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Title: The Peer Interview Methodology: Participatory Qualitative Interviewing and Discussion in a Youth Garden Project

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The *Producing for the Future* project engaged thirty low-income youth in gardening and nutrition education, microenterprise activities, and participatory research during the 2011 and 2012 growing seasons. The intervention aimed to support community protective factors, build positive youth development, and enhance health outcomes through promoting skill-building and mentorship. The mixed-methods approach to program evaluation included interviews, focus groups, and quantitative measures. A peer interview process was conducted with a subsample of youth during the summer of 2012, and engaged youth in creating, conducting, and debriefing interviews with one another. This study compared data gathered in the peer-led interviews to data from staff-led interviews, with the aim of understanding the differences in the two methodologies and in the data they produced. The theoretical frameworks of symbolic interactionism and community-based participatory research informed the methods and analysis. Findings indicate that evidence of participants' level of *rapport* with interviewers and number of *tangents*

during the interviews led to increased richness of data from some participants in the peer interview group. Furthermore, the group debriefing discussion contributed to the researchers' final analysis of the data, and is an example of *youth synthesis* of thematic findings. Implications include the value of participatory methods with youth and the recommendation of the peer-led interview process as a way to incorporate youth voice into evaluation research.

The Peer Interview Methodology:
Participatory Qualitative Interviewing and Discussion in a Youth Garden Project

by
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I understand that my thesis will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

Joy R. Lile, Author

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Introduction and Literature Review

A recent resurgence in vegetable gardening and home food production has stimulated an increase in the number of community and youth gardens across the country. But what benefits do at-risk youth find in gardening? The *Producing for the Future* research project sought to answer this question by engaging low-income youth in Peartree and Mountainside[1], Oregon in two participatory research gardens from January of 2011 to November of 2012. The gardens were designed to provide health-related, community-based interventions to youth with limited access to healthy foods. Youth collaboratively designed and managed two gardens, participated in nutrition and cooking lessons, and developed business skills and community connections through marketing their produce. Researchers used mixed methods to evaluate the health, development, and community effects of the garden program, and also engaged youth and adult volunteers in exploring their own research questions through a community-based participatory research (CBPR) approach. Community stakeholders including faith-based organizations, OSU Extension Service, low-income youth, and adult volunteers collaborated in designing and implementing the program.

Interviews provided a large percentage of the qualitative data for the *Producing for the Future* project. This study will utilize interview data from the project to compare two interview methodologies: traditional interviews, which were designed and conducted by staff at entrance to and exit from the project, and a peer-led interview process in which

[1] For the purposes of this paper, all place names and individuals' names have been replaced by pseudonyms.

youth participants designed, implemented and debriefed on a research experience collaboratively. Some youth engaged in only the two staff-led interviews, while others participated in both staff-lead and peer-conducted interviews. The peer interview process more closely aligns with the ideals of participatory research; however, the staff-lead interview topics aligned more closely with the overall project aims. The salient question for this study is: In what ways, if any, does the peer-led interview process add depth and value to the available data and create a richer CBPR experience for youth? I analyzed interview and discussion data in order to understand how the two methods provided unique contributions to our results.

Supporting Vulnerable Youth

The transition to adulthood is a challenging time for young people who are already marked by risk factors like poverty. The traditional markers of this transition include life events like leaving home, finishing school, starting a full-time job, getting married, having children, etc. However, youth living today are experiencing increasing variation in the timing of these events and the successful navigation of this transition, and social class is a salient predictor of young people's success (Settersten, Furstenberg, & Rumbaut, 2005; Settersten & Ray, 2010a, 2010b; Shanahan, 2000). Compared to the 1970s, poor young people making the transition to adulthood today have decreased earning potential, as well as increased turnover in jobs and "credit constraints" that limit their ability to pay for tuition or assets (Danziger & Ratner, 2010). Parents in all social classes typically continue to support their grown children, but this may look drastically different by class, with low-income parents only able to provide the most basic assistance

(Schoeni & Ross, 2005). Poor youth are more likely to marry and have children at younger ages than middle-class youth, and are more likely to leave home before the age of 18; however, if they have not married or left home by their early to mid- 20's, they become less likely to achieve these milestones than their middle class peers (Berzin & De Marco, 2009). Youth may also experience disparate transitions to adulthood based on the level of social capital that is tied to their socioeconomic status. One study found that rural youth in Oregon with lower SES had fewer social connections and expressed lower aspirations for the future, perhaps because they had fewer opportunities for meaningful community engagement (Shamah, 2009). Vulnerable youth that experience resilience during the transition to adulthood are remarkable for their higher levels of planfulness and cognitive functioning, self-efficacy and drive for mastery, and supportive relationships with parents, mentors, friends, or romantic partners (Burt & Paysnick, 2012). If community-level factors are in place to provide extra support for low-income youth in their late adolescence, this may help them find greater success in the transition to adulthood.

Interventions targeting high-risk youth at this age have proven effective in supporting the transition to adulthood (Hadley, Mbwana, & Hair, 2010). Programs that engage youth have the potential to enhance the "Five C's" of Positive Youth Development (PYD) and increase community-level protective factors within a risk and resilience model. The theory of *developmental contextualism* posits that individuals interact with their social environments in a dynamic and bidirectional system that produces developmental change over time (Lerner, 1995). The high level of plasticity in adolescents can be drawn upon to engage them in activities that will help them to thrive (Geldhof, Bowers, & Lerner, 2013). The positive youth development approach stresses that interventions for vulnerable youth should be strengths-based rather than focusing on problems, risks or deficits (Lerner, Phelps, Forman, & Bowers, 2009; Lerner et al., 2011). By improving youth's developmental contexts and fostering engagement with the community, interventions can support youths' *competence*, *confidence*, *connection*, *character*, and *caring*, leading to the development of the young person's *contribution* to their context (Lerner, Lerner, & Benson, 2011). A national study following youth from 5th grade through high school has shown that the PYD framework can be matched to the lived experiences of young people and serves as a good model for healthy development in youth (Jelicic, Bobek, Phelps, & Lerner, 2007; King et al., 2005; Lerner et al., 2005, 2011; Lewin-Bizan, Bowers, & Lerner, 2010). The PYD approach, when used in high-quality after-school and community settings, has produced a variety of positive outcomes including decreases in risk behaviors and increases in positive self-perception and positive interactions with parents and within the community (Campbell, Trzesniewski, Nathaniel, Enfield, & Erbstein, 2013; Geldhof et al., 2013; Schwartz et al., 2010; Seevers, Hodnett, & Van Leeuwen, 2011).

In conceptualizing the *Producing for the Future* project, researchers used a *risk and resilience* framework to understand how engaging with youth in a community-based intervention could support their resilience. Masten and Wright (2009, p. 215) conceptualize resiliency as "positive adaptation in any kind of dynamic system that comes under challenge or threat". Individual, family, and community protective factors help to foster resilience. Caring adults are crucial in the development of resilience, and healthy community systems help foster resilience in disadvantaged youngsters (Lewis, 2008). Communities can encourage resiliency in young people by giving them opportunities to "participate in community life", "contribute to the well-being of others" and "connect with peers and adult mentors" (Blythe & Roehlkepartain, 1993) and providing adolescents with caring and support, high expectations, and opportunities for participation (Lewis, 2008). One way to build protective factors and PYD processes that can support vulnerable youth through the transition to adulthood is through practice of community-based participatory research with youth.

Participatory Intervention Research with Youth

For several years public health scientists have advocated for a "critical social science perspective" on health research, which would include reflexivity on behalf of researchers, acknowledging assumptions, ideology, and power structures, accepting contradictory experiences, and hypothesizing bidirectional relationships between individuals and their contexts (Eakin, Robertson, Poland, Coburn, & Edwards, 1996). Community-based participatory research, or CBPR, seeks to provide the grounding in community needs and application-based solutions that a critical social-science perspective requires. According to the work of Israel and colleagues, CBPR projects ideally "recognize community as a unit of identity; build on community strengths and resources; facilitate collaborative partnerships in all phases of research; integrate knowledge and action for the benefit of all participants; promote a co-learning process…that attends to social inequalities; involve a cyclical and iterative process;

address health from both positive and ecological perspectives, and disseminate findings and knowledge gained to all partners" (paraphrased from Israel et al., 1998). The values that tend to drive participatory research projects include "translating knowledge into action, social and environmental justice, [and] self-determination" (Cargo & Mercer, 2008, pp. 328–330). The Principles of Community Engagement published by the National Institutes for Health (2011) add that researchers should make an effort to learn about the community, build trust with the community, remember the collective and individual right to self-determination, foster awareness of community diversity, and develop community capacity for sustainability. However, Bogart (2009) points out that not all aspects of CBPR need necessarily be present in every research project, and that researchers and communities should collaboratively decide how participatory their project will be.

Participatory youth research projects vary in their adherence to the CBPR principles, based on time and resource constraints as well as differing approaches to participation. In a meta-analysis of youth CBPR projects, Jaquez, Vaugh, and Wagner (2013) found that of 399 papers published between 1985 and 2012 with "community-based participatory research" and "youth, adolescents, or children" as keywords, only 56 actually engaged youth in at least one of the phases of research. Other researchers focused on youth issues while partnering with adults, or were "community placed" but not truly participatory. Israel (1998) and others acknowledge that all research exists on a continuum between fully and non-participatory, and other researchers have noted difficulties with engaging youth as collaborators. Miscovic and Hoop (2006) cite recruitment and attendance issues, miscommunication, diverging aims of the youth researchers, and institutional requirements as major barriers to collaborations with youth.

However, leaving youth voice out of a research project that focuses on youth issues is a strategy that fails to acknowledge or question the assumptions of traditional hierarchies in research. Partnering with youth in research gives a level of validity to the findings that might not be possible in more traditional adult-youth authority structures (Delgado, 2006; Jennings, Parra-Medina, Messias, & McLoghlin, 2006). The "five phases of research" in which youth can be engaged in CBPR included 1) partnership formation and maintenance, 2) identifying needs and research goals, 3) designing and conducting research, 4) data analysis, and 5) dissemination and application (Jacquez et al., 2013) but the majority of youth CBPR projects engaged youth in between two and four of these phases. I will return to the Jaquez et al.'s phases of research to illustrate how the peer interview process fits into this framework.

CBPR can focus on evaluation as well as basic research. Wallerstein and Duran (2010) found that engaging with the community to evaluate programs can overcome some of the challenges of traditional program evaluations, such as a lack of external validity, differences in community and academic knowledge, language differences, program sustainability, and lack of trust. Teens have been shown to benefit more from programs where they feel that they have a "voice" in the programming (Sweido, Borden, Perkins 2011). By going further and truly partnering with youth in the evaluation of youth programs, young people can gain confidence and power and also build skills and social capital that will help them as they transition to adulthood (Arnold, Dolenc, &

Wells, 2012; Checkoway & Gutierrez, 2006). In a cost-benefit analysis of the Positive Youth Project, researchers, youth, and community stakeholders benefited from the participatory nature of the project by producing truly useful results, building capacity and feelings of empowerment and responsibility in youth, and developing new perspectives of young people's needs and strengths (Flicker, 2006). London, Zimmerman, and Erbstein (2003) argue that youth development *must* be linked to the organizational and community contexts in which it takes place. They assert that alienation, resentment, and negative stereotypes can result from isolating youth in a "vacuum" by failing to seek their perspective in the creation and evaluation of youth engagement programs.

Delgado (2006) makes the case that youth-led research is beneficial from a positive youth development framework in that it urges youth to seek solutions to community problems but also recognizes the strengths and attributes that will help them to navigate academic and professional settings. Delgado urges mutual respect between youth and adults with recognition for the knowledge and insights that young people bring to research. Engaging with youth in intervention research through a participatory process helps them to connect to community supports and become invested in improving their communities. Youth involved in the participatory research process were shown in a randomized, controlled trial study to experience increases in their socio-political skills, motivation to influence their schools and communities, and participatory behavior (Ozer & Douglas, 2012). Other research provides evidence for the link between participatory youth engagement in research, program planning, and advocacy with positive youth development outcomes (Benson, 2006; Checkoway & Gutierrez, 2006; Jennings et al., 2006). Youth-adult relationships are a crucial component of this process, and when adults value the work and effort that youth put into a project, it can have global effects on youths' emotional and psychological outcomes (Zeldin, Christens, & Powers, 2012). The rationale behind the *Producing for the Future* project was that applying the principles of participatory engagement with at-risk youth would help us to create an intervention through which participants developed the connections, character, resiliency, knowledge, and sense of *contribution* that would help them navigate the transition to adulthood.

Youth Gardens

The rate of fruit and vegetable intake is low among both adolescents and adults in the U.S., and the proportion of adolescent respondents who met the recommended intake of dark green, orange, and legume vegetables on the 03-04 National Health and Nutrition Examination Survey was less than one percent (Kimmons, Gillespie, Seymour, Serdula, & Blanck, 2009). Low income youth, especially females, are susceptible to obesity because of a lack of parental monitoring, stress, limited opportunities for exercise, and skipped breakfasts (Lee, Harris, & Gordon-Larsen, 2008). Other factors that may influence disparities in health and nutrition include limited access to healthy foods or the presence of food deserts, the relative expense of healthy or organic foods, limited access to cooking and nutrition knowledge, and lack of time, energy, or equipment to prepare meals from scratch.

Youth gardens have been implemented through school, after-school, and community programs as a successful intervention strategy for improving youth health and nutrition and for increasing youth access to and awareness of fruits and vegetables

(Beckman & Smith, 2008; Bolger, 2011; Gatto, Ventura, Cook, & Gyllenhammer, 2012; Langellotto & Gupta, 2012; Lautenschlager & Smith, 2007b; Robinson-O'Brien, 2009). Other researchers have studied the broader individual and community-level outcomes of youth gardens, such as positive development, science and environmental education, cultural appreciation, poverty mitigation, and community beautification (Allen, Alaimo, Elam, & Perry, 2008; Hilgers, Haynes, & Olson, 2008; Lautenschlager & Smith, 2007a). One qualitative study reported that the ability to work with local adults and donate excess produce impacted how urban youth saw themselves as both competent individuals and members of the community (Allen et al., 2008). Another study followed youth as they ran produce stands at three local high schools. While the programs varied enough to make comparisons challenging, they found that all youth experienced increased professional skills, and youth at some sites increased their fruit and vegetable intake during the program (Sikic, Erbstein, Welch, Grundberg, & Miller, 2012). One participatory study involving low-income youth gardeners produced descriptive statistics indicating that low-income youth and their families would benefit from a gardening program based on previously held attitudes toward gardening (Zoellner, Zanko, Price, Bonner, & Hill, 2012). However, *Producing for the Future* was unique in its attempts to engage at-risk adolescents and young adults in designing, managing, and evaluating a youth garden with micro-enterprise, nutrition, and community donation components.

The Peer Interview: Theoretical Perspectives

Adolescence is an important time for young people to develop a sense of identity within community. Lerner (1994) and other researchers' work on adolescence is guided by the concept of *developmental contextualism,* which posits that the individual organism is "fused" with their environment over the course of development through constant and dynamic interactions between variables and across levels. Under this framework, children and youth influence their own development through bi-directional interactions with others in their context, and adolescents strive to make intentional choices and sculpt their own developmental pathways. Research shows that during the later teenage years, adolescents begin to combine their different context-dependent behaviors into solid and consistent self-identities (Harter & Monsour, 1992). Peers play an important role in adolescent development, and peers can influence individuals' self-identity in both negative and positive ways: youth may encourage one another to engage in more academic or pro-social behavior, or they may cause each other to engage in "false self-behavior" in which they act in ways that are disparate with their self-identities (Steinberg & Morris, 2001).

Symbolic interactionism provides a theoretical perspective that helps to guide the research questions for the peer-interview data. Mead conceptualized the *generalized other* as a way of viewing the self from the perspective of other individuals (1934). Many researchers understand *identity* as a context-specific construct which directly influences the *behavior* of an actor in any given situation. As adolescents transition through an identity-development stage (Steinberg & Morris, 2001) they may use interactions with different people throughout a research project to try out different *roles* (White & Klein, 2008) and play with different self-concepts. Under the concept of the *definition of the situation,* that which we define as real has real consequences for our attitudes and behavior (White & Klein, 2008). Therefore, if an adolescent perceives that the individual with whom they are speaking is a significantly different audience, they are likely to enact behaviors to fit an expected role of that audience. Such a change in behavior (interacting with adults vs. interacting with peers) might affect the quality of the data derived from an interview, as well as how the subject thinks about the research process in the future.

Research with youth requires a careful balance of power and a willingness to venture outside the bounds of traditional research (Delgado, 2006). Qualitative research methods that have been implemented in youth research include key informant interviews, focus groups, Delphi process, community forums, and community mapping. Other less traditional methods in participatory youth research incorporate various media, as in photo-voice, photomapping, or videography methodologies (Adams, 2008; Buck & Cook, 2010; Margolin, 2009). However, few resources exist that describe peer interviews as a methodology that is useful in engaging youth in the research process. In *Utilization-Focused Evaluation* (2008) Patton describes an evaluation in which he used participant-led interviews, but subjects did not engage in either question creation or data analysis. Patton found the process useful to meet time demands as well as for developing group cohesion in the intervention, but did not mention benefits of the process to the quality of the data. Researchers have asked respondents of all ages to conduct one-another's interviews as a means to achieve a higher level of participation and engagement in both research and interventions, for example: autistic children interviewed one-another on ideas about sharing (Menzies, Waller, & Pain, 2011), youth in an alcohol use prevention program conducted clinical interviews (Graham, Tatterson, Roberts, & Johnston, 2004), and nurses interviewed one-another during the hiring process at a hospital (Allen et al., 1998). Peer interviews were also conducted in a study on people's views about animal use, and a small subset of participants conducted peer interviews in a project designed to seek youth's views on local health care (Jackson, 2003; Knight & Barnett, 2008). However, in all of these studies, interview scripts were designed and analyzed by researchers.

Fewer studies have attempted to engage participants more fully in the design and analysis of a peer-interview methodology. One participatory research study engaged a group of youth in designing and implementing peer interviews about LGBTQ youth experiences, and the group used the interview transcripts to create a theater project for their school (Peters, 2003). However, the article focused more on the youth's findings than their methods. Few researchers have used a truly participatory approach to the design, implementation, and analysis of interviews with youth, and none have described what value more participation in interviewing may add to the research process.

Researchers in the *Producing for the Future* project implemented a participatory research method aimed at collecting information on the health, well-being, and social connections that low-income youth formed through working at youth gardens in two communities. By collecting and analyzing data on the youth experiences and perspectives throughout the process of conducting a participatory interviewing methodology, I have been able to fill a gap in the literature and describe in detail a new and innovative approach to encouraging youth participation in research.

Methods

CBPR Approach and Intervention Design

Because there is considerable diversity in how researchers and communities engage with participatory research (Cargo & Mercer, 2008; Horowitz, Robinson, & Seifer, 2009; Israel et al., 1998), it is useful to discuss the specific aspects of a given project that make it participatory. *Producing for the Future* (PFF) engaged CBPR in a variety of ways, namely in that it was situated within the community and motivated by community goals. The principal investigator approached community stakeholders with a grant opportunity for faith-based partnerships to reduce childhood obesity. Based on previous relationships developed through program evaluation, she collaborated with community members and organizations to design a youth garden project. Community partners were approached to help with recruitment of youth participants and adult mentors, facilitation of workshops, and design of research questions. Research staff engaged youth and community members in designing several aspects of the garden program including its physical layout, micro-enterprise activities, nutrition curriculum design, and garden workshops and events. Project staff valued participants' time by providing research incentives and sought youth input into research activities, workshop facilitation, and garden management. Youth participants encouraged community buy-in through selling at farm stands and farmers markets, hosting and attending community events, and donating excess produce to local organizations.

The intervention supported the development of human capital by providing youth with workshops on food security, research, gardening, cooking, and microenterprise skills. Youth engaged with the community to develop social capital and encourage community-level change, and analyzed this process using multiple tools, including the "Community Capitals Framework" workshop (Emery & Flora, 2006), cross-garden peer interviews and a subsequent joint discussion, and unstructured group discussions at each garden. Youth resilience, community protective factors, and PYD outcomes were supported by encouraging youth-adult connections with mentors and other community members through field trips and microenterprise interactions. Finally, PFF was able to fund and facilitate the development and implementation of community-specific plans to transition both gardens to sustainable projects during the third year.

The research questions of the PFF project evolved over time with contributions from youth, community members, and research staff, and included questions about youth and community development, youth skill building and health outcomes, and evaluative feedback on the project. Although research staff took the lead in some stages of the project, we continually sought out and incorporated youth feedback into all aspects of the research.

Sample

The sample in this study includes a subsample of the participants of the PFF project. In the PFF sample, 30 youth (15 in Peartree, 15 in Mountainside) aged 16-25 participated fully in the intervention and data collection[2]. These young people were recruited on a first-come/first-served basis through intercom announcements and visits in

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[2] "Full participation" meant that these youth contributed 35 hours of initial volunteer time to garden development before receiving at least a partial research incentive, and participated in data collection during the project.

local high schools, direct referrals from guidance counselors, email lists that went out to local college students interested in sustainable agriculture, and word of mouth. They were primarily white, and all were self-reported as low-income, meaning their households made less than 200% of the national poverty line or they were eligible for free and reduced lunch. The average amount of research incentive received in a year was $1,005, the equivalent of working more than 100 hours over a period of 4-6 months.

Peer interview subsample. The PFF research methods included interviews, structured and unstructured discussions, ethnographic observation, journaling, video and photography, and meeting notes. In total the project data includes 65 interviews including entrance and exit interviews conducted by staff and peer-led interviews. The peer interview study utilizes a subsample of this data, including only those youth gardeners who participated in the peer interview and joint discussion processes and a comparison group of youth who participated in both entrance and exit interviews but not in the peer interview. (Eleven participants either actively or passively opted out of entrance or exit interviews.)

Eight youth gardeners completed an entrance and exit interview, but did not participate in the peer interview; eleven participated in entrance, exit, and peer interviews; three additional youth participated in some but not all of these interviews. These 22 youth comprise the peer interview study subsample. For the purpose of the peer interview study, the sample will be broken up so that those who completed the peer-interview process as well as the staff-interviews will be labeled the peer interview or "PI" group, and those who did not complete the peer interview but completed the staff interviews will be referred to as the comparison, no peer interview, or “No PI” group. Including entrance, exit, and peer-led interviews, 33 interviews were analyzed from the PI group, while 16 were analyzed from the No PI group. Of the youth gardeners in the PI group, nine were female and two were male. Seven females and one male youth gardener comprised the No PI group. Three additional youth (two female, one male) did not fall into either the PI or No PI groups, but contributed data that was used in some parts of the analysis[3,4,5]. All staff members were female. Also, two adult community volunteers (one male, one female) participated in the group discussion. Table 1 lists the names and the data collected from each youth participant in the peer interview subsample. Overlap and missingness is noted in footnotes, and will be addressed in the analysis section. Table 2 lists the names of youth in each interviewing pair.

Table 1: Peer interview subsample of participants and data collected

Name	Group	Location	Entrance Interview	Exit Interview	Peer Interview
Anita	PI	Mountainside	X	X	X
Beth	PI	Mountainside	X	X	X
Elizabeth	PI	Mountainside	X	X	X
James	PI	Peartree	X	X	X
John	PI	Peartree	X	X	X
Julie	PI	Mountainside	X	X	X
Lena	PI	Mountainside	X	X	X
Lisa	PI	Peartree	X	X	X
Lynette	PI	Peartree	X	X	X
Sharon	PI	Mountainside	X	X	X
Theresa	PI	Peartree	X	X	X
Angela	NoPI	Peartree	X	X	
Anna	NoPI	Mountainside	X	X	
Emma	NoPI	Peartree	X	X	
Holly	NoPI	Mountainside	X	X	
Jennifer	NoPI	Peartree	X	X	
Josh[3]	NoPI	Peartree	X	X	
Marie	NoPI	Mountainside	X	X	
Paul	NoPI	Mountainside	X	X	
Jack[4]		Peartree	X		X
Tina[4]		Mountainside	X		X
Amber[5]		Mountainside	X	X	[X]

[3] Josh was present during the peer interviews and was recorded asking interview questions of Sharon, but Josh declined to answer peer interview questions or participate in the joint discussion himself, and so is considered a NoPI group member for the purpose of this study.
[4] Jack and Tina opted out of exit interviews, but participated in both peer interviews and joint discussions. Their data is used in stages 3 and 4 of my analysis.
[5] Amber was paired with Anne, a staff member, during peer interviews due, to uneven numbers. Her inputs to the joint discussion were used during stage 4 of my analysis.

Table 2: Peer interview pairs

Mountainside Participant	Peartree Participant
Amber[5]	Anne[5]
Anita	Jack[4]
Beth	Theresa
Elizabeth	James
Julie	Lynette
Lena	John
Sharon	Josh[3]
Tina[4]	Lisa

Data Collection

Peer interviews. I conceptualized the peer interview process based on Patton's *Utilization-Focused Evaluation* (2008), although the process that Patton described did not involve participants in the development or analysis phases of the interview. When the research staff conceptualized the peer interview process, we envisioned a data collection tool that would more accurately represent the youths' perspectives and engage participants more fully in the participatory aspects of the project. The peer interview process was designed to engage youth in the CBPR process by (1) including capacity building through hands-on learning about designing and conducting interviews, (2) asking youth to decide on interview topics and work together to write questions in their own words, and (3) involving participants in collaborative analysis of data through a debriefing process. This aligns with the specific aims of CBPR projects to facilitate collaborative partnerships, build on the strengths of the participants, promote co-learning processes, and foster diversity (Clinical and Transitional Science Awards Consortium, 2011; Israel et al., 1998).

The peer-interview process took place from June-August of 2012. During the question design phase, PFF researchers began by holding discussions at both gardens about the components of successful interviews, and then had small groups develop interview questions. As a prompt to develop interview questions, research asked participants to think about what they would want to know about youth from the other garden. Due to differences in the meetings at which the topic was discussed (Mountainside had a small group, Peartree had a larger group) the processes were slightly different – Mountainside gardeners spent time editing and prioritizing their questions, while Peartree gardeners did not. Ideally, each garden would have spent time editing the questions for clarity, overlap, and adherence to shared project goals. However, with two groups and a short amount of time, staff effort was necessary to edit the combined interview for length and overlap of questions. Ten youth, two volunteers and one staff member were engaged in question formation in Peartree, and in Mountainside four youth and three staff members contributed to the discussion. Twenty questions were collected from Peartree participants, and ten from Mountainside. The edited interview contained twelve questions, some of which were used verbatim from the gardeners and some of which were rephrased to include themes that arose in both gardens. Topics included in the peer interview were: garden influences on diet and health, favorite vegetables, effects on life/home/family, opportunities in the community, community/family perceptions of gardening, activities/microenterprise components at the garden, and suggestions for project improvement. Topics that were edited out of the final interview include: challenges/feeling uncomfortable at the garden (topic was re-phrased to “constructive criticism”) and “what portion of the garden do you consider alive and why?” (this question did not align with project aims and was not a repeated theme of interest for youth). Appendix A provides the peer interview guide. Questions were compiled and edited by staff, and the process was approved by the OSU Institutional Review Board.

Youth from both gardens met at a joint meeting in August of 2012. Youth from Peartree met that morning and rode by van to meet Mountainside youth at their garden. The day had a decidedly “field trip” feel to it, and involved team-building activities and workshops in the morning lead by OSU research staff, a lunch of pizza and salad from the garden, and an afternoon trip to a local goat farm. The day was interspersed with icebreakers, games, and ample time for casual interaction between participants. OSU researchers conceptualized the joint meeting as a chance for gardeners to meet and learn about one another, to contribute to the research of the project, and to have a fun learning experience.

As part of the morning session, youth conducted the peer-led interviews. The entire group first participated in a brief workshop on effective interviewing strategies. The workshop took place around picnic tables near the Mountainside garden. After the workshop, they were asked to pair with a member of the opposite garden. Pairs were not formally assigned but were selected on the spot by youth. Each pair was given an audio recorder and two interview guides on which they could take notes. Pairs sat together in the grass around the Mountainside garden to conduct the interviews. Most pairs conducted two interviews consecutively, with one participant playing the role of interviewer through the entire guide, and then switching roles (the only exception was

Anita and Jack, who both answered each question before moving on to the next.) Youth were able to take as much time as necessary to complete the guide; some took substantially longer than others. Staff circulated periodically to answer questions and check that audio recorders were functioning, but generally maintained distance from the dyads so that youth could feel comfortable sharing feedback. Immediately after the interviews, the youth and adult volunteers participated in a group discussion led by two non-coordinator staff members, inside a meeting room of the adjacent church and away from garden coordinators and the PI. The discussion was recorded, and covered topics including: comparisons between the operation of both gardens; comparisons between garden participants from both sites; comparisons between the communities in which the gardens were located; and major impacts of the project on participants. The discussion represented a way for youth to debrief on what they had heard in the interview and compare experiences with one-another.

Through the peer interview process, youth were able to participate in designing, conducting and analyzing a research experience. This aligns with Jacquez and colleagues' research phases two through four (identifying needs and research goals, designing and conducting research, and data analysis) that are described as the most common phases in which youth research participants collaborate (Jacquez et al., 2013).

Staff-led interviews. The staff-led interviews followed a more traditional research approach. PFF staff and researchers developed interview guides and conducted interviews. Participants were formally interviewed twice during the project, once at the beginning of their participation and once at the end (regardless of whether they participated for one or two years). Where possible, staff interviewed participants with whom they had not interacted during the project: undergrad and graduate research assistants were assigned to work with one of the gardens, but interviewed youth from the other garden. The goal behind this strategy was that youth would feel more comfortable sharing feedback or criticisms with staff members by whom they were not supervised, and could discuss any disagreements they might have with garden management. Initial interviews were conducted primarily by undergraduate research assistants and other staff, while exit interviews were conducted by graduate research assistants, who served as garden coordinators. Interviews were held during work parties and monthly meetings, and were generally between 10 and 30 minutes in length. The research assistants conducting these interviews usually had several to get through in a day, and sometimes felt pressed for time. In order to be interviewed, subjects had to leave group activities at each garden and sit with the interviewer either inside the church or outside and around a corner. Similarities between peer and staff-led interview questions lie in broad topic areas, including the best and worst parts of the garden, how youth talk to friends about the project, and social connections made through the garden. The staff-led interviews covered topics that the peer-interviews did not, including: expectations for the project, personal goals during the project, and future goals after the project. The exit interviews included additional themes not explored elsewhere: what the participants learned about gardening, marketing, and CBPR, and how they engaged in CBPR during the project. Appendices B and C contain a full list of staff-led interview questions.

Methodological Limitations

There are some potential challenges affecting the analysis of the peer-and staff-led interview data. This first lies in the differing ages and life stages of participants. Because the peer interview took place during Year 2, all peer interview group members either started in Year 1 and continued, or started in Year 2, therefore that group is not representative of any gardeners who only participated during Year 1. (Year 1 participants in Peartree were all college-aged and attending a community or state college, and so were a markedly different sample than the high school students who comprised the other groups.) However, the comparison group includes first-year, second-year, and multi-year participants, so it was a more representative sample.

There is also evidence that the members of the groups were dissimilar in their predispositions to research and interviewing, judged by variable levels of rapport during staff-led interviews. The high variability between members in the two groups made across-group comparisons (between the No PI and the PI groups) challenging, but within-group comparisons between group members were more easily accomplished. Because the sample presented me with an easily accessible comparison group, I made the judgment that including a comparison group would be preferable to limiting my analysis to peer-interview group data, regardless of potential limitations. For this reason, the analysis of these data includes both between-group and between-person comparisons, and focuses on the quality of interactions between interviewers and subjects in both groups.

Some limitations of the study relate directly to the CBPR process. The question refining process was not completely youth driven in the case of the peer interviews. Staff had the final say of what questions were included and how they were worded, though they attempted to be true to the topics and wording originally posed by the youth. Similarly, there was not ample time for youth to engage in analysis beyond the "debriefing" discussion immediately following the interviews. If time constraints had been reduced, the youth could have engaged more fully in refining the interview questions themselves, and in developing thematic codes for the interviews. My thesis will address the degree to which youth participated in the process as researchers, and how their voice affected the analysis of the data.

Overall this is a small data set with some limitations, but it provides rich data on both the group-level thought processes and individuals' levels of engagement with the research. There are ample data to analyze, and the small size of the sample enabled a deeper analysis of each interview. Analysis of the peer interview and comparison group data was undertaken in such a way as to describe the outcomes of the process in as much detail as possible.

Analysis Strategy

Matthews (2005) presents a poetic description of qualitative analysis as "a creative process that requires spending a great deal of time with the data" which applies to the analysis process for the *Producing for the Future* data. All PFF data were transcribed and coded using MaxQDA data analysis software. The content analysis began with a small team reading through all data and developing a list of themes. This list was sorted into major categories, which were then applied to the data as content codes. We then re-read through the coded data to develop sub-codes which were then applied to the data. Our analysis was grounded in the research questions of the project and in the theoretical frameworks provided in the literature review, and was also guided inductively by youth voice and by direct observations made of the youth and the communities by research staff. For the purpose of this paper, “content analysis” or “content codes” refer to the coding scheme developed by the PFF research team to analyze the main research questions of the garden: 1) How did participation in the garden and microenterprise programs influences participant’s food and diet, skills and knowledge, individual development, and relationships? 2) How did mentorship play a role in the garden program? And 3) what feedback did the youth have about the garden and research processes? Content codes formed the basis for evaluation of the garden project, but do not categorize the process that youth undergo as they engage in participatory research activities like the peer interviews and joint discussion.

For the purpose of this thesis, *process analysis* refers to the analysis of the PI/No PI subsample. Because I began with several research questions and a complicated data organization structure, I took a four-staged approach to analyzing the peer interview and joint discussion data and applying process codes. The staged approach allowed me to separate the data and my research questions into more manageable chunks and also compartmentalize the results into thematic sections.

In the first level of analysis, I systematically developed my coding scheme as I made an initial read-through of the data, and then I applied themes as codes in a second read-through. I included staff- and peer-led interview data from the 11 peer interview group members and the eight comparison group members, 49 interviews in total. I read the interviews in sequence (entrance/peer/exit for PI, entrance/exit for No PI) for each person, in order to understand 1) how each participant developed their own themes throughout the project and 2) the differences between staff- and peer-led interviews for each member of the PI group. I then re-read through the data for the PI and No PI group members to apply these themes.

Stage two of my analysis involved an across-person comparison of interview data. I grouped the 49 interviews from the peer interview and comparison groups by type (entrance, peer, and exit) and conducted counts to measure the number of instances of rapport and tangents within staff and peer-led interviews. This allowed me to make inferences about the factors that allowed staff or youth researchers to obtain more or less rich answers from their subjects. I also looked for overlaps between content codes and my own coding system to understand how rapport or tangents influenced the usefulness (i.e. overlap with of content codes) of the data.

Stage three involved listening to audio recordings for a deeper understanding of the individual factors that influenced interviewer-subject rapport in peer-to-peer interactions. Because I focused on the peer interactions in this stage, I included peer interview transcripts from Jack, Josh, and Tina, who were not in the original PI group. This allowed me to listen to all of the available data in which two participants interviewed one-another (7 pairs, 14 interviews). I also included staff-led interviews with Jennifer and Josh for comparison. The analysis in this stage focuses primarily on the differences in apparent rapport between pairs of participants in order to understand what factors led to rapport. Because I had observed all of the participants in this group, I was able to reflect on what individual personality traits might influence the rapport between a given respondent and interviewer.

In the fourth stage of my analysis, I read through the joint discussion that took place after the peer interview process in order to understand how useful that element was to researchers. (The joint discussion included responses from two adult volunteers as well as youth who participated in the peer interviews.) I looked for themes that came up in the discussion and determined how often they had been coded in other sections of the data, to see if researchers would have noticed these themes had the peer interview process had not taken place. This allowed me to understand how the peer interview process contributed specifically to our research outcomes, and what insights the youth themselves brought to the research findings.

I approached this project with the intent to understand how staff and participant-led interviews might differ. Being a staff member of the project myself, this meant that I needed to take a critical standpoint on my own participation in the process. Critical Discourse Analysis is a practice that acknowledges both the inherent power dynamics that exist in discourse at an individual or cultural level, as well as the ways in which discourse serves to construct the social world (Bloomaert & Bulcaen, 2000; Toolan, 1997). I found CDA to be a useful framework for taking a critical stance on the research. I questioned how perceptions of power based on age might influence the results of an interview, as well as how the youth engaged in social construction and meaning-making during the joint discussion. As I engaged in the coding scheme with a critical standpoint, major themes emerged that I interpreted to be meaningful in the interviewer-subject interactions.

Coding Themes

Rapport. DiCicco-Bloom and Crabtree (2006) argue that emotional connection between the researcher and the respondent through rapport is vital in order to capture the truth of the respondent. I took their lead and conceptualized rapport as the relationship between the interviewer and the subject of each interview. The four stages of rapport include *apprehension*, *exploration*, *cooperation*, and *participation*; (DiCicco-Bloom & Crabtree, 2006) the goal of the interviewer is to move the relationship into the *exploration* and *cooperation* stages so that the respondent can let their guard down and talk more candidly. The *participation* stage, in which the respondent takes responsibility for guiding and teaching the interviewer, is seldom reached in single interviewing sessions. However, establishing a strong rapport and reaching the *participation* stage may be one of the ways in which interviewers can build reflexivity and critical perspective taking, which Kvale (2006) argues is crucial to deconstructing power and privilege in the interview process. In this way, rapport may be a key to developing a truly participatory interview methodology.

In Martin Buber's (1937) classic work on rapport and relationships, an I-Thou relationship with other humans is seen as preferable to an I-It relationship, assuming that "It" is an object that can be measured and known, while "Thou" is a subject that can divulge information but cannot be truly known or merely experienced by another subject. Research in marginalized communities has historically taken an I-It approach, but current writings on qualitative methodologies (Delgado, 2006; Few, Stephens, & Rouse-Arnett, 2003; McCorkel & Myers, 2003; Miskovic & Hoop, 2006; Reich, 2003) suggest that an I-Thou approach is necessary when working with any human subject, but especially those from widely divergent or marginalized backgrounds. Therefore, a consideration of the rapport of an interview, or the tone that the interviewer and subject take with one-another, is necessary when considering whether the research subjects' perspectives have been recorded accurately and fully.

Researchers working with human subjects often fall into the two oppositional camps of conversational vs. standardized interviewing. Standardized styles of interviewing minimize interviewer error but also minimize rapport, while some studies suggest that conversational styles might produce answers that are more truthful and representative, but also have more room for error because of a desire for the respondent to please the interviewer (Japec, 2006). When Goudy and Potter (1975) attempted to correlate rapport as perceived by the interviewer, they found that the only variables that correlated well were themselves subjective signs of rapport, including subject responsiveness/evasiveness and difficulty of the interview. Similar work suggests that rapport should be optimized, not maximized, in order to achieve the most valid data. Seidman (2006) cautions against an overly friendly rapport in interviews, noting that accurate representation of the subject's experience can be compromised by an interviewer who is too interested in friendly relationships and sharing their own experience. He suggests an "I-Thou" relationship as being preferable to a "We" relationship, because subjects need to feel like they have a unique perspective to provide that the interviewer has not yet experienced. The need of the respondent for a more authoritative interview will also vary by cultural perceptions of authority and hierarchy (Japec, 2006), which is relevant for my study as it relates to interviewer's age and respondent's age-graded expectations for interactions. Perceptions of power differentials based on age and authority may be difficult to overcome even within collaborative research (Deutsch, 2008; Miskovic & Hoop, 2006) therefore a comparison of rapport as evidenced in staff- and peer-led interviews will help clarify how age and authority play a role in our data collection processes.

Tangents. Tangents and off-subject remarks are signs of data quality that may or may not provide useful data. For the sake of this study, a tangent was a segment of conversation that did not relate specifically to the question being asked. Although the term "tangent" would suggest a negative connotation, I had seen evidence that tangents in the peer interviews might provide useful data, and I wanted to more thoroughly study this question. For example, one interview (conducted by staff) contains a vignette about what the participant will do with the research stipend. Although this is not a pre-determined topic in the staff-led interviews, as we coded this section we understood the question of managing one's own finances was a way in which participation in the garden contributed to goal-related behaviors. Because participants designed the peer interviews, the questions therein represent their own research interests, and tangents that are present in the data may similarly reflect youth research interests. If the youth are engaging in the research process and considering the possible research-related outcomes of their conversations, tangents should be more useful than not, as youth take a conversational approach to answering their own research questions.

Youth synthesis. The participatory nature of the study means that we have emphasized and prioritized the incorporation of youth and community perspectives. Ideally, participants in CBPR projects are invited and encouraged to contribute to the data analysis process (Israel et al., 1998). However, because of time and funding, we were unable to engage youth researchers in the formal coding process. Therefore, the youth perspectives presented in the joint discussion provide an invaluable source of informal analysis that can be incorporated into our final results, along with other informal analysis including the Community Capitals workshops and other group discussions. I tried to understand how the joint discussion process impacted the content analysis of the PFF project by comparing code counts and looking at the qualitative themes that emerged from the joint discussion.

Final Coding Scheme. The concepts *rapport, tangents,* and *youth synthesis* informed the coding scheme that I developed to analyze the peer interview subsample. The major categories for the thematic codes were *Themes, Data Quality,* and *Youth Synthesis*. Table 2 provides a list of the main codes and second and third level subcodes used in the process analysis of the peer interview data.

Table 3: Process coding scheme for peer interview and joint discussion data.

Coding Scheme
Themes
PI/No PI groups
(Organized by participant ID)
Data Quality
Rapport
Subject depth
Interviewer depth
Both depth
No depth
Tangents
Probes
Youth Engagement
Youth synthesis

Due to the inductive approach, only some codes and sub codes were used in the final process analysis of the peer interview study. *Themes* referred to individuals' construction of their own research themes over time, but it became apparent that the data were too rich to include this analysis in my thesis. *Data Quality* included sub-categories *rapport, tangents, probes,* and *youth engagement with research*. *Probes* did not produce a meaningful set of data, and neither did *youth engagement with research*. I limited my discussion of *youth synthesis* to a group-level analysis of the joint discussion data.

Because of my participation in the *Producing for the Future* project and my growing interest in participatory methodologies, I was motivated to conduct this analysis and understand what the peer interview process brought to the research. The results show that interactions during the peer interviews were substantially different than those in the staff-led interview processes, and that both had advantages and drawbacks within the frame of our project.

Results

Interviewer-Subject Interactions

The interactions between interviewers and respondents in both the staff-led and peer-led interviews were the main source of data for my first, second, and third stages of analysis. I organize the findings below around *tangents, rapport*, and the third stage of my analysis, listening to selected interviews. The data show that *tangents* and *rapport* are correlated with data quality, and are differentially evidenced in staff and youth interviews, and aural cues in the peer-led interviews gave me a deeper understanding of the correlates and outcomes of peer-to-peer *rapport* in interviews.

Tangents. Often tangents were questions or asides added by the interviewer after the initial question was answered, but sometimes they were brought up by interview subjects. They were different than *probes* in that they did not relate to the question on the interview guide but instead to the interests of the participants. I considered an aside to be a "tangent" if it spurred additional conversational exchange beyond the initial question and answer.

The following example of a tangent comes from the peer interview data, collected at the August, 2012 joint meeting. In it, Lynette, a high-schooler from Peartree, asks Julie, an older high school student from Mountainside, questions from the interview guide. The two have a conversation about some of the answers.

Example 1 for Tangents, from the peer interview group:

Lynette (Peartree). Why did you stay with the project?
Julie (Mountainside): Obviously I need the money. But I like to teach, and I have a lot to teach other people, and I love gardening. And I have a lot of

friends here. It helps get away from other problems in life, for a little while.

3 Lynette: That's how I feel too. What do you teach them? Do you teach them like, what to plant?

4 Julie: I know a lot about gardening. I mean a lot. I keep up with Anne, so. So I can teach whatever you want to know.

5 Lynette: That's awesome. How would you cook beets?

6 Julie: Beets? You can boiled them or bake them, or shred them in a salad, they're good.

7 Lynette: I didn't think of shredding. I keep getting them and I don't know what to do with them, so.

8 Julie: Um, cut the greens off, and boil them, and when it's done it will be fork tender, and then you just peel the skin off and eat it.

9 Lynette: That doesn't sound bad.

10 Julie: Or you can cut it up and bake it like a potato.

11 Lynette: Like beet chips.

12 Julie: Beet chips? I should try that.

In segment 3, Lynette asks a probing question about what Julie teaches to other participants. Then in segment 5, the conversation changes course as Lynette asks Julie how to prepare beets, which is tangential in that it not in the interview guide. This gives Julie a chance to demonstrate her knowledge and self-confidence as a teacher. The two share evidence that they are interested in experimenting and learning more about diet and nutrition, which is an outcome that we hoped for from the nutritional component of the project. These data move beyond the research questions to show a process of peer-to-peer education, an outcome that we had not anticipated, but which was evident in several exchanges.

Tangents: detriment or benefit? The preceding interview section raises an interesting question: Are tangents a benefit or a detriment to research? In the peer interview subsample, they seemed to be a benefit, as they were almost all useable data. Out of the 26 segments that were coded as "tangents" in the peer and staff-led interviews, only one was not also coded with content codes. While tangents may not have related specifically to questions from the interview guide, they generally tied back in some way to the research questions of the project. As in the excerpt above, tangents may actually increase data quality, because they can lead to conversations that are meaningful to the research questions of the project, regardless of how well they relate specifically to the interview questions. In the excerpt below, James and Elizabeth have a rambling conversation about monetary goals during the peer interview:

Example 2 for Tangents, from the peer interview group:

1. James (Peartree): So, with the money that you would get from the project, what are you planning on doing it with it?
2. Elizabeth (Mountainside): I want to get my ears pierced and I was thinking about getting a tattoo. I want to get one on my foot.
3. James: Oh cool, so what would it be?
4. Elizabeth: Um, I want to get on this foot and I want it to be a 3d staff of music, and a treble clef in a song and right under it I want it to say “I have had singing”.
5. James: Oh. You’ve had –
6. Elizabeth: Oh, I am a choir nerd.
7. James: Oh, so am I! So that’s cool. I can understand that.
8. Elizabeth: I also owe my dad $400 so I’m paying him back that money.
9. James: Oh, well that’s responsible.
10. Elizabeth: Yeah, he, I go to choir trips and he paid for half of my first one and I owe him money for breaking his camera. So…

Segments 3 through 7 represent the tangential elements of this exchange, beginning with the off-topic conversation about tattoos. Segment 6 gives the two participants a basis for shared experience (being in choir) from which to move forward. Elizabeth then returns to the interview question, remembering the choir trips in segment 10 after her memory is jogged by defining herself as a “choir nerd” in section 6. This exchange continues well after the quoted section, as Elizabeth talks about what her father considers a necessity vs. a luxury (soap vs. shaving cream) and her other uses for the research incentive (including for gas to drive to the garden). The long exchange between the two shows that they are building a level of familiarity with one-another through conversation. James does not move to interrupt Elizabeth by asking the next question, he simply continues to engage with her in conversation, and shows genuine interest in her answers. During the conversation, Elizabeth returns several times to provide additional answers the interview question. If James had rushed the interview to the next question, we may not have seen that Elizabeth takes considerable responsibility for her own finances. This added some insight on Elizabeth's family interactions around money.

Comparing staff and youth tangents. To compare the level of tangents between peer and staff interviews, I compared the likelihood of tangents within both sets of interviews. Table 3 splits the data into three groups: tangents evident in peer interviews, from interviews conducted by staff with participants from the peer interview group, and from interviews conducted by staff with participants from the comparison group.

Table 4: Rates of tangents evident in interview data.

	Peer interviews (in PI group)	Peer interview group (PI group) – staff-led interviews	Comparison (No PI) group	**Totals**
Interviews including tangents	7	4	3	**14**
Interviews without tangents	4	18	13	**35**
Total interviews	**11**	**22**	**16**	**49**
Total # tangents	**15**	**7**	**4**	**26**
Rate (total # tangents/total # interviews)	1.36	0.32	0.25	**0.53**
Ratio (# interviews with tangents/# interviews without tangents)	1.75	0.22	0.23	**0.4**

This comparison demonstrates that the participants in the peer interview group enacted different behavior as subjects of peer-led interviews than as subjects of staff-led interviews. Nearly two-thirds of the peer interviews conducted by participants included tangential segments, while fewer than a quarter of those conducted by staff did. Both the rate of tangents per interview and the ratio of interviews with tangents to interviews without tangents for the peer-led interviews was considerably higher than the rate for staff-led interviews, which was similar between the PI and No PI groups. Below is one of the few tangents in the staff-led interview data, from an exit interview between Hope, a graduate student, and Holly, first-year gardener and high school student from Mountainside.

Example 3 for Tangents, from the comparison group:

1 Hope (Interviewer): …Did you form any lasting connections with project participants, mentors, or staff? How do you see these connections benefiting you or the others in the future?
2 Holly (Mountainside): Well, I know one of my friends, like we weren't really close, we didn't talk that much before the garden, and then we became a lot closer, like we talk a lot more and stuff, like after the garden project. I think it… kind of helps too, like I know there's something else I can use on an application for scholarships or school, and that's really nice to have too. And I always have those people, like the staff, they'll always help me do that.
3 Hope: Yeah. Mm, are you a senior this year?
4 Holly: Yeah.
5 Hope: Have you been looking for scholarships to apply for and stuff like that?
6 Holly: [nods]
7 Hope: Mm-kay. That's a big process.
8 Holly: Yeah, um, the college I'm going to is 30 thousand a year. So that doesn't help.
9 Hope: Oooh. Well, hopefully this kind of project will look really good on your resume. And I'm sure Margot would let you use her as a reference, too, to write an application, a letter of recommendation.

In this excerpt, Holly talks about how she is reaching her goals for attending college. The question focuses on relationships made in the garden that will benefit the gardener in the future. The interviewer, however, is interested in the process of college application that the gardener is going through, and in segment 3 and 5 asks how far along she is in school and if she is looking for scholarships. In segment 8 we discover that Holly's goal is to attend a private university. We would not have known this had the interviewer not asked about the process of applying for scholarships, which is not specifically on the interview guide.

This excerpt is exemplary of the staff interviews in some ways. In the episodes of tangents during staff interviews, the subject of the tangent covered topics that one might expect a mentor to discuss with a mentee. Jobs and schooling were reoccurring themes for tangents in these interviews, which was indicative of the relationships that several youth developed with staff during our project. Even for staff who had not met their interview subjects before the interview, this was the case. In the peer interviews, however, youth often asked a question or remarked on something that they were personally interested in. In the excerpt above, Hope is interested in Holly's college applications in the way that a mentor would be, thinking about progress and deadlines in the scholarship process. However, in example 1 for tangents (above), Lynette asks Julie about how to prepare beets because she is *personally* interested in the answer, so that she can try it at home. Likewise, James is *personally* interested in the tattoo that Elizabeth plans to get, and then when they discover they both participate in choirs he is excited because of their common ground outside the garden. These interests develop organically, because the youth do not have proscribed roles with one-another, and can assume that they are coming to the interview as peers and equals.

That is not to say that the research staff members were not genuinely interested in the youth's lives. We served as supervisors and talked with the youth informally about their goals and challenges. However, this interest was often couched in the terms of a mentor relationship in which the staff provided advice and tangible support such as letters of recommendation. Also, during the interview process paid staff tended to "switch" to researcher mode, placing more emphasis on the interview questions and less on the lives of the participants outside of the garden. Including additional interviews that were conducted from a different perspective allowed for complementary sets of data on each of the youth in the peer interview group.

The context of the peer interviews may have also helped to create a casual and fun atmosphere that fostered a more informal tone in youth interviews. It was a “field trip” day in which we played games in the grass, ordered pizza, and took a trip to a goat farm in the afternoon. This contrasted the settings of the staff-led interviews, many of which were conducted during work parties at the garden, and were often rushed because they were scheduled successively.

To further demonstrate the difference between a staff and a youth interviewer tangents, I compared all of the interviews that Beth, a high-school student from Mountainside, participated in during the project. She was interviewed during May of Year 2 for her entrance interview, and during December of the same year for her exit, and in August as part of the peer interview group. During the staff-led interviews, Beth seemed quiet and subdued, not wanting to elaborate on her answers. She almost exclusively gave one sentence in response to questions and one-word answers to probes. Below is an excerpt form an entrance interview conducted by Rea, an undergrad research assistant.

Example 4 for Tangents, from the peer interview group:

1 Rea (Interviewer): Alright, your second question, when you first started on the project, what were your goals for being a participant and what was your vision for the project?
2 Beth (Mountainside): I don’t know. I just kind of thought that it was…I just thought that it would be fun and I just wanted to volunteer.
3 Rea: So did you make any goals or have you had any goals so far?
4 Beth: Not really.

5 Rea: Not really? And for your vision, did you have a vision or did you have one now?
6 Beth: No.
7 Rea: Just here to have fun?
8 Beth: Yeah.

In segments 3, 5, and 7, Rea falls into a trap described by McCorkle and Meyers (2003) of asking closed-ended follow-up questions as the interview subject becomes more reticent. Beth does not elaborate on any of the follow-up questions, just says “no” or “yeah”, which is a pattern evident in several interviews with less talkative respondents. During the entire interview, Beth does not engage in any tangential conversation or discussion. Compare that style to an excerpt from the peer interview that she conducts with Theresa, a high-school student from Peartree.

Example 5 for Tangents, from the peer interview group:

1 Beth (Mountainside): And your favorite veggies and dishes from the garden?
2 Theresa (Peartree): Um, I guess it’s just like the mixed greens to use for salads, or the raspberries. You guys have so many strawberries.
3 Beth: Yeah, they’re not really growing any more. I mean we picked all the strawberries and they’re just not coming back, but they’re still alive which is weird.
4 Theresa: So it’s just the plants there.
5 Beth: Yeah.
6 Theresa: Reminding you that you had strawberries at one point.
7 Beth: Yeah. They’re just chillin’. I don’t know why they haven’t died yet.

Here, Beth is more animated, engaging in humor and thoughtful commentary with Theresa. Theresa’s remark in segment 2 is not even a question, but in segment 3 Beth elaborates, going out of her way to describe their garden and pose a question she has about the crops. This presents a stark contrast to her quiet tone during the staff-led interview, and Beth is more obviously engaged as she conducts the peer interview. What begins as an observant aside turns into a discussion that shows that the youth are actively thinking about the science behind the garden and processing what they know about plants.

Tangents throughout the interviews provide additional data that helps to support the themes that we observed in the outcomes of the project, and have supported our analysis of the PFF content. However, the most important factor in the tangents that are observed in the peer interview data may be that they help to form a basis of shared experience between the participants. Participants found a more informal tone during these exchanges. Tangents which allow the youth to diverge from interview topics and discuss shared experiences can also help to build *rapport* between interviewer and subject.

Rapport. *Rapport* was used to code evidence of agreement or emotional connection between interviewers and subjects. These instances of emotional connection may have elicited more detailed responses from the subject, or they may have existed on their own in one or two lines. Rapport sometimes included the interviewer expressing shared knowledge or experiences both within and outside of the context of the garden. Subjects and interviewers both expressed signs of rapport, and it was evidenced in both staff and peer-led interviews. In the first example of *rapport* during a staff-led entrance interview, Helen asks Jenifer, an older Peartree participant, what she thought she was getting into when she signed up for the garden:

Example 1 for Rapport, from the no peer interview group:

1 Jennifer (Peartree): …I had no idea what it would look like at all or what the program was really going to be like, so.
2 Helen (Interviewer): Neither did we!

3 Jennifer: Yeah, haha, I was just like ‘sure,’ and then I was like ‘oh, Jack, [participant’s boyfriend, also in the project] look at this’ and he was like ‘Yeah sure!’ because we were both getting interested in eating healthier.

In segment 3, Jennifer laughs, which a regular occurrence in this interview. I took laughter and joking as a sign of rapport because it showed that interviewers and subjects were talking more informally and experiencing a level of empathy with one-another. When Helen responds, “neither did we!” she is showing empathy with Jennifer’s remembered sense of uncertainty about the project in its early days. Shared experiences at the garden represent something that both participants and staff have in common and can interact and bond over. The easy, joking tone of this interview indicates a certain level of rapport that the interviewer and subject have established together.

Rapport in staff and youth interactions. Similar to *tangents,* I compared code counts for *rapport* between peer-led interviews and staff-led interviews in both the peer interview and comparison groups. Interestingly, these results are not as straightforward as the results for *tangents*. Both the rate of signs of rapport per interview and the ratio of interviews with rapport to interviews without rapport was highest in the peer-led interviews, but rapport was also fairly high in the staff-led interviews in the comparison group. The lowest rapport was noted in the staff-led interviews within the peer-interview group. Table 4 presents these comparisons.

Table 5: Rates of rapport evident in interview data.

	Peer interviews (peer interview group)	Staff-led interviews (peer interview group)	Staff-led interviews (comparison group)	**Total**
Interviews including signs of rapport	7	9	9	**25**
Interviews without signs of rapport	4	13	7	**24**
Total interviews	**11**	**22**	**16**	**49**
Total signs of rapport	**16**	**19**	**18**	**53**
Rate (total signs of rapport/total # of interviews)	1.45	0.86	1.13	**1.08**
Ratio (interviews including rapport/interview without rapport)	1.75	.69	1.28	**1.04**

While the comparison group participants all had between zero and three signs of rapport in each of their interviews, some of the peer interview group members had as many as six instances of rapport in a single interview, while others had none. The differences between group members' data and between the two groups of staff-led interviews points to inherent differences between members of the PI and No PI groups that may make comparison more difficult. While rapport may not be universally higher between peer interviewers and their subjects than between staff and youth dyads, there is evidence that the participants in the PI group found more rapport with one-another than with staff.

Another difficulty I saw in the data (not represented by the table) was that there were more codes for evidence of rapport in exit interviews both years than in entrance interviews. Entrance interviews were conducted by undergrad research assistants, and exit interviews were conducted by graduate students who had served as garden coordinators. While the graduate students were not familiar with the participants they were interviewing, by Year 2 they were more familiar with the research aims and the nature of qualitative research, and interview subjects were more familiar and comfortable with the research process during exit interviews. These factors may have contributed to higher rapport between interviewers and subjects as the project progressed.

The following excerpt presents an example of rapport between a staff member and a participant. Margot, a graduate research assistant, interviews Anna. Anna is an older participant and college student who began in Year 1 and attended the garden intermittently during Year 2. In response to a question about her future goals, Anna describes some of the reasons she has not had as much time to garden in the second year of the project:

Example 2 for Rapport, from the comparison group

1 Anna (Peartree):…I was going to have a nursery when I came to OSU, but now I have an art gallery instead, and a dance studio, and so...all of my files of good looking pictures from the garden are going to come in handy as soon as I can print them.

2 Margot (Interviewer): That’s amazing!

3 Anna: It was, most of my best pictures came from there. And, it’s interesting that I sort of, in an extracurricular type setting I developed this photo journalism that has become pretty important to me and is a pretty big aspect of my business now.

4 Margot: Yeah, well you’ll have to let us know when you have your little show.

In this case, the researcher and the participant are both in their mid-twenties, and in segment 2 the researcher expresses enthusiasm at what the participant has accomplished in the last year. Anna was a very talkative person, and sometimes would expand at length during discussions. However, the interviewer is also very interested in Anna's responses, and encourages her by showing a genuine emotional response to her accomplishments in segment 2. This is an example of how graduate research assistants developed rapport with participants because they were interested in participants' lives and goals outside of the garden.

Rapport and elaboration. Some rapport codes led to tangents or to data that were useful in the coding process. To understand how rapport contributed to the usability of data, I differentiated between instances of rapport that led to 1) elaboration in the answer of the interview subject, 2) elaboration or response of the interviewer about their own experiences, 3) elaboration of responses for both the interviewer and subject, and 4) no elaboration in the current instance of rapport. Table 5 presents the frequency of these types of elaboration within rapport codes, and overlaps between *rapport* and other codes.

Table 6: Rapport overlap with other codes

Rapport and Elaboration	
Subject elaborates	31
Interviewer elaborates	7
Both elaborate	3
No elaboration	12
Total Rapport Codes	**53**

Rapport overlap with…	
Content Analysis Codes	49
Tangent codes	11

Forty-nine out of the 53 sections coded for Rapport were also coded with content codes, meaning that they were used in the content analysis to answer primary research questions. Evidence of rapport most frequently led to elaboration by the subject, and evidence of rapport almost always overlapped with content codes. In total, 41 of the recorded signs of rapport led to further interaction between subject and interviewer, and 49 of the segments that were coded for rapport were also coded for content analysis, meaning that in most instances, we saw an immediate benefit of rapport in the form of richer and more useable data. Out of the 26 tangents that were recorded, 11 overlapped with signs of rapport. Both peer and staff dyads with the highest evidence of rapport also had generally had higher numbers of tangents, and those with the lowest evidence of rapport had the lowest instances of tangents. However, sections that were coded as evidence of rapport did not overlap with tangents in most cases. This indicates that in instances of rapport, the most immediate effect was to enhance conversation about the interview questions, but that rapport within an interview makes tangential remarks more likely at some point in the interview.

In the next example for rapport, John and Lena talk during the peer interview. John is a high school student from Peartree, Lena a student from Mountainside. This was a conversation with numerous signs of rapport between the two participants, as well as numerous tangents and informal discussion.

Example 3 for Rapport, from the peer interview group:

1 John (Peartree): Ok, that's pretty cool. So, how do your parents, friends, household members feel about this project?
2 Lena (Mountainside): Um, the lady I live with likes it because, when I do bring home some stuff, like onions, broccoli, and stuff, she likes it when I bring home stuff, because she's like oh, yay, we can make, we can cook it, you know, hopefully, if she does. My mom doesn't really give a shit, she doesn't really notice. She kind of does her own thing.
3 John: I'm sorry.
4 Lena: And, it's whatever but yeah. And, the kids, the kids that I live with too, they like it because there is a garden outside and they're like, oh this is cool. They think it's pretty interesting.
5 John: That's great.
6 Lena: Yeah and it's cool because little kids I can get them to eat better because I am like, hey you know, try this broccoli I grew.
7 John: Broccoli is so good, like fresh, it's ridiculous!
8 Lena: Yeah, I'll just pick some off and eat it. And like, tomatoes from the garden are way better than tomatoes from the store.
9 John: I need to try them. We haven't had any tomatoes come in yet.
10 Lena: We haven't either. They're green but I'm waiting for them to go red. There are a couple from the Manna garden but I don't remember what kind they are.

John provides clues to high rapport in segments 3 and 5, as he empathizes with Lena. Similar to the previous exchanges between James and Elizabeth and Beth and Theresa, this conversation is progressing naturally, with participants taking time to talk about each answer. In segment 6, John adds in his own newly formed opinion about broccoli, which he is excited about. The conversation then turns a different direction, which provided a new code for this section. Segments 6, 7, and 8 show another indicator of rapport, as the participants agree with one-another and find basis for shared views. Segments 7 through 10 were coded under “skills and knowledge” because the youth discuss new knowledge about food taste and origin, whereas in segments 1 through 6 the code for “family and relationships” was used. If John had not felt comfortable interjecting an aside, this extra exchange might not have happened, so the rapport that these two have formed has contributed to our research. However, a deeper exploration into this interaction shows that there may be more at work than just simple tangential discussion; there may be some emotional give and take between the two participants. Listening to this and to other interviews allowed me to more deeply analyze the tone of the conversations.

Interview Tone: A Deeper Analysis of Rapport

In order to understand the aspects of interviews that affected the richness of the data via *rapport*, I listened to the recordings of each peer interview, read through the participant’s interview notes, and took notes about the quality of interactions that I could pick up from the verbal exchanges. I first applied scores of *high*, *medium*, or *low evidence of rapport* to each interview according to the number of *rapport* codes it contained, and then used these labels to group the interviews and attempt to understand what personal or contextual factors contributed to rapport. To provide a limited comparison, I included two staff-led interviews with either high or low evidence of rapport that were conducted with participants outside of the Peer Interview group.

Listening to interviews provided me with various contextual clues: I could tell when jokes were made and whether both participants laughed, when sarcasm was used and when it was acknowledged, and whether respondents spoke slowly and haltingly or rushed and with excitement. I picked up when respondents were leaning away from the microphone or fidgeting with twigs. I could also gain a sense of their emotional reactions based on the tone and cadence of their speech. As I listened, I reflected on what individual characteristics (based on my observational knowledge of participants gained from personal interactions, notes, and descriptions from other research staff) influenced whether an interview demonstrated high, medium, or low evidence of rapport.[6]

Although these pairings occurred by chance, the staff marveled at some of the participants' strong similarities in their peer-interview pairs. Several of the interviews benefited from this arrangement, others did not; sometimes highly introverted participants paired with one-another or an introverted and an extroverted partner paired to produce an interview with lower evidence of rapport. Also, low *evidence* of rapport does not mean low *rapport*, it simply means that if they did experience rapport, it did not have a noticeable effect on the audible qualities of their interactions. Based on my observations of the audio recordings, what follows is a description of the factors that either encouraged or discouraged rapport between interviewers and respondents.

High evidence of rapport. There seemed to be two conditions that made high rapport most apparent in the peer interviews. The first was that both the subject and the interviewer were outgoing. In each of the three peer interviews that evidenced high

[6] As I listened to interviews I also changed some of the groupings slightly: a few of the "low evidence of rapport" group members moved up into "medium evidence of rapport" based on the presence of humor and laughter that was not recorded in the interview transcript.

rapport, both participants had outgoing personalities, and spoke up frequently during monthly meetings and discussions. The second condition that led to high evidence of rapport is that the participants had shared experiences or common ground from which to start in order to engage in more meaningful conversation. In most cases, this common ground was found outside of the garden, in their personal lives.

For example, James and Elizabeth are both self-described "choir nerds", and have acted in plays during high school. James is focusing his efforts on a career in film acting, while Elizabeth was elected "princess" of a local festival and has goals of running for public office. The two bring up these similarities repeatedly while interviewing one another, and have long and rambling discussions during the interview. On paper, these occasionally read like one of them is bragging or rambling, but in listening to the conversation I could always hear genuine interest in the "active listening" ("yeah, uh-huh, ok") responses from the other person. While James asks questions, his tone varries between surprise, knowledgeable agreement, and questioning as Elizabeth responds, and these short interjections encouraged Elizabeth to elaborate. Elizabeth similarly indicates active interest in James' responses and refers back to her own interview or to shared interests. Both participants have highly outgoing personalities and shared a basis for common ground.

Lynette and Julie live different lives, but share similar personalities and values. Lynette is a high school junior in Peartree living with a single mother, while Julie is a high school senior and also employed part-time a local nursery and living on her own in Mountainside. Their interview together has a subdued tone, which matches their personalities – they are hard-working, diligent, and more talkative with people they know well or in discussions when they have something meaningful to contribute. Both have clear career paths already mapped out, though in differing fields. Lynette expresses interest in her conversation with Julie, especially where Julie demonstrates or discusses her own level of independence, which seems to be something Lynette strives for based on this and other data. They talk about cooking, and also about Julie's job and living situation, and bring up several topics that are outside of the interview guide but useful in answering the project's research questions. Although they are both often quiet in person, they share an intellectual curiosity about the world around them and seek personal independence, and these factors bring them together during the interview.

Similarly, in a staff-led entrance interview with high rapport, Helen, a staff member in her early 30's, talks to Jennifer, a Peartree participant who joined during the first year and is already attending college. The two had participated in meetings together before, and therefore know each other and had a friendly relationship. The slightly hectic nature of the early months of the garden (as seen in example 1 for Rapport, above), as well as interesting factoids they know about one-another, creates a bond on which the two base their high level of rapport during this interview. In one instance of rapport, Helen mentions Jennifer's European family – a fact from a previous conversation that might have stuck out to Helen because of her travels in Europe as a child and teen – and it sparks a long conversation about Jennifer's ambitions of teaching in Europe. Both interactions at the garden and interests outside of the garden serve to increase the evidence of rapport during Helen and Jennifer's interview.

The peer interview with high evidence of rapport that stands out the most is the conversation between John and Lena. These two are both the type one might describe as a "skater", who listen to alternative music and engage in alternative activities. Lena uses her long board to get around Mountainside. However, they also both avoid the more negative activities associated with their peer group: John is highly involved with a church youth group, and Lena praises the garden for encouraging her to distance herself from substance-using peers. They both present laid-back and easy-going personalities. However, listening to the interview gave me insight into a segment of Example 3 for Rapport, which is partially repeated below.

Example 3 for Rapport, from the peer interview group (partially repeated):

2 Lena (Mountainside): Um, the lady I live with likes it because when I do bring home some stuff, like onions, broccoli, and stuff, she likes it when I bring home stuff, because she's like oh, yay, we can make, we can cook it, you know, hopefully, if she does. My mom doesn't really give a shit, she doesn't really notice. She kind of does her own thing.
3 John (Peartree): I'm sorry.
4 Lena: And, it's whatever but yeah. And, the kids, the kids that I live with, they like it because there is a garden outside and they're like, oh this is cool. They think it's pretty interesting.
5 John: That's great.
6 Lena: Yeah, and it's cool, because little kids, I can get them to eat better because I am like, hey, you know, try this broccoli I grew.
7 John: Broccoli is so good, like fresh, it's ridiculous!

After Lena ends an answer (segment 2) with, "My mom doesn't really give a shit, she doesn't really notice. She kind of does her own thing" John says "I'm sorry" in an uncharacteristically quiet voice (segment 3), and then finds a way to change the subject – the deliciousness of the broccoli from the garden (segment 7). His written answer to this interview question only says "positive" with a smiley-face, compared to three to five word answers to the other questions. I wondered if he was disturbed by her answers, and looked for a way to change the subject quickly to something more positive. I also wondered if the high level of rapport and responsiveness that John demonstrates while conducting this interview was driven by a curiosity about how their lives are similar and different. John is from a small family comprised of his father and two little brothers, and his mother is not in his life. Lena stated elsewhere that she lives with “just some people” (i.e. neighbors or family friends) that have their own small children, and while she sees her mother regularly, their interactions are not always positive, nor do they follow proscribed parent-child roles. John might feel empathy with Lena because of their shared lack of a strong maternal figure. As they build a basis for shared experiences, they begin to delve into the differences between their communities and their lives.

John’s own interview responses often sound like a typical teenage boy who is outgoing and has strong community connections. However, by giving him the opportunity to sit down with someone from a very different lifestyle and a different definition of what “poverty” means, he might have experienced insight into his own situation. Similarly, Lena might have been more moved to talk about Mountainside because she was paired with someone with a similar personality and interests, so she could relate to him about certain surface qualities of her life, and also discuss deeper feelings about her family and social interactions. Because these participants were able to discover commonalities in their past through casual conversation and deeper connection, they became genuinely interested in one-another’s lives and stories and motivated to have a deeper conversation.

Medium and low rapport. While similarities in personality and experiences help draw out participants in interviews with high evidence of rapport, they are the same factors that seem to hinder engagement in interviews with lower evidence of rapport. Some participants are just not talkative, or are shy around new people, which is a difficult problem to solve in a limited amount of time and in a group setting. Theresa, from Peartree, and Beth from Mountainside are both high-school juniors with introverted personalities, especially around new people. Both participants give clipped, one or two sentence answers to almost every question, in staff- and peer-led interviews. These two do seem to share some common ground in their lives; they joked and laughed at points during the interview, but seemed nervous and awkward about the interview process and only briefly engaged in deeper conversation, as shown in example 5 for Tangents, above. If given more time to converse or more room to seek out common ground, I wondered if these two would have demonstrated higher rapport because of their similar personalities.

Lisa and Tina also seemed to have a medium level of rapport, and their interview included few instances of asking one another follow-up questions. Both are have graduated high school, and Lisa attends college. Lisa says in one response, “I don’t make friends easily”, and her follow-up questions are very focused on the project’s research goals and do not seem to stem from her own interests in what Tina is saying. Tina is generally quiet in group discussions but has a few friends at the garden. I have noticed in previous interactions that Lisa has a hard time engaging in mutual conversation or seeking out other’s perspectives. While the two seem to have some things in common (being slightly more independent than high school-aged participants), their personalities might have gotten in the way of establishing rapport.

Some dyads had a harder time finding common ground, and personality traits may have added to low rapport in some interviews. Jack, an older participant from Peartree, interviews with Anita, a high school student in Mountainside. Jack is a naturally outgoing person who works at a childcare program, and seems to be able to establish a friendly rapport with anyone. Anita, however, is very quiet, and gives uniformly short, though sometimes deep and well thought out, answers to questions in both staff- and peer-led interviews. Jack seems to put effort into drawing Anita out, but she does not engage in conversation with him. I suspect their lack of shared experience, age, and lifestyle differences meant that rapport did not come easily.

Similarly, Josh from Peartree interviews Sharon from Mountainside, and both display quiet personas while at their respective gardens. Josh is notorious (among staff) for giving brief answers to questions – usually yes or no, and then another yes or no to probes. (I listened to a staff-led interview with Josh and empathized with the tone of frustration from the interviewer.) In their peer interview, Sharon makes occasional jokes or laughs, but gets no response from Josh, who simply reads the next question after each response is given, without a hint of acknowledgement for the response. I wondered if pairing him with a different participant would have given us deeper answers or more conversation; however, it could just be the case that some people are not willing or interested in talking deeply during a structured conversation. His low levels of rapport in both staff and youth-led interviews present an example of how individual personality factors can benefit or detract from participatory research.

Personality factors and level of shared experiences were the main contributors to high rapport in the peer interviews. More of the staff-led interviews scored “low” on rapport, primarily because the staff members tended not to ask personal questions based on shared experience with the participants, but instead focused on the interview questions. The cases with highest evidence of rapport occurred between the graduate students and some of the peer interview group participants during exit interviews, and this may have been due to the shared experience of having participated in the gardens, as well as graduate students’ higher levels of interview training and skills (both being in their second year of master’s programs). However, the act of engaging with participatory methods like the peer interview process might also have encouraged youth participants to relax and be more friendly with the staff during exit interviews. Among those staff-led interviews that demonstrated high rapport, a large majority of the coded instances of rapport stem from a shared experience at the garden – one person mentions the experiences or knowledge gained in the project, and the other agrees that that was useful information or a fun experience. However, youth are still more likely to engage in informal conversation about shared experience with one-another than with a staff member. If they see the staff member as a peer, they might have more peer-like interactions, but if they see the individual as an authority figure or even an unknown but older individual, they might be less likely to experience “flow” in their conversations. The peer-led interview process added an additional data source that was solicited by a peer, with whom the subject was more likely to find common ground. While participants' personalities prevented high levels of rapport in some cases, there were cases in which participants expressed genuine interest in one-another and engaged in meaningful and deep conversation that proved highly useful in the content coding process.

Youth Synthesis in the Joint Discussion

There are a series of codes used in the content coding process that grew out of the joint discussion, as participants debriefed on the peer interview process. Because many of these themes occur primarily within the joint discussion or the peer-led interviews, researchers might not have noted them if not for this process. Some of these themes arose because of the specific content of the peer interview, and some via the invitation for youth to compare the communities in which they lived. The joint discussion gave youth a chance to explore the contents of the peer interview for themselves and to describe what they saw as the most important ideas that emerged from the process. I labeled the themes that emerged from this process as *youth synthesis* because there was evidence that, through the joint discussion, youth consciously analyzed the content of the interviews and came to new understandings about the outcomes of the project.

Table 6 included below shows each of the *youth synthesis* themes, as well as the number of codes for that theme collected from within the peer interview data, within the joint discussion data, within the other data (staff-led interviews, journals, other discussions) from PI group members, or within any data collected outside of the PI group. The data are split this way to show that without the joint discussion, some of these themes may not have been noticed.

Table 7: Incidence of youth synthesis codes within and outside of peer interview data.

Theme	Codes found in: Peer interviews	Joint discussion	Other data, PI group	Outside of PI group	**Total**
Garden location	10	3	5	2	**21**
Gendered attrition	4	3	0	1	**8**
Barriers to youth engagement	0	6	2	4	**12**
Independence	1	3	3	0	**7**

It is important to take into account that a coded section of an individual's interview may only contain a paragraph of that individual's perspective, while a coded section from the discussion may contain several agreeing or contrasting points of view (as is seen in the examples below). In all cases, at least half of the mentions of the theme came from the peer interview or joint discussion data. Some of the themes were echoed outside of the PI group, while some were not. Some views that were only expressed during the context of the peer interview process related directly to the emphasis placed on comparing the gardens during the peer interviews, and so we would not expect them to be evident in other data.

Garden Location. A primary theme that emerged as we gathered feedback on the garden project was that the microenterprise components needed to be adapted more specifically to the location of the gardens and the communities in which they took place. While this might have occurred to researchers independently of the peer interview data, the joint discussion probed youths' perspectives on how imbeddedness in community affects a youth microenterprise project. Several participants from Mountainside brought this theme up initially, and the facilitator sought out perspectives from Peartree youth as well. In the content coding process, the *location* code was applied to instances where youth discuss their ability to access the community for marketing purposes, either at farmer's markets or via direct marketing at the gardens. This is one of the major themes that emerged for us as researchers, and we are planning a future publication discussing how community access moderated the impacts of each garden (Lile & Richards, in preparation).

Example 1 for Youth Synthesis Themes – Garden Location[7]*:*

1 Helen (Facilitator): how do these differences relate to differences in your communities?
2 Lena (M): I'm gonna have to say that, um, the garden here, I think it gets noticed a little bit more, just because it's a smaller town and we're in a more community where there's like houses, and people live out here and stuff.
3 Amber (M): Yeah, and Anne said that more people drive by theirs, there's not really a place where they can walk by their garden, and people are always walking by our garden. And it's a closer drive too like, they're like right, the garden's kinda really close to the road right here and people notice more and, us, it is a smaller community for us so...
4 …Helen: (*to Peartree gardeners*) Do you guys agree with that?
5 John (P): Yeah, I feel like that there is not many people just kinda to stop by to say hi cause like, I guess that would be kinda weird in our sense since ours has a huge fence around it. But it's like, I don't know, I don't see many people stopping by and 'when you guys selling?' and what not, like I can see that here is, like, oh, you guys can actually see the produce from, you know, the sidewalk.
6 Jack (P): Yeah
7 Lena (M): Yeah and like we on Sundays we sell produce right out front of the garden and so people will be like 'oh, do you have more of whatever' and we're like 'oh in the garden let me go pick it for you.' Ya know? People, people love that.

[7] In each section from the joint discussion, Helen, a staff member, serves as the facilitator. (M) refers to participants from Mountainside, (P) to those from Peartree.

8 Jack (P): Yeah, sometimes people honk when they drive by. *(group laughter)*

Although there was discussion early in Year 2 about the necessity of a prioritizing marketing at the Peartree garden, the idea of the garden's location affecting their ability to market had not come up yet for the Peartree participants. John's observation that passers-by in Mountainside can "see the produce from the sidewalk" is in direct contrast with his experiences at the Peartree garden, where the church, a parking lot, and a low hill obscure any view of the garden from the street. On marketing days, Peartree participants load produce into a cart and push it 75 yards to the street. In line 8, Jack is referring to the high speed at which drivers often pass by the Peartree garden. The garden in Mountainside runs right up to the sidewalk, so participants could see a clear difference in the locations. Another aspect of location that we considered based on this code was the relative ease with which the Mountainside gardeners could access the small Farmer's Market there, while Peartree participants had a difficult time accessing the large and expensive Farmer's Market to sell their produce.

Gendered Attrition. Attrition was already considered a concern by the researchers, as we saw participants drop out in early spring of the first and second years, but participants in the discussion brought up the issue of differential attrition by gender. Having already started with low numbers of male participants, the second year in Mountainside saw these numbers dwindle to zero, a detail that was highlighted by meeting the Peartree group, which included four male participants on the joint meeting day. The three coded sections for gender within the joint discussion data are long sections that represent several perspectives and sometimes lead to heated discussion. Out of 13 discussions of attrition, six were dual-coded with gender, and several additional segments from Mountainside participants discussed wanting to recruit and retain more male participants.

Example 2 for Youth Synthesis Themes – Gendered Attrition:

1 Lena (M): Oh, ok this is a little delayed, but the differences, um, well the guys actually stayed in their garden, and our guys are flakes and don't really ever show up.
2 Sharon(M): I know right!
3 Amber (M): I was gonna say that! Well, one of our guys has other things that he does and he can't really come out.
Later…
4 Lisa (P): Also, sometimes, sometimes guys tend to think that gardening is, like, something old ladies do, and so they don't really think that it's gonna be a lot of work, and so, like, a lot of wimpy guys go, and they're like "oh I need to weed" and then they're like 'I have to move a pile of leaves? This is hard' and then they kind of bail.
(giggles)
5 Jack (P): Ya, I don't know. It's a bargain, I don't think we've ever like talked about the issue or had the issue of like how many guys or girls are in the garden it just seems like who's ever or whatever, um, ya know, people are going to stick if they're gonna stick, depends.
6 Sharon (M): Yeah.
7 Jack (P): And I don't think it's necessarily, you know will all the boy's clubs we have in the world and in this country that there's like maybe a couple of women dominated things. I think it's healthy there's nothing wrong with that.

The topic of gender is introduced by the female Mountainside participants, who take a negative view of the male youth in their community, and Helen asks for the males from Peartree to chime in about whether they think gardening is gendered work. The male participants point out the benefit of having a "woman dominated" activity, and it is apparent that gender has not been an issue in Peartree. The conversation goes on for some time before Helen changes the subject, noting, "So let's move on from gender, cause we could spend all day on that." Helen's facilitation pushes the youth to see beyond their own perspectives on gendered attrition, and to seek out one-another's opinions and ideas.

Barriers to youth engagement. If not for the joint discussion, youth from Mountainside might not have articulated how their choice of activity was constrained by their circumstances. Lena was a champion for this theme, pointing it out in interviews and discussions. However, others also noticed and remarked on the low number of engaging activities for youth in Mountainside and the experience of stereotyping low-income kids, while Peartree participants noticed a lack of employment opportunities for youth. Half of the coded segments for "barriers to youth engagement" stem from the joint discussion, and contain several instances of youth collaborating to distill a theme from their shared experiences. Interestingly, the theme did not emerge within the peer interviews, but when youth had the chance to come together they were able to articulate this macro-level issue within their community. In the segment below, Lena has just spoken about her feelings about Mountainside's lack of engaging opportunities for youth, and Helen asks for a comparison from Peartree. Lisa, an older participant from Peartree, makes the observation that it seems like there are ample volunteer opportunities in Peartree, so although there may not be jobs, there is more opportunity for youth to participate in community life.

Example 3 for Youth Synthesis Themes: Barriers to Youth Engagement:

1 Helen (Facilitator)[after a comment from Lena]: So this is something, I feel it's a theme, I feel like, that I've heard the Mountainside gardeners talking about, is [that] lack of opportunities for youth leads to some pretty grim possibilities.
(several Mountainside participants: "yeah")
2 Lena (M): This town, it just feels like it drags you in.

3 Helen: So anyone in Peartree wanna comment on that from your perspective? Do you have similar issues happening?
4 Lisa (P): I feel like Peartree, I mean when I got there I noticed that like there are literally like no jobs but there are a gagillion volunteer opportunities. Like all the teenagers are, I almost feel like they're forced, like someone is telling them, like, 'you need to go out and volunteer' because there are tons of volunteer opportunities and there's a lot of teenagers who are out there volunteering. So, I wonder if like, if it's more like, if they just don't, like if there was a better job market here than maybe teenagers could just go to work or something.
5 Sharon (M): Yeah.
6 Helen: Here is Peartree or?
7 Lisa (P): Here, here in Mountainside cause, uh, I mean Peartree we may not have jobs but we do have volunteer opportunities that can help your resume and stuff. I wonder if, like, in Mountainside, if they have like some kind of network where they could like write, where they could like have it online or something, or if they just had more job opportunities if kids wouldn't be getting into trouble…

The opportunity to look at their community with a critical eye may have been very useful for some of the participants of *Producing for the Future*. While they may have previously thought of the challenges they faced as personal struggles, the process of talking through these issues with others may have given them the understanding that they face structural barriers that have nothing to do with their own abilities, and some problems require collaboration and community investment to overcome.

Independence. I found it surprising that theme of independence stems primarily from data in the peer interview subsample. While Lynette seemed to be the champion for the independence theme, others agreed with her and told their own stories about independence during the joint discussion.

Example 4 for Youth Synthesis Theme: Independence:

1 Helen (Facilitator): Ok, thank you, there you go. So any other strengths you're now seeing in your own lives? *(Lynette raises hand)* Yeah.

2 Lynette (P): I feel like because of this project I'm more independent, like I don't have to rely on my family so much for stuff. I can do things on my own, like if I need food I can just go to the garden and get some, or I can, like, get food and make dinner for myself. And I like that.

3 Helen: Yeah. Anybody else?

4 James (P): I most definitely agree with you on that because I'll like take things from the garden and I'll just like experiment, and it'll turn out really good, and then I'll be like 'here eat this' and my mom's like 'wow, that's really good,' like she's surprised cause I'm - it's just, like it lets me go home and rather than, like, go read or watch TV or something or play with my cat, I don't know – *(group laughter)* – um, I'm like, I'm in the kitchen, and I'm experimenting with food, and I think that's very important cause I'm in high school so if I go to college, or if I move to pursue whatever I'm going to pursue, it's kind of interesting to get that experience early and kind of feel independence in that sense.

Lynette is the "catalyst" of *independence*, just as Lena is with *barriers to youth engagement*. The peer interview between Lynette and Julie had encouraged her to bring up this theme during the discussion (in another segment of the joint discussion she praises Julie for her independence). Lynette had brought up a growing sense of independence in a previous staff-led interview, and in a journal entry less than a month before the PI session. She seemed to be primed to focus on the independence that Julie felt in having her own apartment and finding employment in what she enjoyed as well as gardening at home and teaching others how to garden. Lynette's mention of independence during the discussion session prompted James (above) to think about his own growing independence around food and diet. In the next sections of the discussion (not included for length) Elizabeth describes being excited about cooking for the first time, and Sharon then describes how participation at the garden has "just basically jump started me into, you know, getting things that I've always wanted" such as her driver's license. This shows how the gardeners build on one-another’s statements, making realizations about themselves that they might not have made without hearing other perspectives.

Discussion

The peer interview and joint discussion process was immensely helpful to our project. It provided youth with another way to analyze their lives and the outcomes that they experienced as they talked in dyads and in the larger group. The peer interview process contributed to *Producing for the Future* by: 1) providing a more interactive and participatory research experience for youth, 2) providing an additional rich data source for some youth because of high levels of rapport and tangents, and 3) providing a way for youth to generate insights based on one-another's' experiences during the joint discussion.

During the peer interview process, youth engaged in phases 2 through 4 of Jaquez, Vaugh, and Wagner's (2012) *five phases of research*: they (2) identified needs and research goals through participatory workshops, they (3) designed and conducted the peer-led interviews, and they (4) participated in data analysis by distilling important themes during the joint discussion. This process was short and relatively simple, compared to the lengthy and involved process that CBPR can entail (Jennings et al., 2006). When asked to develop interview questions for the joint meeting day, youth focused their interview questions on comparing the gardens and microenterprise programs, and on the ways in which the gardens influenced their greater communities. In this way, the participants involved in the interview design workshops determined what outcomes the entire process would have. The high level of dependence on participant perspective is both a limitation and strength of participatory research: although the questions were constrained by the sample of participants attending the interview creation workshops, those participants were more invested in the questions that were posed and therefore engaged in more deep conversation and discussion. The interview guide represents real research questions that the youth developed throughout the project, including the community-level outcomes of the research. Youth like Lena and Lynette were further able to explore their own questions by bringing up themes which encouraged others to share their perspectives during the joint discussion. Because the *youth synthesis* themes are not deeply explored elsewhere, they represent a powerful way that the joint discussion participants shaped the research process and enhanced the data of *Producing for the Future*. While this was just one methodology used in a research project that incorporated CBPR principles throughout the entire process, it is a strategy to engage youth collaboratively within the context of any research or evaluation project, wherever it falls on the continuum of participatory research.

The peer interview process in comparison with staff-led interviews increased instances of *tangents* and evidence of *rapport*, both of which proved beneficial to the quality of the data. Only four out of 53 sections coded for rapport were not coded with content codes, showing that the vast majority of these sections were useful to the content analysis. Also, 41 out of 53 instances of rapport were followed up with elaboration related to the interview question, meaning that high rapport generally led to deeper conversation. Elaboration on behalf of the respondents signals that they felt they were heard and listened to by a confidant. Rapport tended to focus respondents on the questions at hand, rather than leading to tangents. Evidence of rapport was more variable among peer dyads than among staff and peer pairs. In the peer interviews, rapport was especially high between participants like James and Elizabeth, whose outgoing personalities and similar life experiences allowed them to bond and engage in long and flowing dialogue. For others like John and Lena, rapport formed on the basis of shared personality traits as well as empathy for similarly difficult family situations. While these data suggest that, at least in part, rapport is based on immutable personality factors, they also show that shared experience can play a large factor in the level of rapport that participants experience. Having shared experiences may have allowed dyads like Beth and Theresa to engage in more open and mutual exchange, rather than maintaining strict adherence to the interview guide. Although many youth in our study found good matches for interviews through chance alone, establishing a baseline of commonality between interviewer and subject may help participants move beyond the initial phases of rapport and engage in more exploratory, cooperative, or participatory styles of dialogue (DiCicco-Bloom & Crabtree, 2006). More reserved participants like Beth and Theresa were able to relax during the peer interviews, incorporating a level of humor and reciprocal exchange that was not apparent in their staff interviews and that led to increased tangents and elaboration of responses. The rapport that was possible in these interviews is what made many of them function as additional and rich sets of data, because peers felt comfortable sharing deeply with one-another. Rapport deepened interview pairs’ connection to each other and to the interview questions.

Tangents, on the other hand, tended to show us aspects of the youths’ lives that were not addressed by interview questions, but that were nonetheless affected by their participation in the garden through interconnected webs of development. These were the ripples into their school, work, and relationships that we were hoping to see; however, we found it difficult to design questions around these research topics because of the variety of unique experiences of each youth gardener. A skilled interviewer will follow the lead of the respondent to find meaning inductively, and that is exactly what our youth participants did in many instances. Out of 26 examples of *tangents*, only one was not labeled with content codes, which shows that the interviewers and subjects displayed a high level of adherence to the research aims during their conversations. This level of focus points to high youth engagement in research – they were not using their time during the peer interview to engage in off-topic conversation, but were delving into research questions. This also shows that the research aims tapped constructs that were valuable and meaningful in the youths' lives.

The relative prevalence of tangents and rapport in the peer interview data demonstrates the ease with which some of the peer dyads interacted, deconstructing the power differentials inherent in traditional interviews (Kvale, 2006) and providing an alternative to the mentor-mentee dynamic that the *definition of the situation* (White & Klein, 2008) produced in many staff interviews. Both participants came to the interview as youth gardeners, and so could view one-another as peers with a natural basis for shared experience (this was more difficult in dyads with more disparate life experiences). As youth played the role of both interviewer and subject, both roles lost their meaning, because neither participant held inequitable power. Because they were able to play both roles, youth were more likely to participate in an "I-Thou" relationship and recognize the relative subjectivity and humanity in one-another. Youth saw one-another instead as coinvestigators, and used this perception to engage with their own research interests through dialogue.

The context of the peer interviews may have also played a key role in the outcomes. During a program evaluation with youth participants, interviewing while other participants engage in program activities would be the norm. However, in comparison with the peer interviews, youth during staff-led interviews might have felt they were missing out on gardening time and instruction, and might have felt rushed or not wanted to answer questions in depth. Or, they might have felt singled out by the interviewer and awkward about the interaction. In comparison, during the peer interview all of the youth were engaging in the same activity, so they may not have felt like they were missing out on a gardening experience. The interviews took place in the garden rather than isolated from it, so youth had a direct visual representation of their work as they talked.

The joint discussion that took place after the peer interview proved to be an essential component of that process, as youth used it both to debrief on what they had just learned about their fellow gardeners, and to synthesize new ideas and understandings about the gardens' effects on the surrounding community and on the youth themselves. Youth took the opportunity during the joint discussion to build on ideas that they had formulated but not articulated, and the theme of *barriers to youth engagement* emerged as a new idea during this conversation. One-on-one conversation led youth to focus on similarities between their individual experiences, while group discussion allowed them to step back from their own experiences and take a critical eye to garden-wide and community-wide patterns. The relative disadvantage faced by Mountainside residents became apparent to all of the participants, and they began to understand that poverty is experienced differently in different contexts. By integrating ideas from the interviews and synthesizing new concepts, youth directly informed the formal data analysis process and contributed their own analysis of the effects of the garden. A skilled facilitator helped guide this process while allowing youth interests to frame the conversation. The joint discussion allowed youth to explore whether the themes that had been relevant to them were meaningful to others, and to take a critical eye to their communities. Cross-fertilization of themes and ideas was a crucial part of the joint discussion, allowing the youth to build on one-another's experiences and learn from each other. This is a prime example of the bi-directional interactions that are the basis of *developmental contextualism* (Lerner, 1995), as youth engage in a constant and dynamic flow of information and ideas with those around them in their environments.

DiCicco-Bloom and Crabtree (2006) describe *participation* as the final stage of rapport. Therefore, a CBPR approach should emphasize enhancing rapport in order to increase participation in research. In a truly participatory interview, subjects take the lead in teaching the researcher about their lives and their perspectives (DiCicco-Bloom & Crabtree, 2006). I believe that this level of rapport was achieved in some of our peer interview dyads, as participants became truly interested in one-another's perspectives and sought to both teach and learn about each other. The entire process of the peer interview and joint discussion was structured around the idea of the two gardens coming together and sharing ideas and insights. The interview guide included several comparative questions, and many of the youth expanded on these questions through conversation and discussion to compare their towns and their experiences. Youth like Lynnette and Lena served as catalysts for ideas by describing their own perspectives on these themes. Others focused on traits that they saw as lacking in their garden, like gender imbalances and garden visibility. The facilitator helped the youth expand on and apply themes to their own experiences. Most of the youth who participated in this process sought to engage with the research and with one-another, to learn, and to teach others about their experiences as low-income youth in a community context. By doing this, they were able to "promote a co-learning process…that attends to social inequalities" (Israel et al., 1998).

The meaning-making that youth engaged in as they carried out the phases of research also supported their PYD processes (Delgado, 2006; Lerner et al., 2011; London et al., 2003): they built *competence* by developing interview techniques and *confidence* in using these new skills (as when they use probes or tangents to explore their own research interests) while using strategies for expressing *caring* (as when John expresses empathy for Lena or Jack tries to draw out Anita); they discussed the individual *character* traits and social *connections* that grew out of the project (in the *independence* and *barriers to youth engagement* themes); they were able to *contribute* new knowledge and insight to one another and to the research staff during the joint discussion. As youth felt a sense of belonging and safety within the context of the gardens, they were able to develop confidence and nurture a growing sense of independence within themselves. The low-income youth in our study encouraged one-another and expressed their own *resilience* (Burt & Paysnick, 2012; Lewis, 2008; Masten & Wright, 2009), as Lynette does when she talks about Julie's independence or James and Elizabeth do when they discover a shared passion for performance and discuss their big dreams. Youth were supported and encouraged to participate in their own positive development throughout the process by staff and community members who provided mentorship, scaffolding, and new opportunities to participate in and contribute to community. My favorite story from the project happened in in January of 2014: after the garden project ended, Lena traveled out of state, and then returned to Mountainside. When asked why she would ever go back after being so vocal about the negativity she experienced there, Lena told us that after she saw so many other places, she realized that she had to "do something" about Mountainside. Lena has now become active in trying to keep the garden a sustainable resource for low-income youth in the town, and is a good example of *contribution* to one's community as a positive bi-directional outcome of PYD.

Taken as a whole, the picture that the peer interview data paint is one of added richness, but also added variability, within the process and the outcomes of the peer interview group. It seems evident that the peer interview process should not be undertaken as the sole source for interview data within a research project (unless much more depth and richness can be gleaned due to the use of more involved participatory methods than we were able to incorporate). However, as a supplemental data source, the peer interview process adds a great deal to the research and can serve to enhance and inform the findings of more traditional data collection techniques.

Limitations

A few aspects of this study limit the generalizability of the results. As in many qualitative cases, a small N and highly varied groups make it challenging to draw comparisons between the peer interview and comparison groups. Where comparisons were obvious, I noted them, but I also noted when variability between group members made comparisons more difficult. Also, because the interviews asked different questions, slightly more depth and richness was bound to be added by the peer interview because it covered previously unexplored topics. For this reason, I focused not on comparing the content of the two interviews, but on the quality of interactions between researchers and subjects. In this light I strayed from one of my initial research questions, which was to track respondents over time and analyze their own development of themes, as it became obvious that this was not a useful way to analyze these data.

Additionally, we had no intention to conduct this analysis with the PFF data. I took the lead of other researchers who have critically analyzed data that were meant to answer other research questions (Arendell, 1997; McCorkel & Myers, 2003; Reich, 2003). The transcribers, however, generally focused on content rather than tone, so details like laughter, the presence of additional words (i.e. like, uh, um), notes about pauses, or other context-specific information are sometimes not documented. Listening to selected interviews proved to be very useful in this regard, but was not possible for the entire sample, given the focus of this thesis.

Conclusion

It is possible that the findings of this study (that the peer interview increased the depth of our research data and results) are due entirely to the contextual factors that were present in the peer-interview process, and not to the act of peer-interviewing in and of itself. Contextual factors include the field-trip like atmosphere of the joint meeting day, the fact that youth from different gardens were coming together for the first time, the fact that the peer interview guides were substantially different than staff-led guides, and that participants may have connected more deeply with questions they designed themselves than with those designed by staff. However, I would argue that the context-specific nature of our findings is a strength of our project, rather than a limitation. The setting was designed around the youth, with the intention of supporting a meaningful and participatory connection with the research process. This speaks to the importance of framing the peer interview within a context of participatory, engaging, and fun research where youth develop research questions and interview guides that are meaningful and interesting to them. The act of peer interviewing (by which I mean simply having peers interview one-another) has been utilized in previous studies, but not within a framework of participatory engagement throughout multiple stages of research.

For this reason, outcomes of this study include the development of the Peer Interview Methodology, a specific participatory process to be used in designing, conducting, and analyzing peer interviews. The major three components of the Peer Interview Methodology are: 1) engaging participants in formulating research questions and designing an interview guide through collaborative question creation and editing; 2) inviting participants to conduct interviews with one-another in an informal setting and encouraging the development of *rapport* and the incorporation of conversational *tangents* by helping them establish common ground; and 3) encouraging *synthesis* by including a debriefing/discussion session directly after the peer interviews so that participants can discuss and compare what they have learned about one another. The Peer Interview Methodology is recommended for evaluation and participatory research projects where researchers have repeated interactions with participants, and participants become comfortable and competent as researchers. It is also recommended as an <u>additional</u> source of interview data, not as a replacement for traditional staff-led interviews. As a method for engaging and encouraging comparisons between research participants, the Peer Interview Methodology can be a beneficial addition to a research design.

Beyond the recommendation of the Peer Interview Methodology for participatory evaluation and research, this project provided several lessons for research with youth. Here are my recommendations based on my findings from the peer interview and joint discussion data:

- Do not underestimate the power of rapport in interviews with youth. Rapport can develop between interviewer and subject based on both immutable personality factors and the discovery of shared experience, which can be enhanced throughout the research project. In a qualitative evaluation, the purpose of interviewing is two-fold: both to understand the outcomes of the project on the participants' lives and to provide honest feedback on the project. It might have been beneficial to disentangle these two outcomes of the interviewing process by incorporating multiple interviews for every participant. We might have taken better advantage of the connections that our research staff formed with youth by recording interviews between individuals (volunteers, youth, staff) who were more familiar with one another and could probe ideas that had come up in previous conversation. In this way, staff who worked directly with participants might have built upon their shared experiences and established relationship to more deeply probe research questions and engage in more open and fluid dialogue. Staff members who were less familiar with participants could ask more specifically for feedback about the project, in order to allow more honest answers. The rapport that was evident between individuals like Helen and Jennifer, who were more familiar with one-another prior to the interview, and the subsequent richness added by increasing rapport, suggests that building on familiarity between interviewers and subjects might have been an effective strategy to add richness to the data.

- Engage youth! A disproportionate percentage of the literature does not attempt to truly engage youth in research that is meant to improve their outcomes. We learned that researchers can derive more meaning and usefulness from their data if they engage youth participants in designing, conducting, and analyzing the research methodologies. Youth gardeners proved to be valuable partners in our research process. We saw that even when youth went on tangents during participatory interviews, they still displayed a focus on, and interest in, the outcomes of the research. Youth proved to be effective interviewers because they could avoid the traditional interviewer-subject power dynamics (as they took turns intervieweing one-another) and age-graded hierarchies that our more traditional interviews might have suffered from. The data from the joint discussion contributed greatly to our findings and opened our eyes to the perspectives of the youth. These data were powerful to us as we coded, and were heavily influential in the development of major themes during the content analysis. We were also able to engage youth from both communities by asking them to present on a panel at a health extension conference. The youth found this experience empowering because they were able to directly share their stories with stakeholders to encourage youth gardening programs nationwide. Encouraging direct and thoughtful contributions from youth proved to be engaging, empowering, and informative, and created more useful and deep findings.

- Take a strengths-based approach to development. Although it has been discussed at length by other researchers (i.e. Arnold et al., 2012; Benson, 2006; Delgado, 2006; R. Lerner et al., 2005), the outcomes of Producing for the Future support the need for positive, strengths-based programs that engage youth in their own development. We were able to support low-income youth to be researchers and entrepreneurs in their own right, and to develop the capacities and interests they need to succeed in the adult world. We developed a program that would foster partnerships and mentorship between youth and adults in the community, and encourage the development of specific skills and knowledge about gardening, nutrition, and micro-enterprise as well as an intellectual curiosity about how the activities they engaged in affected themselves and their communities. The high level of interest and focus during research activities, as well as youth’s own descriptions of their newly developing capacities, and new understanding of macro-level issues and injustices are evidence that the positive youth development approach was an effective strategy in our project. Programs that engage PYD support youth to cultivate their own passions, so they naturally avoid activities that may have negative impacts on their health and development. Participatory research is a good match for PYD programs, because it challenges youth to take a critical eye to themselves and their communities and work towards change.

- Introduce a basis for common ground among youth who have not met, in order to increase *rapport*. We conducted icebreakers before the interview process, which gave youth a chance to see who they might like to partner with. This may have encouraged the pairings that emerged, many of which were very appropriate matches. Another idea is to weave questions into the interview that encourage interviewers and subjects to share more personal stories, in order to break past the initial stage of *apprehension* (DiCicco-Bloom & Crabtree, 2006) between interviewer and subject.
- Cultivate mindfulness in program evaluation by preserving study materials, investing in the training of interviewers, facilitators, and transcribers, and carefully considering research context. We provided cursory training for staff interviewers, but did not go into depth on the purpose of and approach to open-ended interviews, probes, etc., and so the engagement of staff interviewers with their subjects varries. We were lucky to have a skilled facilitator for the joint discussion, but the level of skill and experience varied across research staff members. The contextual factors that played into the results of both the peer and staff-led interviews may have contributed to differences

in respondents' levels of rapport and tangents with interviewers. Participants may have felt more relaxed and at ease during the peer interviews because it was a structured activity for the day rather than an interruption of other activities. Widely varying styles between the three transcribers also meant that the tone of the conversation is not always clear from the transcribed notes. Listening to audio recordings of interview proved to be a highly useful analysis strategy for this project, and would not have been possible if we had erased audio files after transcribing them. Because program evaluation is often conducted with limited funds and on short timelines, evaluators may focus on the primary outcomes of the program in interviews and discussion without considering how participants will respond to different individuals and contexts. However, mindfulness is an important factor of qualitative methods, regardless of whether the intended outcome is evaluation or basic research. Carefully training all research assistants, preserving data in many forms for further analysis, and considering the contextual factors that may influence participant's responses will create a richer data set. I suggest a balance that favors depth over brevity within qualitative evaluations, especially in the evaluation of programs that integrate multiple pathways through which to impact participants' lives.

Incorporating different types of interactions between youth participants during evaluation research helps them to understand their own developmental processes, ask new questions, and come to new understandings about the effects of the program at individual, family, and community levels. I have tried to incorporate the principles of

Critical Discourse Analysis (DiCicco-Bloom & Crabtree, 2006; Toolan, 1997) and take a "critical social science perspective" (Eakin et al., 1996) in this study by engaging in reflexivity on behalf of the researchers, acknowledging power structures inherent in research methodologies, and hypothesizing a bi-directional relationship between research participants and staff where both are researchers and learn from one another. As qualitative researchers, we are not only interested in the "true" or "real" effects of the program, but also in the processes that participants use to come to new insights and develop their own perspectives. The more that we can encourage youth to engage in discussion and exploration in the evaluation of youth programs, the more they will form bi-directional and contributing relationships with their contexts. If we assume that young people are in the process of creating identity, we must give them ample room to discuss these new identities and develop their own understanding of themselves so that we can more fully understand their perspectives.

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APPENDICIES

Appendix A: Peer Interview Guide

1. How has the project influenced your diet and health? What are your favorite veggies/dishes from the garden?
2. How does the project make you think about gardening at home?
3. How is the garden affecting your life? Has it opened up any new opportunities?
4. What was your favorite activity or experience at the garden (at monthly meetings, work parties, etc.) and why?
5. Have you made any new friends, young or old?
6. How do your parents/family/household members feel about this project?
7. If listing this project on a resume, how would you describe it?
8. What are you planning on doing with the money from your research stipend?
9. How did you market your produce and how did it work? What happened with produce not sold?
10. Has the existence of the garden affected the way the community looks at youth? What have you noticed?
11. Why did you stay with the project?
12. What would you change about the garden project?

Appendix B: Entrance Interview Guide

1. What did you think you were getting into when you signed up for the project?
2. When you first started on the project, what were your goals for being a participant? What was your vision for the project?
3. What do you think you've gotten from the project so far?
4. Do you feel that you've formed any connections with youth participants, adult mentors, or project staff?
5. If you were to tell someone about this project, what would you say?
6. What would you say is the best part of this project?
7. What would you say is the worst part about this project?
8. What has surprised you about this project?
9. Where do you see yourself in 5 years?
10. Has this project had any part in shaping your future goals?

Appendix C: Exit Interview Guide

1. What did you expect this project to be when you signed up?
2. Did the project live up to your expectations? (Why/why not? What were your expectations?).
3. What were your original goals, and have you fulfilled them?
4. What was the most valuable thing you got out of the project?
5. What, if anything, did you learn about constructing a garden?
6. What, if anything, did you learn about growing fruits and vegetables?
7. Did you help with the selling of the produce? What, if anything, did you learn about selling and marketing fresh vegetables?
8. What, if anything, did you learn about community-based research? (doing research as a community member)
9. Did you feel you were actively engaged as an individual in the research component of the project? (What components did you help with? How did you help to document the changes in gardeners and in the community?)
10. Did you form any lasting connections with project participants, mentors, or staff? How do you see these connections benefitting you or others in the future?
11. What was the best part about this project?
12. What would you change about the project?
13. Why did you decide to leave the project?
14. Would you recommend this project to a friend? Why or why not?
15. Has this project had any part in shaping your future goals?