODOLOGY

The authors were part of a university team asked to design and implement a photovoice project by city staff and advocacy organizations who were members of a local coalition with whom the city collaborates. This project was designed collaboratively with city staff and coalition members with the explicit aim to include decision makers as stakeholders from the beginning (Liebenberg, Sylliboy, Davis-Ward, & Vincent, 2017; Wang & Burris, 1994). As part of this project, the authors of this paper played dual roles as facilitators and researchers, collecting data and analyzing it throughout the project. As a result, the researchers were situated squarely within the process. As participant observers, we were able to reflect on and analyze what we noticed and assess our findings iteratively. It allowed us to see nuances that we may not have noticed if we had been gathering data from the outside.

Overview of the Research Project

There were four phases to the research project and each phase built upon the previous one, culminating in the design of the final focus group with decision makers. During phase 1, we assessed the impacts of participation in the photovoice process related to empowerment, civic engagement, and community connectedness through a quantitative pre- and post-assessment. During phase 2, the authors conducted a qualitative thematic analysis of participant photos, public artist statements, facilitator observations, and a review of participant worksheets, applications, and biographies, paying special attention to the stories that had emerged. These stories were later shared in phase four with decision makers. In phase 3, the authors completed an assessment of the impact of the photovoice exhibit on attendees, which included decision makers, residents, and others. Attendees voluntarily completed a paper survey at one of the exhibits or later via a QR code. We also assessed the impact of the project on collaborating organizations by examining press materials about the project that included blog posts, news releases, media reports, partner emails, and written observations from project collaborators. Finally, the authors designed a presentation for city decision makers based on findings from phases 1-3. Following the presentation, decision makers participated in a focus group to share their responses to the photovoice findings. In summary, the first three phases of data collection guided both the conceptualization of the research questions for the focus group with decision makers, as well as the data that was shared to prompt responses from decision makers. This iterative integration of findings leading to the final, fourth phase of our research allowed us to examine multiple forms of evidence and to reflectively consider the implications of our findings (Fetters & Molina-Azorin, 2017). Each of these phases is discussed below.

Case Study: The Boulevard Photovoice Project

The Boulevard is in a rapidly changing and gentrifying city. It serves as a major artery,

running through the entire city and includes a mix of businesses, homes, and services. It has the second highest bus ridership in the city and has also been identified as one of the most dangerous streets for bicyclists and pedestrians. While this project was conducted, the city was actively engaging in the planning process to implement changes to make the Boulevard safer for residents to access public transit, bike routes, and sidewalks. City and transportation partner organizations were interested in collaborating to elicit resident voices to inform proposed and future changes the city could implement.

The Boulevard Photovoice Project ran for one month, and included four weekly workshops held at a health center located along the Boulevard. Over the course of the four workshops, participants learned basic photography skills, reviewed and discussed their photos, learned how to edit photos using free software, edited their final photos, mapped their photos along the Boulevard, developed artist statements to accompany each of their final two photos, and developed an artist biography. A team from the university, which included the authors, facilitated the workshops, while staff from the city and the advocacy organizations provided additional support during the sessions.

The project highlighted the work of 17 city residents, representing 11 different neighborhoods along the Boulevard. City staff, in partnership with staff from the advocacy organizations, recruited adult residents to participate in the project. A press release, flyers, and email information were shared with residents and trusted institutions along the Boulevard. Information and the application were shared in the most common three languages spoken along the Boulevard (English, Vietnamese, and Spanish). Individuals could apply to participate using an electronic form or a paper application with drop off locations at the library and recreation center. In reviewing applications, the city selected individuals with a strong interest in the topic as well as diversity in experiences, modes of transportation, gender, and neigh-

borhood representation. Participation in the research study was voluntary and all residents selected by the city elected to participate. All participants self-identified as someone who lives, works, and/or plays near the Boulevard. In between workshops, participants were asked to take photos of what made them feel safe or happy traveling in their community as well as what made them feel unsafe. Each participant later selected two of these photos (one that made them feel safe or happy and one that made them feel unsafe) to share at the public exhibit.

Each participant received food, childcare, translation services if needed, and a \$25 gift card for each session attended. Participants were provided a laptop for use during the sessions and were able to keep it upon completion of the project. The project resulted in two formal exhibits. The photographs and accompanying narratives were also displayed informally at several other events. A photo book of all participant work was also created and distributed to participants, city officials, and relevant organizations. At the conclusion of the project, a final report and two-page fact sheet were created for the city.

The focus of this study is on impacts on exhibit attendees, collaborating organizations, and decision makers, highlighted in phases 3 and 4. However, we share summaries of all of the phases below, including phase 1 (impacts on participants) and phase 2 (thematic analysis of participants' work), because the findings from these two phases were, importantly, shared with project collaborators and decision makers.

Phase 1: Impacts on Participants

We first collected and analyzed data on the self-reported impacts of the project on participants. There are three primary, desired outcomes for participants in photovoice projects: community engagement in action and advocacy, improved understanding of community needs and assets, and increased individual empowerment (Catalani & Minkler, 2010). Ten of the 17 participants completed both a pre- and post-assessment that aimed to

measure these three constructs during our first phase of research. Using SPSS, we completed a paired t-test analysis on the participant pre- and post-assessments. These assessments used a 5-point Likert Scale (from strongly disagree to strongly agree) to measure the three desired outcomes. Understanding the impact on participants was one important facet in demonstrating to city staff and policy makers the outcomes of their investment in the photovoice project. Our findings demonstrated a statistically significant increase in all three constructs.

Phase 2: Thematic Analysis of Photos and Artists Statements

During the second phase, we completed a qualitative analysis of the photographs, artist biographies, artist statements, and other workshop materials to code, sort, and reflect on the data (Seidel, 1998; Lecompte & Schensul, 2010), as well as avoid imposing our own biases and preconceived ideas by focusing on what emerged (Bazeley, 2007). We identified the primary themes that cut across all 17 photovoice participants' work, which became three stories of the Boulevard: (1) a transportation artery, (2) a vibrant community, and (3) a forgotten corridor. As a transportation artery, most participants characterized the Boulevard as a dangerous road with fast-moving cars, negligent drivers, automobile accidents, and traffic that is busy, stressful, and, "chaotic." See Figure 1. Participants further described how the traffic ran right alongside, or sometimes among, pedestrians crossing the street and walking on crumbling or non-existent sidewalks. As a vibrant community, the Boulevard was more than a transportation artery to the people living their daily lives along it. Participants described vibrant aspects of the Boulevard that included diversity, cohesiveness, care, pride, and beautiful residential neighborhoods with numerous community assets (Figure 1). As a forgotten corridor, participants saw the Boulevard as a barrier, both physically as a wall of traffic and socially as a corridor of rapid urban change

with rising populations, littered sidewalks, and infrastructure in disrepair—described as “ugly” in Figure 1—causing some residents to feel apathetic or neglected.

Figure 1. *Rose Girl.*



Note. “I wanted to highlight the vibrancy and creativity that permeate [The] Boulevard. Even though it seems chaotic and ugly, once you slow down and pay attention there are a lot of interesting and beautiful bits. I was also pleasantly surprised by the new driver speed feedback sign in the background.” (Photography and artist statement by Boulevard Photovoice Project Participant.)

Phase 3: Impacts on Viewers of Exhibits and Takeaways from Collaborating Organizations

At the conclusion of the photovoice project, two public exhibits showcased participants’ work. The first exhibit was held two

weeks after the conclusion of the workshops as part of a larger community summit related to transportation. Members of city council and other elected officials, government employees (city, county, and state), area residents, transportation professionals, and members of advocacy groups attended the summit. Specific time was set aside in the summit agenda for attendees to interact with the participants and view their work. The second exhibit was held 6 months later in the atrium of a municipal office building housing over 40 city government departments. The exhibit was staged in the center of the atrium for three days and visitors/residents and city employees were able to peruse the photos at their leisure. During a special 2-hour reception, photovoice participants, researchers, and city staff were on site to talk with people and answer any questions.

Attendees at both exhibits were asked to complete a survey about their experience of the exhibit. Questions included items related to awareness and concern for traffic safety issues, impacts of viewing the photovoice exhibit, and several open-ended questions (e.g., What issues did you see highlighted in the photos and how could the city address such issues?). We were also interested in understanding how staff from the collaborating organizations might use the findings of this photovoice project to influence decision-making. For this reason, we reviewed observations from project collaborators; blog posts, news releases, and reports written about the project by collaborators; and emails from project collaborators detailing their reactions and responses to the project.

Phase 4: Impacts on Decision Makers

Given the primary goal of photovoice to influence policy making, we conducted a follow-up with key decision makers during the final phase of the project. We saw city staff as a particularly important group of decision makers to assess. While long-term policy change is undoubtedly important, these individuals regularly make decisions that affect residents’ lives and address issues important to

them. We conducted a focus group with decision makers following a presentation of the project results from phases 1-3. The focus group occurred one year after the conclusion of the workshops and initial exhibit at the summit. Twenty-four decision makers participated, comprised of staff from multiple city departments and advocacy organizations. We asked the decision makers if anything they learned about the photovoice project would influence their work, shift their understanding, or lead to action. To recruit participants for the focus group, we worked with one of our collaborators employed by the city to send an email to a list of potentially interested decision makers.

Data Analysis

To analyze the quantitative data from the Exhibit Attendee Survey in phase 3, we used SPSS. We used a paired t-test analysis to examine the scaled questions assessing participant beliefs before and after viewing the exhibit on the exhibit attendee survey. Attendees' awareness or concern was measured on a scale of 0 (no concern/ awareness) to 10 (great concern/awareness). Additional quantitative questions on the exhibit attendee survey were measured with a 5-point Likert scale (from strongly disagree to strongly agree). Statements addressed attendees' connection to the communities depicted in the photos and ideas for taking action based on the content of the photos. We solicited additional insight and feedback from exhibit attendees through four open-ended survey questions. We grouped responses to these questions into common concerns reported by at least three individuals.

Our analyses of the observations of collaborating organizations in phase 3, as well as the decision makers focus group in phase 4, was iterative and inductive to again focus on what emerged from the data (Bazeley, 2007). Similar to the process described above in phase 2, we employed a qualitative coding process with the collaborating organization materials and decision makers' focus group transcript. As we added, condensed, sorted, and reflected on the codes, we arrived at the

three main observations of collaborating organizations and the primary themes in the decision makers' responses to our presentation (Seidel, 1998; Lecompte and Schensul, 2010).

RESULTS

In order to answer our research questions, we focus on presenting the results from phases 3 and 4 of the Boulevard Photovoice Project. Specifically, these phases sought to assess the impact of the photovoice project from three key perspectives: attendees, collaborating partners, and government decision makers.

Question 1: How do exhibit attendees of photovoice projects respond immediately after hearing and seeing the photographs and stories presented by participants?

Thirty-seven attendees from the two exhibits completed an exhibit survey that included questions about level of awareness and concern about traffic safety before and after viewing the exhibit, impacts of viewing the photovoice exhibit, and several open-ended questions such as what issues they saw highlighted in the photos and suggestions for how the city could address such issues. Analysis of the survey items demonstrated that most exhibit attendees were impacted by viewing the photovoice exhibit. Attendees' level of awareness of traffic safety issues along the Boulevard corridor ($t(37) = -6.362, p < .001$), level of concern about traffic safety issues along the Boulevard corridor ($t(37) = -4.620, < .001$), awareness of traffic safety issues in the city as a whole ($t(37) = -4.871, < .001$), and level of concern around traffic safety issues in the city as a whole ($t(37) = -3.836, < .001$), all increased significantly after viewing the photos. Thus, survey responses indicate that there was a significant increase in all four measures of awareness and concern about traffic safety issues after viewing the exhibit. These results demonstrated that the majority of exhibit attendees left the exhibit with more awareness and concern for traffic safety issues than they had before attending.

We also asked exhibit attendees a series of questions about how they were impacted by viewing the photos. We found that the majority of exhibit attendees agreed or strongly agreed that they intended to share the ideas with other community members (85%), felt mobilized to take action (73%), had specific ideas and solutions to address community concerns (67%), felt engaged and connected to members of the community (93%), were more aware of the needs of residents of the Boulevard (90%), and were more aware of the daily lives of residents of the Boulevard (93%).

Question 2: What do staff members from collaborating organizations observe through their participation in the photovoice process?

Three ideas surfaced when analyzing partner-generated qualitative data, including the facilitator observation forms, emails, blog posts, news releases, and reports written by collaborating partners, that demonstrate the impact the Boulevard Photovoice Project had on collaborating organizations. These themes are 1) sustained value, 2) ability to understand the lived experiences of those most affected, and 3) the importance of the diversity of collaborating organizations in the success of the project.

First, partners spoke about the ripple effect the project had beyond the final exhibit. In the words of one of the partners, this “*sustained value*” of the products (e.g., exhibits, photo books, final reports, fact sheets) meant they continued to be useful and have impacts within their organizations. For example, a collaborator from one of the advocacy-based groups was able to put the photographs and narratives on display at several additional community events, sparking further conversation about mobility along the Boulevard corridor. Next, collaborating organizations also felt that through this process themes more deeply embedded in the community surfaced, thus expanding their *ability to understand the lived experiences of those most impacted*. An example from one of the partners highlights this:

It was very interesting to see [the Boulevard] more from a pedestrian perspective. When I travel on [the Boulevard] it has always been in a car, so the challenges of a pedestrian or someone with mobility disabilities might face was largely invisible to me. . . photovoice was a really great way to actually visually see and document some of those challenges as someone who is not as familiar with this area.

Last, all partners agreed that the *diversity of collaborating organizations and the unique role each played contributed to the success of the project*. The university team was viewed as experienced outside facilitators and thus a neutral party. The university team had no stake in the outcomes, which allowed participants to engage openly in the process, build trust, and share ideas. As one of the partners representing the city expressed, “Having experienced and trusted facilitators was essential to allowing the community to feel free to ask questions and express their ideas.” The project was sponsored and initiated by staff from the city government who were present at all workshop sessions. Instead of leading activities, they were engaged alongside residents and actively listening throughout the process. Immediately following the project, city employees compiled a list of actions they could implement based on participants’ photos. These actions included areas for further exploration, as well as immediate improvements to the streetscape along the Boulevard, such as improved signage, changing lighting patterns, and implementing pilot technology to address participant identified issues. Last, as one staff member commented, having advocacy-based organizations engaged in the process:

...allows for participants to have a way to actively engage once they discover that the built environment and safety is something in which they would like to continue to engage. Having this continuum between the city and the community is important for sustaining

these important community partnerships and gaining momentum to creating a culture of safety.

As another partner commented, “This really emphasized to me that communication and connection between local government, NGOs, and community members can be fostered in creative, but very powerful ways.”

Question 3: How do decision makers respond to a presentation of the findings of photovoice projects, including impacts on participants; themes and stories from participant photographs, artist statements, and accompanying work; and responses from exhibit attendees?

During the focus group, we presented city decision makers with the findings from phases 1-3. From phase 1, this included impacts on participants, e.g., the statistically significant change we saw in participants’ civic engagement, empowerment, and understanding of community need. From phase 2 we shared the dominant themes, how frequently they were mentioned, and examples of photos and narratives that were representative of each of the three themes—the Boulevard as: (1) a transportation artery, (2) a vibrant community, and (3) a forgotten corridor. Lastly, from phase 3 we shared the Likert-scale survey results from exhibit attendees, a summary of exhibit attendee open-ended responses, as well as the observations from staff of collaborating organizations.

In the discussion that followed our presentation, decision makers primarily talked about photovoice as a *process* for engaging residents. This surprised us as we had expected them to focus on the *results* of this particular photovoice project, especially as they related to traffic safety, transportation, and the Boulevard corridor. We identified two primary themes in their responses to our presentation. Decision makers talked about photovoice as (1) a thick engagement process leveraging the power of stories, and (2) a reciprocal process that goes beyond collecting information from residents.

The dominant idea discussed by the 24 decision makers centered around photovoice as a *thick engagement process leveraging the power of stories*. Nabatchi and Leighninger (2015) describe “thick” participation involving intensive, in-person, and often time-consuming deliberative processes that result in more meaningful and powerful forms of participation. One decision maker summed up photovoice in these thick terms:

I think we are always so anxious to try to get quantity, and this really shows that there is a ton of value in getting some really deep conversations going in terms of quality, making sure that those conversations are from start to finish and you’re really telling the story.

Decision makers found value in both the process, which took the form of “deep conversations,” and the data that resulted from participants “telling the story.”

The idea of thick engagement characterizes how 16 of the 24 decision makers responded to the photovoice project. Ten of those decision makers touched on thick engagement in terms of the potential for photovoice and resulting stories to supplement, enrich, or even substitute existing, often more “thin,” engagement processes. For example, they considered photovoice for fostering more meaningful resident participation or for layering rich qualitative data into decision-making. One decision maker weighed what photovoice could look like in their work:

I was really struck by how I look at public comments all day long...about things in the community that they like or don’t like and I was really struck by how much more powerful this was just with a photo and you know a person behind it. It’s sort of like an empathy machine, so I think that could be really cool for us as a way to add a richness to our engagement.... And, I feel like this could be a really cool way to do it that really connects with people more meaningfully.

They saw the more powerful forms of data and more meaningful connections with people as ways to enrich or even substitute for some of their existing engagement processes. Yet this and other considerations of photovoice cannot be disconnected from a broader context outlined by a few decision makers—a context of leadership often accustomed to quantitative data driven decision-making and, for some city departments, a lack of resources to carry out more intensive processes like photovoice. Nonetheless, some of the decision makers further imagined the utility of photovoice stories to support quality versus quantity, as a different, more meaningful, and more impactful way to reach leadership.

A few decision makers further discussed the potential impact of photovoice stories through their utility as *data*—data that are different from quantitative data, which often drive decisions, and data that show more than the deficits in a community, but also the assets. One decision maker described the potential utility of photovoice stories as data: “...And, this is data. So, it’s adding a different kind of data that we can layer into our decision-making process and making sure that we continue to come back to the people that we are working for...”

As the above decision maker commented, “making sure that we continue to come back to the people that we are working for,” leads to the other primary, but less dominant, idea that decision makers talked about, which is photovoice as a *reciprocal process that goes beyond collecting information from residents*. For seven of the decision makers, going beyond collecting information meant that photovoice brought people together, connecting city employees with the residents they serve, residents with one another, and city employees across departments. Moreover, a few decision makers noted how community-university partnerships expanded the capacity for carrying out these types of thick engagement processes. The idea of reciprocity also encompassed finding a balance between decision makers and the community that goes beyond one-way data

gathering. Nine decision makers considered how processes like photovoice can lead to taking action and continuing engagement with the community long after an initial engagement process concludes. One decision maker recognized the data-gathering importance of a process like photovoice but emphasized the power of processes like photovoice to simultaneously facilitate meaningful community engagement:

...But, I also think about community engagement, what did they get out of the process? ...Not just getting the, the whole process is usually about one way, the community giving you information, and then you move on. Eventually you will get good delivered to the community, but what if we built that into the process? Right, where they’re getting the benefit while we are studying how to make the community more walkable or more greenspace, whatever.

Another decision maker echoed the value of an engagement process in and of itself: “Doing an activity can have a value just on its own, doing something together and seeing what comes out of it.” Decision makers not only found utility in the photovoice process for facilitating powerful participant stories that can be useful qualitative data for decision-making, they also recognized the impact of the process itself for building sustained community engagement.

DISCUSSION AND LIMITATIONS

Our first research question sought to understand how viewers responded to the photovoice exhibit. Our results demonstrate that nearly all exhibit attendees reported a change in their awareness and concern of the topics the project sought to address, namely transportation and mobility along one of the city’s busiest corridors. Attendees also better understood these issues through the eyes of residents, felt more connected to the community, and had ideas for how to remedy the concerns brought up by participants. Although

our results demonstrated increased levels of awareness, concern, and a willingness to take action, we are unable to determine if viewership of the exhibit resulted in changes in behavior of exhibit attendees. While we took a step closer to understanding the impacts of photovoice on policy, substantial barriers/challenges still exist to connecting deliberative public participation processes like photovoice to the impacts on targeted policies (Nabatchi & Amsler, 2014). For example, will exhibit attendees vote differently on ballot initiatives related to traffic safety and infrastructure improvement along the Boulevard?; will they get involved in city projects, local coalitions, or other groups seeking to implement changes?; will they speak to others about their knowledge and experience with the photovoice project, thus advocating for issues of concern? We suspect that there may be a gap between professed willingness to advocate for issues and actual engagement or action.

Our second research question addressed what staff from collaborating organizations observed from the photovoice process. While collaborators were struck by the deep understanding of the concerns of residents the process provided, they also saw the benefits of designing a process through a collaboration across departments and sectors that led to value well beyond the final exhibit. This sustained value is an example of the power of “thicker” public participation projects like photovoice. Indeed, partners explicitly contrasted this project to the “thinner” forms of public participation typically led by the city, where resident feedback is solicited in more one-off, less-engaged processes (Nabatchi & Leighninger, 2015).

Working to fulfill one of the primary goals of photovoice to impact policy, we see the involvement of city employees as crucial to the project as it ensured that the ideas for change generated by the participants could influence the decisions and actions made daily. City employees present during the photovoice process, not just in attendance at the exhibit, were developing ideas for things they could do, change, or implement on the

Boulevard as the project unfolded. This is in addition to ways in which the final products (e.g., exhibits, photo books, final reports) may influence policy makers in the long term.

The results from our third research question, interestingly, showed decision makers’ responses were not focused on changes to policies, practices, or decisions related to the themes of the project, but rather they were moved by the power of the process itself. This may suggest that until thicker forms of engagement become more commonplace, the novelty of such projects might distract from focusing more intently on the narratives that seek action-oriented solutions. Additionally, ensuring that the decision makers most connected to the project topic or theme are present at all stages of the photovoice process is incredibly important, if the goal is to influence policies. Relatedly, there is also the question of the ethical responsibility that organizers have to steward calls for change that may have been catalyzed through participation (Mitchell, 2015). Public participation projects like photovoice, which purport to impact participants and help enact social change, must work to be accountable to this goal (Bober, 2011). For example, many of our participants talked about fears of losing the cultural identity of the neighborhoods along the corridor with rising rates of gentrification and change. While this concern was not specifically about transportation or mobility, participants raised it nonetheless. Thus, it left us wondering how our collaborators might take action to be responsive to this concern. In some ways, we recognized that it is likely easier for city staff to take action on issues raised in individual photos. Taking action based on the broad themes, such as the loss of cultural identity presented through our analysis, requires longer-term, more complex decisions. These types of decisions require time for reflection and processing as well as time for decision makers to take ideas back to their departments for discussion and exploration of actions. So more time than was provided, as the focus group discussion occurred immediately following our presentation of

findings, would be required to see actions that addressed the larger themes raised by photovoice projects. Additionally, while city staff may be familiar with how to take action following traditional public participation processes, taking action from the less common, “thicker” forms of engagement may be more difficult because of the complexity.

DIRECTIONS FOR FUTURE RESEARCH AND CONCLUSIONS

Our work shows how city staff can make immediate decisions and implement ideas within their departments in direct response to participant ideas when they are involved in the process from the outset. We also saw immediate impacts expressed by viewers of photovoice exhibits. While this study provided important examination of the impacts of a photovoice project on those who view and engage with participant-generated materials, future research on decision-making is still greatly needed. Longitudinal research is needed to understand how or if photovoice projects continue to impact viewers over the long term and ultimately shift behavior or catalyze action. This project also demonstrated how learning about the results of a photovoice process can influence decision makers’ openness to “thick” forms of community engagement. Additional research is needed to tease out how decision makers might act on the themes presented through photovoice processes, once they get past the novelty of the approach and are provided the time and space needed to consider addressing broader themes.

While we focused on immediate reactions to the photovoice project and reactions to a presentation of the findings, future research might also explore how photovoice projects can continue to impact decision-making. This might take two forms. First, when given time to process the findings and discuss with colleagues, do the results of photovoice projects continue to influence decisions in the longer term? Second, what is the impact of photovoice projects past their “end” exhibits through additional products such as story maps, photo books, or permanent travelling

exhibits? Can such products successfully convey messages and guide decision-making in similar ways to having participants present to talk about their photos?

At a time when there appears to be momentum and interest in building more inclusive, robust public participation processes, photovoice can serve as one method to not only elicit resident ideas and concerns, but to promote awareness, reflection, and action in the larger community and among key decision makers. We believe that university actors can be powerful collaborators with city government, supporting their efforts to engage residents in meaningful, thick public participation. Involving local advocacy organizations is key in ensuring trust is built with residents and also provides additional avenues for engagement after photovoice projects conclude. Each of these stakeholder groups bring a unique set of skills and assets to collaborative photovoice projects, ensuring the greatest impact not only for participants’ but also on decision makers and policy, helping meet one of the primary goals of photovoice projects.

REFERENCES

- Annang, L., Wilson, S., Tinago, C., Wright Sanders, L., Bevington, T., Carlos, B., Cornelius, E., & Svendsen, E. (2016). Photovoice. *Qualitative Health Research, 26*(2), 241–251.
- Arnstein, S. (1969). A ladder of citizen participation. *Journal of the American Planning Association, 35*(4), 216–224. <https://doi.org/10.1080/01944366908977225>
- Barrett, G., Wyman, M., & Coelho, V. S. P. (2012). Assessing the policy impacts of deliberative civic engagement: Comparing engagement in the health policy processes of Brazil and Canada. In T. Nabatchi, J. Gastil, M. Weiksner, & M. Leighninger (Eds.), *Democracy in motion: Evaluating the practice and impact of deliberative civic engagement* (pp. 181–203). Oxford University Press.

- Bober, L. (2011). Visualising justice: The politics of working with children's drawings. In L. Theron, C. Mitchell, A. Smith, & J. Stuart (Eds.), *Picturing research: Drawing as visual methodology* (pp. 63–76). Sense Publishers.
- Carlson, E. D., Engebretson, J., & Chamberlain, R. M. (2006). Photovoice as a social process of critical consciousness. *Qualitative Health Research, 16*(6), 836–852.
- Catalani, C., & Minkler, M. (2010). Photovoice: A review of the literature in health and public health. *Health Education & Behavior, 37*(3), 424–451. <https://doi.org/10.1177/1090198109342084>
- Chevalier, J., & Buckles, D. (2013). *Participatory action research: Theory and methods for engaged inquiry*. Routledge.
- Coronado, C., Freijomil-Vázquez, C., Fernández-Basanta, S., Andina-Díaz, E., & Movilla-Fernández, M. (2020). Using photovoice to explore the impact on a student community after including cross-sectional content on environmental sustainability in a university subject: A case study. *International Journal of Sustainability in Higher Education, 21*(7), 1331–1350.
- Fetters, M., & Molina-Azorin, J. (2017). The Journal of Mixed Methods Research starts a new decade: Perspectives of past editors on the current state of the field and future directions. *Journal of Mixed Methods Research, 11*(4), 423–432. <https://doi.org/10.1177/1558689817729476>
- Freire, P. (1970). *Pedagogy of the oppressed*. The Seabury Press.
- Greene, S., Burke, K. J., & McKenna, M. K. (2018). A review of research connecting digital storytelling, photovoice, and civic engagement. *Review of Educational Research, 88*(6), 844–878.
- Harper, D. (1986). Meaning and work: A study in photo elicitation. *Current Sociology, 34*, 24–45. <https://doi.org/10.1177/001139286034003006>
- Hergenrather, K. C., Rhodes, S. D., Cowan, C.A., Bardhoshi, G., & Pula, S. (2009). Photovoice as community-based participatory research: A qualitative review. *American Journal of Health Behavior, 33*(6), 686–98. <https://doi.org/10.5993/ajhb.33.6.6>
- Latz, A. (2017). *Photovoice research in education and beyond: A practical guide from theory to exhibition*. Routledge.
- LeCompte, M., & Schensul, J. (2010). *Designing and conducting ethnographic research: An introduction* (2nd ed.). AltaMira Press.
- Liebenberg, L., Sylliboy, A., Davis-Ward, D., Vincent, A. (2017). Meaningful engagement of Indigenous youth in PAR: The role of community partnerships. *International Journal of Qualitative Methods, 16*, 1–16. <https://doi.org/10.1177/1609406917704095>
- Liebenberg, L. (2018). Thinking critically about photovoice: Achieving empowerment and social change. *International Journal of Qualitative Methods, 17*(1), 1–9. <https://doi.org/10.1177/1609406918757631>
- Lukensmeyer, C. J., & Torres, L. H. (2006). *Public deliberation: A manager's guide to citizen engagement*. IBM Center for the Business of Government.
- Mitchell, C. (2015). Looking at showing: On the politics and pedagogy of exhibiting in community-based research and work with policy makers. *Educational Research for Social Change, 4*(2), 48–60.
- Nabatchi, T., & Amsler, L. (2014). Direct public engagement in local government. *The American Review of Public Administration, 44*(4), 63S–88S. <https://doi.org/10.1177/0275074013519702>

- Nabatchi, T., & Leighninger, M. (2015). *Public participation for 21st century democracy*. John Wiley & Sons, Inc.
- Ruby, J. (1991). Speaking for, speaking about, speaking with, or speaking alongside: An anthropological and documentary dilemma. *Visual Anthropology Review*, 7(2), 50–67. <https://doi.org/10.1525/var.1991.7.2.50>
- Roger, K., Wetzel, M., & Penner, L. (2018). Living with Parkinson's disease – Perceptions of invisibility in a photovoice study. *Ageing and Society*, 38(5), 1041–1062.
- Rose, G. (2012). *Visual methodologies: An introduction to researching with visual materials* (3rd ed.). Sage Publishing.
- Scott, R. P. (2019). More than just complaints: Generating thick engagement through thin participatory programs. *Perspectives on Public Management and Governance*, 2(2), 155–165.
- Seidel, J. V. (1998). Qualitative data analysis. Qualis Research. (Originally published as “Qualitative data analysis,” 1998, *Ethnograph v5.0: A Users Guide*, Appendix E.)
- Wang, C., & Burris, M. (1994). Empowerment through photo novella: Portraits of participation. *Health Education Quarterly*, 21(2), 171–186. <https://doi.org/10.1177/109019819402100204>
- Wang, C., & Burris, M. (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health Education & Behavior*, 24(3), 369–387. <https://doi.org/10.1177/109019819702400309>
- Wang, C. (1999). Photovoice: A participatory action research strategy applied to women's health. *Journal of Women's Health*, 8(2), 185–192. <https://doi.org/10.1089/jwh.1999.8.185>

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