

Youth ReACT for Social Change: A Method for Youth Participatory Action Research

Pennie G. Foster-Fishman · Kristen M. Law ·
Lauren F. Lichty · Christina Aoun

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Abstract Although participatory action research has become an increasingly popular method with youth, involving them in problem identification, analysis, intervention, and/or feedback, few PAR projects tend to involve youth in all of these phases—particularly the data analysis phase. Yet involvement in the data analysis phase of a research effort can help to promote critical awareness of the targeted issues, potentially increasing the effectiveness of subsequent PAR stages. In addition, although many YPAR projects aim to promote the critical consciousness of their youth participants, some projects struggle to promote this awareness, often because the methods used are not well matched to the developmental needs of their participants. In this paper we present the ReACT Method, a PAR approach specifically designed to promote local knowledge production and critical consciousness by engaging youth in the problem identification, data analysis, and feedback stages of research. Given the lack of attention in the literature to the methods used for engaging youth in these processes, we provide detailed descriptions of the methods we developed to engage youth in problem identification and qualitative data analysis.

Keywords Photovoice · Participatory action research · Youth engagement · Qualitative data analysis · Community building

Youth participatory action research (YPAR) has become an increasingly popular tool for jumpstarting youth

engagement, giving voice to youth's concerns, and launching programs and activities that meet the needs of local youth within a community. YPAR projects vary considerably in their design, particularly in the extent to which they involve youth in the continuum of research activities. For example, YPAR projects have typically involved youth in identifying critical needs (e.g., Strack et al. 2004), designing interventions that meet their concerns (e.g., Gosin et al. 2003; Wilson et al. 2007), or providing feedback to promote dialogue and action within a community (e.g., Figueroa et al. 2000; Wang and Pies 2004). However, it has been less common for YPAR projects to engage youth in all stages of this research continuum, particularly in data analysis processes (See Sabo 2003 for exceptions to this statement).

Attention to which research stages are included in a YPAR project is critical, given that different components of a research project provide significantly different experiences and outcomes for participants. According to Gavena and Cornwall (2001), YPAR projects can provide participants with opportunities to: (a) expand their knowledge and contribute to local knowledge production processes; (b) develop their critical thinking and experience consciousness raising; and (c) inspire and/or pursue action. In many ways, these participatory processes emerge during different stages of the research continuum. For example, the problem identification and feedback stages are the most likely to promote knowledge development because these research processes involve youth in opportunities to learn about issues within their community and to share these concerns with other community stakeholders. Meanwhile critical consciousness raising may be most likely to emerge during problem identification and data analysis stages, when participants are given opportunities to critically reflect upon the conditions of their lives and broader

P. G. Foster-Fishman (✉) · K. M. Law · L. F. Lichty · C. Aoun
Michigan State University, 125 D Psychology Building,
East Lansing, MI 48824, USA
e-mail: fosterfi@msu.edu

contexts (Fear et al. 2006; Foster-Fishman et al. 2005). Overall, this suggests that researchers and practitioners designing YPAR projects should pay particular attention to the processes and outcomes they hope to foster and design their projects accordingly. This paper describes a YPAR project that the authors designed to engage youth in problem identification, data analysis, and feedback.

Lessons learned in a recent YPAR effort called the YES! Project (Wilson et al. 2006, 2007) highlight the importance of YPAR design, particularly how the selection of research phases to include and how one engages youth in these efforts can ultimately bound the success of a YPAR project. In this project, middle school students were involved in a YPAR effort that was designed to trigger collective youth action-oriented projects targeting problems in youth's school environments. Photovoice was selected as the YPAR method because it incorporates a creative medium (photography) with the goal of social change and critical dialogue (Wilson et al. 2007).

Overall, YES! Project leaders felt that the action element of this project was less effective than desired, primarily because youth's analyses of the targeted issues were often incomplete. The project leaders blamed this outcome, in part, on the challenges youth faced when critically analyzing their photographs through the Photovoice freewrite process. In the freewrite process, youth were asked to describe each of their photos by writing answers to five questions (called the SHOWed questioning method; see Wang 2003 for a description of this method and questions). Because many youth did not have prior experience with this type of critical thinking task, and some found the writing task overwhelming, the Photovoice process did not yield the critical thinking and awareness that it was designed to accomplish. Thus, youth did not expand their understanding of the issues they were targeting, and in turn did not have the insights needed to create collective action projects designed to resolve the targeted problems (Wilson et al. 2007). Instead, youth tended to create projects that targeted immediate solutions instead of the root causes of the issues they cared about. This constrained understanding also limited the youth's ability to expand other stakeholders' (e.g., principals, other students) understanding of the local problems, and in turn restricted the youth's impact on local knowledge production.

The story of the YES! Project has several important lessons. First, it highlights the importance of designing YPAR projects in ways that fit targeted goals. As the YES! Project designers discovered, when YPAR methods fail to generate critical understandings within participating youth, the impact on local knowledge is reduced and action efforts are less effective. Second, this project highlights the importance of engaging youth in developmentally appropriate processes designed to foster their critical thinking. It

is our position that youth *are* capable of critical thinking; unfortunately the methods used in the YES! Project—particularly the freewrite process—were not well positioned to develop or capture this ability within youth.

When we were asked by a community partner to engage youth in a PAR effort, we drew upon these lessons and aimed to design a YPAR project that effectively promoted local knowledge development and critical consciousness by engaging youth in problem identification, data analysis, and feedback processes. We emphasized these research phases in our YPAR effort because they met the needs of our partnering community and the objectives we were assigned. First, the community we partnered with was primarily interested in hearing ideas from youth about how to best promote youth engagement within the community. Thus, our PAR method needed to provide youth with opportunities to identify, openly discuss, and share their needs and concerns. The problem identification and feedback phases within a PAR project are best suited to meet these requests.

Second, our partnering community was in the midst of a broad scale community initiative that aimed to reduce structural inequities around educational and economic outcomes. A core component of this initiative was to promote local residents' awareness of the structural inequities that existed within their community. To support this goal, we wanted to provide youth participants with opportunities to develop their critical consciousness about their lives and broader community conditions. Because critical consciousness emerges through reflection and dialogue (Freire 1973) and when one has the opportunity to discover patterns and asymmetries in daily life and the community (Watts et al. 2003), our YPAR project needed to promote youth's reflective and inductive skills. Problem identification and data analysis processes are best suited to meet these needs.

This paper provides an in-depth description of an innovative YPAR project that engaged 19 middle school-aged youth in problem identification, data analysis, and feedback. Because few examples exist in the YPAR literature that include the full involvement of youth in data analysis, it is our hope that the methods detailed below will provide future researchers with the tools and guidance needed to engage youth in this critical research phase.

Project Overview

This YPAR project was launched within a small Midwestern city that was in the midst of a broad scale community building initiative. Critical to this effort was the promotion of adult and youth engagement in local decision-making and change strategies. Historically, youth were notably absent from most decision-making and action efforts within the community. When decision-making structures were created,

they typically excluded youth from the poorest of neighborhoods. Moreover, local youth development organizations were mostly disengaged from other community organizations and the community change effort. Thus, although youth engagement was an explicit value of this initiative, neither the existing community infrastructure nor the processes established through the community building effort had yet been able to engage youth in the ways desired. To address these concerns, we were asked by local organizational leaders and funders to design a strategy that would simultaneously heighten youth's awareness of their value within the community and of the issues facing their community as well as promote local organizations' understanding of how to best promote youth engagement. For the past 12 years we had been working in this community, most recently as the evaluators of the community change initiative.

With those goals in mind, we designed a new PAR method that we call Youth ReACT (Research Actualizing Critical Thought). This participatory action research approach includes three phases: (1) problem identification and initial feedback using Photovoice; (2) data analysis of youth's narratives; and (3) feedback and community dialogue. Photovoice is a participatory research method that puts cameras in the hands of individuals often excluded from decision-making processes in order to capture their voices and visions of their lives and their community (Wang et al. 1996). To date, Photovoice has been used with a variety of marginalized groups including homeless adults (Hodgetts et al. 2007; Wang et al. 2000), Bosnian refugee youth (Berman et al. 2001), persons with disabilities (Bowers 1999; Jurkowski 2008), immigrant workers (Gallo 2002), impoverished people living with HIV/Aids (Rhodes et al. 2008) and youth and adults living in concentrated poverty (e.g., Foster-Fishman et al. 2005; Nowell et al. 2006).

Although Photovoice is a powerful PAR tool, it can be used in ways that bound the extent to which participants engage in data analytic processes, thus reducing the opportunities for critical consciousness raising. Therefore, we followed the Photovoice phase of our project with a summer-long data analysis process that was designed to identify key messages youth wanted to include in a report on their Photovoice project. This report, a component of the feedback phase, was published in fall 2007 and was intended to jumpstart a community dialogue about youth engagement and other youth concerns. We describe each phase of this project below.

Phase 1: Problem Identification via Photovoice

In the spring of 2007, 30 middle school students were invited to participate in the Photovoice Project. All of these students were participating in a college preparation and scholarship program and were identified by local school counselors and

scholarship program staff as having untapped leadership potential. Twenty prospective participants and families attended an orientation session. All chose to participate in the first phase of the project, though one youth eventually dropped from the project due to personal circumstances.

Participating youth represented four middle schools and included two sixth graders and 17 seventh graders, ranging in age from 12 to 13 (mean age = 12.37). Sixty-eight percent of participants were female; 47% were African American, 32% were Caucasian, 10.5% were American Indian, 5% were Hispanic, 5% selected "other," and one participant did not report race/ethnicity.

Preparing Youth for Photovoice

Youth engaged in several training exercises to ensure they had the skills needed to fully participate in the Photovoice activities: taking photographs, using photographs to answer questions, and engaging in dialogue with peers. Youth received training from professional photographers on how to use a camera, frame a photo, and take pictures safely and ethically. They also engaged in a Photovoice simulation exercise where they practiced all of the activities involved in a Photovoice session.

Framing the Project

The purpose of the Photovoice project was to learn from youth about how young people can become involved in their neighborhoods, schools, and community and how the community can support their future goals. We used the following framing questions to focus the youth's photographs: (a) "What are your dreams for your future?," (b) "What are your educational and career goals?," (c) "How are you and your friends involved?," (d) "What could you and your friends do to help make your neighborhood, school, and city a better place to live?," and (e) "What are some of the ways that local organizations and adults can help you make this happen?." Youth took photographs in response to the first two framing questions during weeks one and two; the remaining questions were used during weeks three and four. Below we provide examples of the photos and stories that emerged.

Small Group Structure

In weekly 2-hour facilitated group sessions, youth shared their photographs, and as a group, reflected upon and discussed the photos' meanings. Groups were mixed-gender and included three to eight youth from the same school. Groups were organized around school membership because the four targeted schools represented vastly different neighborhood and economic contexts. We felt that students from different schools may have unique perspectives on their

community and that a homogenous small group experience may foster deeper examination of students' shared context.

Photo Reflection Sessions

Photovoice projects have used a variety of techniques to elicit photographers' meanings about their photos. We selected strategies that supported our dual goals of giving voice to youth photographers *and* fostering critical reflection through an evolving group dialogue. The first strategy involved a modified "freewrite process." We wanted youth to reflect on their photographs prior to group discussion yet also wanted to minimize the writing expectations. Students were given the option to write brief answers to three reflective questions (e.g., "*I wanted to share this photo because...*" "*What is important for people to understand about this photo?*") on three photos they selected to share.

The second and perhaps more important strategy involved a facilitated group dialogue. Some Photovoice projects view group conversation about another's photo as potentially "compromising" the voice of the photographer. On the contrary, we believe, and have demonstrated in a previous Photovoice project (Foster-Fishman et al. 2005; Nowell et al. 2006), that it is possible to design a group process that preserves the voice of the individual photographer while also promoting larger group reflection and critical dialogue. Such dialogue is essential if one aims to promote a deeper analysis of targeted issues and a critical consciousness (e.g., Fear et al. 2006). Thus, we structured our group discussion processes to first elicit the photographer's original thinking *and* then followed these presentations with a group dialogue.

For example, in one session, a young woman showed her photo of a Drug Free School sign and talked about the drug problem in her school and community (See Fig. 1 for



Voice of Photographer:

I took a picture of the drug-free school zone sign because I think it's important that drugs stay out of school. I'm talking about illegal drugs. I know a lot of kids at my school do illegal drugs and it's sad because they shouldn't. I don't think anybody should because it kills brain cells and once you kill brain cells, you can't get 'em back. I have a friend...she smokes weed and I try to encourage her not to, but she thinks that since her cousins do it that it's OK for her to do it. She knows if her Mom found out she would be in so much trouble and I don't see why she does it if she knows she would get in trouble. What's done in the darkness comes to light
There's a crackhead over in the hood and she just walks around and stuff...and she's like, crazy and stuff...people [should see] her living in places that aren't that good. That's what you get for doing that kinda stuff like getting addicted to those kinda drugs. In middle school maybe you get a lot of popularity [doing drugs but] a lot of time you get the real world and stuff. You're not gonna have anything
Last year me and my Mommy were walking around [and] this lady just came up to my [Mom and asked] "Gotta smoke?" That just scared me half to death the way she just came up to her. And I was like Mommy is she a crack-head and she said yeah and that just scared me half to death

Voices of Other Small Group Participants:

A lot of kids in our town do it [drugs] and kids do it 'cause they think it's cool. They hear [a rapper] and like him and [say] 'I'm gonna do what he do'. But in the real world they [rappers in videos] really live in big houses and they don't even dress like the way they dress in the videos and they act way different and have proper language
When your parents do it, it's just a bad role model for you. Then your friends get you involved in that kind of stuff. Sometimes people feel left out and that's the only [way in]. Some people think it will calm you down, but it really doesn't
[We could show other kids the truth by] showing them somebody who is doing it [using drugs] and they could see how they react and act stupid. To show them what they do to their bodies, take that young person to somebody that's been doin' it their whole life. Show them [young person] what they don't have and what they could have if they didn't do [drugs]. They couldn't have anything because you waste your money trying to get drugs
We could encourage people not to [do drugs]. Like talk them out of it or tell their parents so that their parents could talk to 'em about it or have them confess and stop doing it. It could save their lives and help them

Fig. 1 Drug free zone photo and discussion excerpt from photo exhibit

the photo and narrative included in the exhibit). When the group dialogue began, the facilitator raised questions that would help the youth think about the causes of drug problems within their community. Here is a brief excerpt from that conversation:

Initial Photographer Description:

I took a picture of the drug-free school zone sign at front of my school because I think it's important that drugs stay out of school... I know a lot of kids at my school do illegal drugs and it's sad because they shouldn't. I don't think anybody should because it kills your brain cells....

During the Group Dialogue:

Facilitator 1: *I'm wondering- what do you guys think makes people want to do drugs?*

Group Member 1: *Influences*

Facilitator 1: *Influences, what kinds of influences?*

Group Member 1: *They hang around their cousins a lot.*

Group Member 2: *Maybe their parents are bad role models and they just got it from their parents.*

Photographer: *People don't always get it from their parents...*

Group Member 2: *Just when your parents do it, it's just a bad role model for you and then your friends get you involved in that kind of stuff. And then sometimes people just feel left out.*

This excerpt is representative of the dialogic process that occurred in most Photovoice sessions. Through exploration with peers or directed probes asked by the facilitator, the group process allowed for deeper reflection of the topics raised by the photographer and promoted a critical analysis of current community conditions (Foster-Fishman et al. 2005). Overall, the facilitated group dialogue appeared to promote this deeper understanding by: (1) eliciting an understanding of root causes of targeted issues; and/or (2) expanding youth's analyses of targeted issues beyond individual-level explanations to include contextual conditions. We illustrate both of these processes below.

Discovering Causal Explanations

An important goal of most YPAR projects—including the present study—is to engage youth in local knowledge development. Towards that end, it is important that youth share what they know and explore these understandings to fully contribute to this process. Sackmann (1992) highlights that knowledge within a community comes in multiple forms and that each knowledge type contributes something unique to one's understanding of community conditions. For example, in the initial presentation of their photos, youth typically emphasized two types of

knowledge. Some emphasized what Sackmann refers to as “dictionary knowledge” (Sackmann 1992)—knowledge that describes the “what” of a community (e.g., what is considered a problem, what is important to community members, what actions are taken by residents). Others emphasized directory knowledge—knowledge that describes what should be done (e.g., It is important to go to college.). Below are excerpts that illustrate this emphasis on descriptive and directory knowledge:

Photographer 1 (Photo of two youth picking trash up off of the floor):

Initial Reflection: *This is a picture of two of my friends. They are standing around and one of them decides to pick up a tissue on the floor and I thought that was pretty cool. Because they are just standing around talking to each other and saw the tissue and one was looking at it like 'I'm not picking that up' and the other one just decides to pick it up. ...This photo shows how kids do actually help out in the community and in their schools.*

Photographer 2: (Photo of a woman surrounded by police officers in a park)

Initial Reflection: *This is a picture of a drunk lady passed out in the park. I think this is important for people to understand. If you work hard and stuff like that you won't have to embarrass yourself in front of other people. You just have to get a good job and stuff like that. Obviously she was on some drugs or alcohol. You shouldn't put that into your body. You shouldn't damage your body. You should be healthy so you can get a job and then you don't have to do stuff like sell drugs to get money.*

Although these initial reflections provide important contributions to the community's understandings of youth concerns, they do not shed light on *why* community problems exist, *how* they affect residents, or *how* a community can transform itself. To gather those levels of understandings, it is necessary to reveal what Sackmann refers to as axiomatic (i.e., Why is it like this) or recipe (i.e., How can this be resolved) knowledge. To access those knowledge types in our Photovoice sessions, group facilitators asked questions that were specifically designed to reveal this deeper level of understanding, including: “Why is this a problem?,” “Why is this important?,” and “How might that help solve the problem?” This level of probing helped youth move beyond a simple description of a problem or current community condition and consider the underlying meaning of an issue, its root causes and potential solutions.

This next excerpt well illustrates how the facilitator's questions helped youth discover some deeper explanations for the presented problem. The conversation was initially linked to the framing question targeted that week (“How are you and your friends involved?”) with the youth

photographer highlighting the importance of public transportation and her desire for her community to embrace alternative transportation. But as the group discussion unfolded, youth revealed why alternative transportation (e.g., buses, bikes, and walking) was not a viable solution in their community: violence and crime in their neighborhoods kept residents off the streets.

Photo 2: (Photo of the Chicago City Skyline, See Fig. 2)

Photographer's Reflection: *I took a picture of this because this city helps the community by walking, taking bikes, boats and stuff. They have waterways to get through here...Some people find other ways to get around the city by doing stuff that can help you physically like walking and taking bikes and stuff. This helps the community because it doesn't put a lot of pollution in the air. But here, in our city...there's not many people that ride their bikes and there's not a lot of buses or taxis here because it's not a big city.*

Photo 2: Group Reflection

Facilitator: *What about, bikes? Do most people have bikes?*

Group Member 1: *I had my bike last year but somebody stole it and my mom's bike. So everything's just being stolen now and a lot of people I know who had bikes... I don't see them riding around now.*

Facilitator: *Do you think a lot of people steal bikes here?*

Photographer: *I think a lot of people in the hood like to steal bikes a lot because if they don't have enough money to get a bike they just see one and they just take it. Or other times they just take it so they can just ride around on it and when they get tired of it they just lay it down so anybody can take it.*

And then later in the conversation...

Facilitator: *If you have to walk at night, is it pretty safe?*

All Students: No [very adamant]

Group Member 1: *Not even where I live.*

Photographer: *Not even in the daytime. I live in the hood though.*

Facilitator: *What are the things that make it unsafe to walk around or ride your bike at night?*

Group Member 1: *Like the other day, they were over there shooting by my house and by my grandma's house and it's just unsafe because it doesn't matter where you are. It's like shootings are everywhere now. A bullet*



Fig. 2 Cityscape photograph and discussion excerpt from photo exhibit. *The Voice of the Photographer:* I took this picture because this city kind of helps the community with walking and taking bikes and stuff. There're a lot of cars in this city and it's crowded a lot. But some people find other ways to get around by doing stuff that can help them physically like walking and taking bikes and stuff that doesn't put a lot of pollution in the air. In the summer there's a lot of people who ride bikes to parks and around [Battle Creek] to their friends' houses. But otherwise there're not many people who ride their bikes. My mom [said] in the summer time that we're gonna start to ride our

bikes more, like family bike rides around the city. Instead of driving our cars a couple of blocks, we can start riding our bikes more because of the gas prices and stuff. *Voices of Other Small Group Participants:* [It's not safe to walk at night] Not where I live. The other day there was a shooting by my house. It's just unsafe because it doesn't matter where you are. There're shootings everywhere now. They can just be shooting at one person and the bullet can just go somewhere else and shoot another person and they don't even know who they're killing

doesn't have a name, like they can just be shooting at this one person and the bullet can just go somewhere else or shoot another person and they don't even know who they're killing. Like Thursday, two people who got shot weren't the people meant to be shot. The bullets were shot at somebody else, but it shot two other people.

As this excerpt illustrates, the group dialogue process helped youth uncover the broader social concerns—and some of the root causes—that impacted the use of alternative transportation sources within their community. If the Photovoice process had only included the photographer's reflection and used only that data to inform action steps, potentially ineffective actions may have emerged that simply targeted engaging more youth in the use of alternative transportation. As this example highlights, the group dialogue significantly expanded the youth's perspective about the issue and even shifted the youth's attention to more elemental concerns.

Discovering Contextual Explanations

In their initial presentations or discussions, youth also often attributed problems within their community to individual-level factors, such as a student's "laziness" or "a lack of concern." Through the facilitated dialogue, youth were often asked to identify other reasons why these problems might exist within their community. Sometimes, this process helped youth to recognize larger, contextual factors that might influence someone's behavior, to identify their own privileged position within the community, or even to recognize some structural inequities. For example, in response to the framing question "What are your career or educational goals?" many youth talked about the importance of working hard in school, receiving a good education, and attending college. Many noted that these behaviors were necessary if one wanted to "have a good life" and avoid "living on the street." In these conversations students often referred to other youth who did not finish high school as "lazy." However, when facilitators asked them to explore other reasons why some individuals do not graduate or attend college, they began to identify family or other situational conditions that could influence a youth's success at school. The following excerpt is illustrative of many of the conversations that emerged:

Photographer's Reflection: This is a picture of a college sweatshirt. I wanted to share this picture because I really want to go to college. It is important for people to understand how important college is and that not everyone goes to college. Some just don't graduate from high school. They just don't think about it. College is really important to me though. I don't think I would make it in the world without going to college.

Facilitator: You mentioned that some people don't finish high school. Why do you think some people don't finish high school?

Photographer: They are just lazy. Or they goof off and don't get a chance to finish.

And then later in the conversation...

Facilitator: Do you think everybody here in Battle Creek has an opportunity to go to college?

Group Member 1: At our school they keep telling you that everybody has a chance to go to college because you can get financial aid. But I still don't think some kids believe it.

Facilitator: Why do you think some kids don't believe it?

Photographer: Well, a ton of parents don't go to college or finish high school. And that means that they think they can't do it either. Like you can't choose the family you are born into. Some kid's parents might not have enough money to afford going to college.

As this conversation continued to unfold, the students began to talk about other options for underprivileged students, including financial aid and affirmative action scholarship programs. The latter idea triggered many comments, eventually leading the students to an examination of racism in America. For example, after a White student talked about how scholarships should "only be awarded on academic merit," a Latino student shared his experience as a minority and how he "often has little say" because of this status. Another White student began to talk about what she had learned in school about the history of racism in America, sharing how White's had "once controlled everything" in America. Students then talked about segregation and equal opportunity, and they agreed on the need for everyone to have opportunities and be treated fairly when applying to college.

Overall, this excerpt well illustrates how the group dialogue process helped youth discover the multi-level influences on educational success in their community. From a consideration of individual characteristics, to family support and resources, to the social/political conditions in America, the conversation helped youth move beyond their initial view that education was simply an opportunity equally available to all. This development towards a more critical understanding of community problems was mirrored in many other Photovoice group conversations as youth explored the systemic conditions related to a range of other concerns.

A Summary of the Visions and Voices of Youth

Across the content of the photos and group dialogues, five overarching conceptual issues/concerns emerged that were verified by the youth: (1) importance of education, (2) examples of and strategies for promoting youth engagement, (3) youth's concern about the environment, (4) the need

for youth-based programs and activities, and (5) the need for safe and drug-free neighborhoods. The first theme emerged in response to the framing questions about youths' dreams for their future and educational/career goals. The next three themes (2–4) emerged in response to the framing questions that examined youth involvement within the community. The final theme, which included the largest number of photos and stories, emerged in all 4 weeks of this project. Table 1 provides example photo and narrative content for each thematic bin.

Given the framing questions, we expected references to the importance of education and discussions of youth engagement; however, the participants' emphasis on the need for safe and drug-free neighborhoods, concern for the environment, and need for youth-based programs and activities were unexpected. The emergence of these

unexpected themes speaks to the value of the open-ended nature of Photovoice and the facilitated group processes we employed. Using their cameras as communication tools, the participants shifted the conversation from an emphasis on education and youth engagement to a focus on their urgent needs for a clean, safe community that offers them opportunities to engage in healthy activities. The facilitated dialogue then helped participants explore the root conditions of the issues that emerged.

The Community Photo Exhibit

Similar to other Photovoice projects, a photo exhibit was used to promote knowledge sharing and enhance critical consciousness among other community residents. To

Table 1 Summaries and examples of each thematic photovoice bin

| Thematic bin | Example narrative content included in this bin | Example photos |
|--|--|--|
| Youth want safe and drug free neighborhoods | Youth told stories about the crime, violence, and drug use in their neighborhoods. They described their neighborhoods as dangerous places to live and to go to school. They described how the police do not help their neighborhoods. They talked about how neighbors are less likely to take action to stop neighborhood problems Youth wanted adults and organizations to talk to them more openly about the consequences of drugs and violence and to realize that young people watch them and model their behavior The youth felt that young people should take advantage of opportunities such as getting involved in an after-school activity. However, they also felt that more activities needed to be offered and that they needed to be offered in safer places accessible to everyone | Drug free school sign Inebriated woman getting arrested in a park |
| Education is important for future goals | Youth emphasized that they need to get an education to achieve their goals Youth see other youth unable to get a good education because of the barriers they face. They talked about how family problems and peer pressure get in the way of getting good grades Youth want adults to be more supportive of youths' educational goals | Front of local college College sweatshirt Professional office building |
| Youth are concerned about the environment | Youth emphasized how they are concerned about the environment and what it means to their future or the earth Youth think that it is everyone's responsibility to protect the environment. They want the residents in their community to help protect the environment (e.g., walking versus driving their cars). They want their community to provide more opportunities to keep their city clean (provide service learning courses) They were also concerned about the appearance of their hometown and how the actions of some people can make their city look bad. For example, they talked about the trash that people throw | Cars Youth picking up trash City parks |
| More programs for youth are needed | Youth do not think there is enough after-school or summer activities available to them. They described many of their friends as "bored" and think that, with more youth-based activities, there would be less crime in their city and fewer youth looking for "bad things to do" Youth wanted summer and after-school programs to be accessible to everyone (e.g., transportation and cost concerns taken care of) and widely advertised | Youth playing basketball A piano |
| Youth want to be involved in making their city a great place to live | Youth said they get involved when they care about the issues. They get involved when they know that they can make a difference To foster youth involvement, the youth said that adults and their friends should encourage them, and organizations should offer a variety of fun activities. Incentives should also be offered | Youth volunteering at a nursing home Youth sorting Girl scout cookies |

ensure that the exhibit reflected the youth's priorities, youth nominated one photo for each participant to include in the exhibit. Each photograph was accompanied by excerpts from the photographer's original description of the photo and from the group dialogue (see Figs. 1, 2). To ensure that these stories reflected the intentions of the photographer, youth edited and approved the final text associated with their photo.

The exhibit launched a weekend planning and networking retreat for local organizations and residents involved with the broader community building initiative. The exhibit opened with a brief presentation by the youth. Youth then stood by their exhibit pieces, which allowed attendees to ask them about their photos and meanings behind them.

Reports from the youth participants, our community partners, and local organizational representatives provided strong evidence that the Photovoice project had a significant impact on youth and the broader community. For example, youth noted in their post-project debriefings that they became more critically aware of their community; organizations and adult residents commented that the exhibit highlighted the assets of the youth in the community. However, given the initial intent of this project—to give voice to youth's concerns and promote critical awareness of community issues—we felt that additional opportunities for engaging the youth and the broader community around the data collected in Phase 1 were needed. We designed two additional phases towards that end: a data analysis component and a feedback process that would include the creation of a book designed around the Photovoice project.

Phase 2: Fostering Critical Consciousness through Data Analysis

We posit that engaging youth in meaning extraction through data analysis is an essential, though often forgotten, step in YPAR. The way in which data is interpreted is significantly influenced by the perspective of the parties conducting the analyses. In other words, even data collected or reported by youth can be misrepresented if youth, themselves, are not involved in defining the meaning behind their data. In addition, examination of first and second order thematic meanings can trigger critical consciousness because this analytic process requires individuals to critically examine assumptions and patterns underlying their data (Patton 2001). It is this stance of criticality that engenders awareness of current conditions and an understanding of the root causes of local conditions and problems (Fear et al. 2006). When PAR projects exclude youth from this analysis step, they inadvertently limit participants' ability to expand their critical

consciousness. Finally, through an examination of the layers of meaning within their data and the root causes of targeted concerns, youth are better prepared to design actions that address the underlying causes of these problems.

Attention to the layers of meaning within a data set is particularly important when using a Photovoice process. Photovoice data have multiple levels of meaning that can be explored, including: (1) the visual meaning of the photos themselves; (2) the meaning behind the photographer's story about the photo; and (3) the multiple meanings within this story and photo that are explored in the group discussion. The story and photo captured in Fig. 2 well exemplify these multiple layers of meaning.

Unfortunately, within the context of a photo exhibit, it can be difficult, if not impossible to capture all of the critical reflections and meanings that emerged from the photos. For example, for the photo displayed in Fig. 1, additional themes emerged in the group dialogue that were not displayed—given space constraints—in the exhibit. For example, one-seventh grade female discussed how the current drug problems also affected neighborhood safety:

My aunt lives right across the street from some apartments. One of the girls that lives there is a crackhead. This girl owed this guy some money for some drugs. Well that guy thought my aunt was the one who owed him the money and he chased her with his truck right up to my aunt's porch!. Because that girl was selling some drugs and owing somebody some money she almost got my aunt killed.

In addition, given the amount of data that emerged in Phase 1, not all photos and text could be displayed in the exhibit. Over 50 photos with group narrative emerged from the Photovoice process, but only 19 of these photos could be included in the exhibit. Thus, we felt it was imperative to have the youth and the broader community become more engaged with the full material. For these reasons, we designed a process that would engage youth in identifying and analyzing the multiple meanings in the Photovoice data.

The ReACT Data Analysis Method

In order to engage youth in data analysis and foster critical thinking, we developed an approach we call the ReACT Data Analysis Method. We developed our own method because few descriptive examples of how to effectively engage youth in qualitative data analyses processes existed in the literature.

Our method had to balance three competing desires and constraints. First, we needed to engage youth in formal

qualitative data analysis, including first and second order thematic analysis, in order to preserve scientific rigor and the voice of youth during the analysis phase. Second, our method needed to appeal to middle school students during the summer. Thus, we had to balance the fact that data analysis would likely require the youth to think and act in new ways with the knowledge that they wanted to be involved in a fun summer camp experience. Drawing from lessons learned in the YES! Project (Wilson et al. 2007), we knew we needed to design a data analysis process that included interactive and novel activities to avoid a homework-like feel. Third, we were faced with an externally imposed time-constraint; our data analysis method needed to be accomplished in five-three hour sessions.

To address these constraints, the ReACT method of data analysis uses a sequence of “messaging games” that expose youth to three critical phases of a qualitative data analysis (Miles and Huberman 1994): (1) data reduction, (2) data organization to promote conclusion drawing and action, and (3) conclusion drawing and verification. These games were designed to promote critical thinking by engaging youth in open-coding, content analysis, first- and second-order thematic clustering, thematic coding, and dialectical discussions. Because most of these processes were likely to be new experiences for some of the students, we created messaging games that mirrored other popular children’s games (e.g., a scavenger hunt, a memory game, Simon Says) to create a familiar context for this learning to occur.

The ReACT Messaging Games

Four data analysis messaging games were created. The game used in session one focused on training youth in content analysis and thematic integration. During sessions two and three, two different games had youth find first and second order themes. In the final two sessions, youth interpreted the meaning of their findings and identified recommendations for the community. Each data analysis session focused on a unique thematic bin or bins to: (1) keep the data manageable, (2) promote synthesis and thematic integration; and (3) promote deep thinking about the root causes of specific problems.

Session 1: An Introduction to Thematic Analysis: The Candy Sorting Game

This game was adapted from Preskill and Russ-Eft (2005). The purpose of this game was to introduce participants to the process of sorting data and organizing themes into higher-order categories. This was accomplished by asking youth to work together in groups of three to four people to sort various types of candy into piles (first-order analysis),

to reorganize these piles into fewer groups (second-order analysis), and provide names to these piles (theming). To help youth see the similarities between this process and qualitative data analysis, facilitators identified the connections between the youths’ actions and language to the upcoming analysis task (e.g., “Type of candy’ and ‘brand of candy’ are things candy pieces might have in common with each other. In this project, you will sort sentences into piles, just like you did the candy. Another word for these piles is categories.”)

Sessions 2 and 3: Finding Similarities across Data Sources: The Message Scavenger Hunt and Memory Matching Games

Overview

The primary purpose of these games was for the youth to engage in active qualitative data analysis by identifying important messages in the Photovoice data and organizing these messages into thematic groups. Through individual reflection and group dialogue, these games helped participants think critically about the data, sort and organize narrative into first- and second-order themes, and generate and apply labels to thematic clusters.

Step 1: Identifying Key Messages

The first step focused on data reduction. Participants were divided into groups of three to four people and each group worked with a different set of Photovoice data (photos and narrative)—though all data was linked to the same conceptual bin. Each participant in a group read through the same set of data and identified messages that were (a) salient to him/her and (b) important for the community to hear. Facilitators recommended that they “Think of themselves as newspaper editors and imagine that this copy has just been submitted to them to include in their newspaper. Their job is to identify messages that best represent these stories and to give that message a title.” For example a participant read the quote below from the Chicago skyline photo (Fig. 2) and identified one important message to share with the community: “Violence is destroying our neighborhoods.”

Every time there’s a shooting’ around my house, I get scared. I didn’t even know what to do. I just took me and my sisters, and we just went under the bed and stuff. Like I didn’t know what to do, it just came to me naturally. [Police] should just get put in our position because my sister, she was crying and stuff. We didn’t know what happened or anything. We didn’t know if our parents were okay.

To help them visualize the connection between the data and the messages they identified, youth were instructed to indicate, with a highlighter, the section in the data linked to each message. This process also helped them to easily identify what narrative was left for analysis when searching for remaining messages. To ensure that the messages were grounded in the data, facilitators asked questions such as, “Where did you find that message?” and “Is there a sentence that made you think of this message?” To prepare for the process of sharing their messages with their peers, participants wrote each message on a large sticky note.

Step 2: Sorting Data

Step two focused on data organization. Once the participants had identified key messages, they shared them with their group members and worked together to cluster their titles into similar categories. Facilitators used a variety of processes to get youth to share and sort their themes. For example, in one approach a youth was invited to select one title from his/her pile and place that title on the table for all to see. The facilitator then asked whether or not anyone had a title that was similar to the one shared. As youth placed their titles on the table, other group members were asked to identify if the titles were similar. If disagreements emerged, youth were asked to reconfigure the clusters. To further promote critical dialogue, facilitators challenged the youth by asking questions such as, “Why do you think that message is important?” and “What does it mean to you?” Once all messages were shared, the facilitator asked the youth to read the text they did not yet highlight to see if there were any remaining messages to consider. Additional messages were sorted into the existing clusters accordingly. Finally, youth labeled the groups, and these labels (i.e., themes) were then used by the youth in the next part of the game.

For example, the message identified in the section above was clustered by the participants with four other messages: “Keep yourself and [our city]¹ safe;” “In a crime, people’s actions hurt and kill people;” “Shooting and killings never solve anything;” and “Everyone should be able to feel safe in their own home, but because of people who do bad things, you can’t and that’s not fair.” The youth decided that the title of this cluster should be “Keep yourself and [our city] safe.”

Step 3: Thematic Matching

Step three emphasized data organization and integration. The goal of this step was for all participants to work

collaboratively to cluster themes. For the Message Scavenger Hunt, each participant started with several cluster titles that their group developed in step two (e.g., “Keep yourself and [our city] Safe”). The participants were given one minute to talk to members of the other groups to (a) share their messages and (b) find themes that matched. When participants found thematic matches, they were instructed to go to the “message wall” and present their match to a facilitator. If youth convinced the facilitator of the validity of this match, the participants placed their matches on the message wall. If the facilitator disagreed, the youth needed to find another theme in the room to match or “make the case” for starting a new thematic cluster. This game continued until all messages were placed on the wall. The team that sorted all of their matches first won a small prize (e.g., candy, pens, or pencils).

In week three, a different clustering game—called Memory Match—was used. Facilitators asked the youth to select one message from each thematic group (at the end of step 2), number the back of the message, and place it face down on the message wall. The youth were divided into two teams that took turns selecting messages (i.e., by calling out the messages’ respective numbers) and deciding collectively whether the messages shared a higher order meaning. As before, participants had to convince the facilitators that messages matched. Facilitators encouraged critical thinking by asking questions such as, “Why do these match?” and “What would a title be for these messages?”

For example, the message titled “Keep yourself and [our city] safe” was grouped on the message wall with the following messages from other groups: “Shooting and killings never solve anything;” “It’s stupid to be involved in gang violence because you just end up caught;” “There shouldn’t be just one part of town that is good, the whole city should be nice and have no violence.”

Step 4: Identifying Themes

Step four completed the data organization/integration process. Youth worked together to label the clusters on the wall with second-order themes. Participants were asked to label each thematic group with a title that best defined the linked messages. For example, the youth decided that the title for the thematic group discussed above should be “Keep yourself and [our city] safe.”

Sessions 4 and 5: Transforming Data into Action:
Simon the City Council Member Says Game

Overview

The purpose of this game was to facilitate the conclusion drawing phase of data analysis by having youth reflect on

¹ To protect the anonymity of our community partners we have removed the name of the city.

the meaning of the data in order to generate recommendations that could be implemented within their community.

Step 1: Identifying Recommendations

We instructed participants to identify important messages in the narratives and integrate them into recommendations about what other youth, adults, and local organizations could do to address the identified issues. They did this by completing recommendation stems provided by the facilitators. For narratives that pertained to needed programs and activities in their community, stems included: (1) Youth could, (2) Youth should, (3) Adults could, (4) Adults should, (5) Local organizations could, and (6) Local organizations should. For data regarding youth engagement, participants finished the following stems: (1) Youth are involved when, (2) What helps youth get involved is, and (3) Youth get involved because. They were instructed to write their recommendations on large sticky note pads for future group sharing.

In order to assist the participants with summarizing and condensing large portions of data into recommendations, we developed a game that consisted of a mock City Council meeting in which the participants were invited to attend and provide the City Council with their recommendations about what can be done to improve their city and promote youth engagement. Facilitators told the participants that, “Simon the City Council Member attended the Photovoice exhibit and thought it was so impressive and inspiring that the City Council would like to help young people become more involved in the community and in things that matter to youth!” The facilitator then placed the recommendation stems in the center of the table and instructed the participants to use them to help think about their recommendations.

Step 2: Sorting Data

Participants shared their written recommendations with their group members and worked together to organize them into thematically similar groups. This step followed the same procedure as the above games. Each group of recommendations was divided equally among the youth participants to share at the mock City Council Meeting. Some example recommendations that the youth identified from the Youth Engagement bin were: “Youth get involved when they know they are going to make a difference in someone’s life” and “Adults should encourage youth to be involved.”

Step 3: Thematic Matching

The purpose of the mock council meeting was for the groups to share and condense their recommendations. The

main project facilitator served as Council Chair (Council-member Simon) and ran the meeting as a City Council session. Participants shared their relevant recommendations to the Council, posted them on the message wall, and worked to cluster them into meaningful groups.

Step 4: Identifying Themes

After all recommendations were clustered on the message wall, participants worked together to label the new thematic groups with a title (in the form of a recommendation) that best defined the group. This task allowed for the integration of data into specific recommendations about future action and intervention.

Promoting Knowledge Development and Critical Awareness through Data Analysis

Overall, it appears that involvement in data analysis provided youth with a structured process for discovering the often obscured patterns and inequities in their community (Watts et al. 2003). As a result, participating youth developed a heightened awareness of their surroundings and significantly altered their understanding of some basic community problems. By exploring content from multiple school group discussions, youth became conscious of issues and experiences that were both shared and unique across the four schools. Posting the clustered themes on a wall also provided tangible evidence of the criticality of some key concerns. For example, it was impossible to ignore the prevalence of drug problems and concerns for personal safety when the themes related to these issues practically covered one wall.

In their analysis efforts, youth discovered several important patterns and inequities that were concealed in the group discussions. For example, during the Photovoice group dialogues, several individual youth talked about the inability of local organizations to meet their after school needs. However, it was not until youth identified this theme across multiple narratives and school groups and then discussed the meaning of this problem within their community that a disturbing pattern—and inequity—was revealed to the youth: Neighborhoods varied significantly in their access to quality youth development opportunities and this variability was linked, in part, to economic status. Youth developed an explicit recommendation in response to this insight: Programs should be made available in all neighborhood school areas. Youth were also disturbed by the fact that some of their peers could not afford the options that were available in their neighborhoods, which led to a second recommendation: More scholarships need to be made available for low income youth to participate in after school activities.

Youth discovered several other important patterns through the analysis process: youth from all of the schools desired educational success; police response varied significantly across neighborhoods; youth were more involved in the community than adults gave them credit for. Overall, the discovery of these patterns informed the development of the guide book (see below) and also became prioritized in larger community conversations about how local organizations could become more responsive to youth needs.

Phase 3: Feedback—A Guide to Youth Voices

Phase two culminated with the creation of a booklet titled “A Guide to Youth Voices.” This guide included the recommendations generated by youth about how youth, adults and local organizations can work to make their city a better place to live and help youth achieve their dreams. Youth wrote, designed, and edited this book. In addition to exploring the full content included in the Photovoice phase of this effort, this guide also aimed to further promote awareness of youth’s concerns and jumpstart dialogue between local organizations, residents, and the youth. The booklet was organized around the five thematic Photovoice bins. Here is an excerpt from the section discussing Safe and Drug Free Neighborhoods²:

We care about our city and want it to be safe and drug free for everyone.

Here’s what we said:

Today there is a lot of violence and crime that people do and they just don’t care. I want people to understand that if people keep doing these crimes, our city as a whole will look bad, it just won’t look right.

We recommend that other youth...

Make the right choices and take advantage of existing programs and activities.

Youth can do an after school activity like sports or do something to help out their school.

And we want organizations to...

Offer us activities where it is safe and drug free.

There is an organization that I don’t go to because of security issues. Over by where it is there are a lot of shootings.

The dissemination and use of the Guide as a tool for promoting dialogue and change is in progress. Thus far, the Guide has been broadly distributed to service delivery organizations across the community, and the issue of youth engagement has become the focal point of two recent community events. In both events, youth participants were

invited to serve on an expert panel where they discussed the issue of youth engagement and local youth concerns. The conversations that emerged during the events served as a catalyst for future organization-to-youth dialogues. The youth participants will meet with various local organizational leaders to engage in more purposeful planning around youth engagement. A traveling Photovoice Exhibit will accompany youth as they meet with local organizations. This exhibit will also be housed in schools, youth organizations, and community spaces this winter.

Discussion

In this paper we described one participatory action research project that was designed to give voice to youth concerns and promote critical awareness among youth and the larger community. With a focus on creating opportunities for the youth to think critically about their lives and their communities—and sharing these insights with others—we engaged youth in a Photovoice project, qualitative data analysis, and the writing and production of a feedback report. From a substantive perspective, this project highlights the importance of creating opportunities for youth to voice their concerns. This project emerged from the desire of a local funder to identify ways to promote youth engagement within the community. Importantly, however, the youth significantly shifted the focus of this dialogue, placing greater priority on the creation of neighborhoods and a community that was safe and provided positive programs for youth. As a result of this focus, local organizations are working to identify ways to promote more youth programs and neighborhood safety.

From a methodological vantage point, this project highlights the importance of designing YPAR methods that can effectively tap into the wisdom of participating youth and promote their critical consciousness. Unlike some other YPAR projects, we were able to generate an in-depth analysis of current community conditions and substantive recommendations for action from the youth. We attribute this success to the methods we used. First, we engaged youth in critical group dialogue during the Photovoice phase of this project. Although other Photovoice researchers have had other participants ask the photographer questions to elicit the story behind a photo, it is not so common to engage the full group of participants in a dialogue about each photo. Yet, as this and other projects (Foster-Fishman et al. 2005; Nowell et al. 2006) have revealed, group dialogue is an effective venue for promoting awareness and raising critical consciousness because it provides participants with opportunities to co-generate understanding and analyze their collective experiences. Second, we engaged the youth in data-analysis,

² To protect the anonymity of the youth and their city, we do not include the report in our references.

which allowed them to reflect even more about their experiences by identifying patterns and inconsistencies across their stories.

Although our project did not include an intervention or action phase, as found in some other YPAR efforts, preliminary evidence does suggest that participating youth became more empowered through their participation, and the community is now more intentionally considering how to further engage youth. We posit that this success is due, in part, to our intentional design of a YPAR project that promoted knowledge generation and critical consciousness through problem identification, data analysis, and feedback. Participatory power can only emerge when YPAR participants have the ability to enhance local knowledge and expand both their own and the community's critical consciousness (Gaventa and Cornwall 2001). As other YPAR projects have demonstrated, when youth are given opportunities to explore their voice and communicate their concerns, they can develop the participatory competencies often linked to empowering, participatory outcomes (Checkoway and Richards-Shuster 2003; Strack et al. 2004). For example, throughout our project, including a wrap-up youth focus group, we heard numerous stories about how participating in this project helped the youth to "better understand the issues in their community," "think more critically," and "identify more ways to become involved."

Importantly, youth noted that each of the three distinct phases of this effort made an important and unique impact. Youth described how the Photovoice process provided opportunities for them to see things they had never noticed before and to understand the perspectives of other youth in the community; the data analysis stage provided them with opportunities to "think in ways they had never thought before;" the Guide gave them an opportunity to have a "united voice" and collective impact on the community. As some of the youth noted:

After taking pictures of people doing drugs and stuff like that I thought about how drugs can really affect you. I thought drugs were bad before the project, but I didn't know it was that bad until I saw the pictures. For me to actually express some of my opinions through pictures is really great. It's almost like I have all these opinions stuck in this little pop bottle that keeps getting bigger. With this book it's almost like your opening up the bottle and you're taking some of my opinions out. If everyone heard and considered everyone else's opinions, no matter what age, I think the world would be better.

If I was by myself I doubt adults and organizations would value my opinions. A group of people or this

booklet that we're doing makes a bit of a difference. People will actually listen.

I have never had to think like this before. I love it.

In other words, our efforts appear to have promoted youth's critical awareness and substantive understanding of their community, their place in it and their collective power—all important processes and outcomes valued by participatory action researchers (Minkler and Wallerstein 2003).

There is also growing evidence to suggest that the project has triggered a heightened awareness about the importance of youth engagement within the community. For example, the local nonprofit intermediary support organization is now working to integrate youth into organizational learning communities throughout the city. Youth engagement has become a central goal of several change projects in the community, and youth from low income neighborhoods were recently added to an advisory group created by a local funder. Given the short duration of the project to date, this amount of change in a community that has rarely engaged youth from poor neighborhoods is notable.

Challenges and Limitations

There are many challenges when engaging in any PAR project. Below are some important considerations and strategies to keep in mind when doing this type of work.

Challenges and Strategies to the ReACT Method

The largest challenge we faced was how to manage the large quantity of data that emerged from the Photovoice project and the ensuing data analysis processes. We had to consider two issues in regards to this data quantity. First, we were concerned that youth may become disengaged if the data analysis process were too prolonged. Second, we faced an external deadline that significantly bounded how much time we had available to process this data. We adopted several strategies with the dual goal of creating a process that was youth-driven while at the same time could be completed within the given time frame and not overly burden the youth. Overall, this required some initial filtering of the data by the adult research team, which reduced the quantity of data that the youth needed to process. Although we had member checks in place, it is possible that youth may have generated different themes and recommendations had they seen different passages. Below are the strategies we adopted given our constraints.

Data Reduction Processes

Before each data analysis session, we edited the verbatim transcripts from the Photovoice phase of the project. Data reduction was a necessary step. First, it was important to reduce the amount of narrative in order to maintain participants' interest and enthusiasm. A single group's Photovoice session transcript could include up to 250 paragraphs (and we had transcripts from 20 sessions). Second, the youth became distracted by extraneous information and the vernacular in which they spoke. Therefore, the first step in data reduction included eliminating all paragraphs that did not directly pertain to the project (e.g., discussions about using the restrooms) and cleaning the vernacular to make the narratives more comprehensible (e.g., we removed "ums" "likes" and "aint's"). The second step included eliminating data redundancies. Using the emergent themes identified by youth in a previous session, graduate students coded the remaining text and eliminated paragraphs that contained messages that were completely redundant with the themes already identified by the youth. On average, about 60–70% of the paragraphs were eliminated through this process allowing for a more manageable amount of data for the youth to analyze in each session.

Given our concerns that we were violating some important assumptions behind YPAR with this reduction process, namely ensuring that the voices of the youth and their interpretations were being heard, we asked a youth expert (i.e., a youth who participated in phase one but not in phase two) to independently code twenty-percent of all removed paragraphs from each case summary. We were primarily interested in whether or not the youth would determine if these paragraphs contained messages that were similar to the themes identified in the paragraphs that were coded during phase two. Overall, the vast majority of themes the youth expert identified matched those developed by the youth in phase two, suggesting that our reduction process did not threaten the authenticity of the analysis process.

Time Constraints

Any PAR project is likely to face time constraints, and at times, these constraints can impede the researcher's ability to maintain the PAR values of participant voice and engagement. For example, in our project the Photovoice exhibit date was predetermined to coincide with a weekend retreat for local organizations. Although this opportunity was fortuitous, this deadline constrained the amount of time we could engage youth in critical reflections and the extent to which we could engage youth in all decisions surrounding the local exhibit. Because critical reflection emerges over time (e.g., Fear et al. 2006), it is possible that an extended process may have further promoted the overall

knowledge generation and critical consciousness of the participants. In addition, YPAR projects vary in the extent to which they engage youth in different research phases and in the decision-making processes related to a project (Checkoway 2003; Minkler and Wallerstein 2003). Certainly, a pure PAR process that is fully directed by youth would be desirable for many reasons, and the extent to which this project did not achieve this ideal potentially limited its impact. Although this project did not provide the latitude or the time for such involvement, youth were the most fully engaged around those decisions that were most directly connected to how their voice would be represented to the community (e.g., determining what photos and stories to share; identifying themes and recommendations to highlight in the feedback report).

Maintaining Youth Involvement throughout the Project

In addition to challenges due to the time frame of the project, the *timing* of our project posed additional problems. During the data analysis phase, we faced competing demands on youth's time, including camps and family vacations. Because of these commitments, we had inconsistent attendance across all sessions. Ultimately, this meant that we did not have the same individuals consistently examining the data and integrating what had been previously discussed with what was emerging during a given session. To counter this lack of consistency, we incorporated numerous member checks throughout the process. For example, participants reviewed the themes and recommendations developed during their absence. Although these strategies helped to offset the costs associated with a shifting data analyst base, we recommend that groups considering YPAR projects first assess the time commitments of their prospective participants and use this information to inform the timing of the project.

Managing Adolescent Group Dynamics

Wilson et al. (2007) described encountering challenges managing group dynamics among middle school youth during the YES Project, such as social immaturity and youth jockeying for higher social status through ostracism and putdowns. Similar forms of disrespect and flirtation occurred in our mixed-gender groups. This required strong facilitation skills, attention to the undertones of conversations, and patience.

Capacity of the Local Organizations and Community

Although YPAR projects may build youth capacity, they do not necessarily build the community's ability to work

with or respond to youth or an organization's operational capacity. Yet, YPAR projects often require communities and local organizations to behave in new ways toward youth, to implement unfamiliar activities, and/or to work with others in new ways. It is critical to assess youth-focused organizations' and the broader communities' readiness to support a YPAR process. Other researchers have found that YPAR projects are most likely to be embraced and fully supported when youth-focused organizations already value evaluation, have internal capacity to conduct evaluation themselves, have resources to support youth PAR participants, and have prior experience responding to youth voices (Lau et al. 2003). We found that local organizations were better prepared to support YPAR when they embraced a positive youth development focus and when they had adequate staff resources to provide the logistic support that was needed (e.g., picking up students' film). In some ways, this YPAR method could be used within a service learning context to help foster organizational capacity. In addition to providing youth with opportunities to foster their knowledge development and critical awareness, this YPAR process could also engage organizational leaders and staff to think critically about their ability to support youth's voice and continue to promote their participatory power.

Conclusions

Youth Participatory Action Research is an exemplary tool for providing youth with opportunities to shape the dialogue within their communities. When the YPAR process creates opportunities for youth to demonstrate their capacities and concerns to the broader community and think deeply about the meaning of the data they gather, the critical consciousness of the youth and the broader community is enhanced. As Project ReACT demonstrated, youth are both able and eager to think critically about their community and the data generated in a PAR process. Through the design and use of developmentally appropriate, interactive, and fun "messaging games," youth were successfully engaged in data analysis processes. Future YPAR efforts should continue to explore ways to meaningfully engage youth in all phases of the research continuum, particularly in activities that promote meaning extraction and critical analysis.

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