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Recruiting and Retaining Young Urban Black Men in a Study of Violence: Procedures Used and Lessons Learned

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Abstract

We conducted a study about three common recruitment and retention obstacles facing scholars interested in racial disparities research: potential mistrust from the black community, a stigmatized research topic, and high participation burden. Nonetheless, we successfully recruited and retained 28 young black men in a three-month study of violence. In this article, we describe and explore the recruitment, engagement, and retention strategies employed during the study. Using a concurrent triangulation mixed-method design, we analyzed data from our web-based administrative system, participant enrollment and exit surveys, and team members' field notes. A large

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percentage (79%) of participants completed the study. We received 81% of 556 expected surveys, and 100% of the remaining participants wanted to continue participating at study's end. We conclude that internal incentives, the combination of informal and formal community recruiters, the visibility of the principal investigator, and face-to-face meetings may have contributed to the success of the project.

Adolescent black boys are underrepresented as health-care patients, public health intervention participants, and research study participants. Anyone interested in improving the health of these adolescents is likely to ask: Can we recruit them and can we keep them engaged? However, literature describing effective recruitment strategies for black young men is sparse and limited in two ways.

First, few studies provide information specific to the successful recruitment, engagement, and retention of black young men. In general, public health scholarship on racial inequities continues to be hampered by low rates of black participation (Bonevski et al. 2014; Sankare et al. 2015; Yancey et al. 2006). The issue is amplified when studying the most pressing health issues for black young men, such as risky sexual behavior, substance use, and violence (Bempong et al. 2014; Fraga 2016; Magruder et al. 2009). Participating in studies or programs where they share information on these stigmatized and criminalized topics could have serious (including criminal) repercussions.

Second, much of the promising, extent information on recruiting black young men focuses on efforts that rely solely on place-based organizations to complete recruitment (Fortune et al. 2010; Warner et al. 2013). Although schools, churches, clinics, community organizations, and the like can be capable partners in the recruitment process, the resultant sample contains young men with a connection to a public or parochial institution. The most disconnected youth—those not engaged in education, work, or other formal organizations—cannot be captured through these recruiting partnerships (MacDonald and Marsh 2001; Zaff et al. 2014).

The current article, which focuses on only a portion of our more extensive project, provides details and analysis that help address these two particular shortcomings in the literature. The analyses reported here center on two broad research objectives. The first objective is to examine whether our recruiting methods served as efficient and effective ways to recruit young black men in general and to capture some "disengaged" youth as participants. Our second objective was to explore connections between our

recruitment and retention processes and participants' continued participation in the project, despite high burdens on them. We hope that by disseminating a detailed accounting of, reflection on, and analysis of our procedures, other researchers and program directors can use and improve on our process so that public health research and intervention efforts can increase inclusion of the young black men who are at highest risk for engaging in risky behaviors.

Common Issues Related to Recruitment and Retention

Mistrust

George et al. (2014) report that a little over three-fourths of relevant research articles find that potential black participants cite distrust as a barrier. More specifically, black individuals are skeptical about whether research will benefit the black community, suspecting that it will instead advance the agenda of white researchers and their institutions (BeLue et al. 2006; Durant et al. 2007; Gadegbeku et al. 2008; Herring et al. 2004; Johnson et al. 2009; Scharff et al. 2010). This mistrust extends beyond medical institutions to include academic ones, which minorities often view as elite entities (Curry and Jackson 2003). Researchers who have not established positive, ongoing relationships with black communities may be particularly vulnerable to issues of mistrust (Curry and Jackson 2003). This mistrust may be even more important than racial concordance between the research team and black research participants (Davis et al. 2013; Fryer et al. 2016).

Taboo Topics

It is a challenge to ask anyone to report on behaviors or taboo topics that society negatively sanctions both formally and informally. Hypersurveillance of young black men and widespread implicit bias toward them make it dangerous for black adolescent boys to share information about potentially illicit behavior (Rengifo and Pater 2017; Todd et al. 2016). To effectively elicit information on common sensitive topics, researchers must pay particular attention to question wording, interviewer training, and identification mechanisms (e.g., geotracking, IP addresses; Fraga 2016). Given that we were studying violence, we considered these factors when designing the recruitment and retention process.

High Participation Burden

Logistical characteristics of studies such as time-consuming enrollment processes and inconvenient meeting locations/times can also serve as barriers to recruitment and retention (Brown et al. 2000; Ejiogu et al. 2011). Specifically, research methodologies requiring a lot of time, thought, or specific timing can negatively affect both recruitment and retention (Ejiogu et al. 2011). These barriers can be especially salient in populations with limited transportation options, unfamiliarity with wording in studies, and lack of schedule control, all of which tend to characterize adolescent black boys.

Selection Bias

Health researchers have begun to make progress in addressing the previously mentioned barriers by moving toward more community engaged recruitment and retention practices (Wallace and Bartlett 2013). However, if limited to partnerships with community organizations and institutions, these new methods can contribute to a selection bias pervasive in health research on black adolescents: the exclusion of the disconnected youth subpopulation of black adolescents. As a result, the experiences of the most vulnerable subgroups within the population—those who practitioners are typically most eager to reach—are often not included in studies and programs. In this way, partnerships can contribute to selection bias when studying health issues associated with social marginalization from institutions (Lamb et al. 2015). One of our goals when designing the recruitment and retention process was to include these often marginalized black adolescents as participants.

Method

The Larger Study

Data were collected as part of a more extensive study on underresourced Indianapolis neighborhoods' resiliency to adolescent violence. All of the 19 neighborhoods (census block groups) of interest had high levels of concentrated disadvantage: poverty, single parent families, unemployment, public assistance use, and minority residents. But they also averaged less than one annual incidence of adolescent violence over a five-year period (between 2008 and 2012). These were our "resilient" block groups. We were interested in comparing data on the experiences of young men in these neighborhoods to data on young men in one of the other 108 areas of concentrated disadvantage (the nonresilient block groups).

Thus, the study had relatively strict inclusion criteria. Participants needed to be between the ages of 16 and 20. They could spend time in any of the 127 areas of concentrated disadvantage, but our recruitment was stratified by resilient versus nonresilient block groups. Additionally, we did not want participants to be related to each other or reside at the same address.

Data collection included in-person interviews, enrollment and exit surveys, and, primarily, ecological momentary assessment (EMA). The mobile phones prompted participants to fill out a cell phone–administered survey twice per week over a three-month period. Health researchers have used EMA to study a variety of health issues among adolescents (Hensel et al. 2016; Shiffman 2009; Silk et al. 2011). While the data from this method are rich, EMA places a high burden on respondents.

The research team for this study consisted of five people. The principal investigator (PI) is a community-involved black woman in her 30s. She lives in an upper-middle-class area of Indianapolis and is heavily involved in her children's public school located in a lower-income area of Indianapolis. The project manager is a community-engaged white woman in her 20s who lives in Indianapolis. She has been professionally connected with residents of the neighborhoods of interest for over five years. The postdoctoral scholar is a black woman in her 30s who lives approximately an hour and a half outside of Indianapolis. The project coordinator is a black woman in her early 20s. She is an undergraduate student who previously attended an Indianapolis high school and continues to work with students as a tutor and mentor. The research assistant is a black man in his 20s. He is also an undergraduate student and lived off campus in Indianapolis at the time of the study.

Recruitment Strategy

The recruitment process was approved by our institutional review board (IRB). We recruited participants from contact leads provided by four sources: (1) an adult with formal ties to the youth, (2) an adult with informal ties to the youth, (3) a community engaged researcher, and (4) youth-initiated snowballing.

First, we contacted people from a list of contacts provided by two research partners: a charter school dean (with formal ties) and a local community organizer (with informal ties). The dean works in a high school that serves students who live throughout the city. His school is 11% white and was founded by an organization that is committed to increasing economic independence among low-income families. The community organizer has partnered with the PI on various efforts over the past seven years.

His contacts included young people he has met in his daily interactions throughout the city during conversations and his usual daily rounds.

Second, the PI recruited individuals from her networks and during day-to-day interactions in public spaces (primarily parks and restaurants). Third, once enrollment began, participants began telling family and friends about the study, resulting in an unplanned snowball sample.

The enrollment process was completed via face-to-face meetings. At the enrollment meeting, our team reminded participants of the study purpose. Then, as a form of internal incentive, we noted that we wanted to learn more about the decisions made by teens to refrain from violence, and we wanted to use the information to find ways that other neighborhoods could decrease rates of violence among young people.

As part of the external incentives for participation in the study, participants were given an iPhone 5C and a phone case. The university granted participants ownership of the phone after they agreed to participate in the study (i.e., even those who withdrew from the study kept their phone). If a participant lost, broke, or reported his or her phone as stolen, we replaced it and provided a new phone number. Participants received unlimited domestic calls, texts, and data for the duration of the study. A member of the study team suspended service when a participant missed two consecutive surveys and terminated service at the completion of the study. We also provided a US$25 Visa gift card for attending each in-person interview and the exit survey.

To alleviate some of the potential participants' reservations regarding reporting about violence, the IRB recommended applying for a U.S. Department of Health and Human Services certificate of confidentiality and (perhaps more importantly) a National Institute of Justice certificate of privacy. We also included the following wording in the informed consent materials that were provided to the participants:

> Your personal information may be released if required by law. However, if a study participant becomes a person of interest in an investigation and data from the study is subpoenaed, the PI will not comply and will instead fight against any subpoena for study records.

Engagement and Retention Strategy

After the informed consent process, a research team member provided a tutorial on iPhone use, survey access, and data entry. We explained the risk that although the research team did not collect or track this information, participants could provide a record of their presence to others outside of the

research team through geotags. We taught them how to turn off trackers on individual apps. This extra information was meant to protect participants per IRB guidelines and increase trust in the research team.

We provided participants with a study information sheet and placed contact information for the project coordinator directly into the participants' phones. The project coordinator attended 24 of the 28 enrollment meetings. The substantial involvement of the coordinator was meant to create a close relationship with participants.

A web site designed to be accessed by team members was a central tool in our engagement and retention strategy. The Web site allowed us to see in real time who had completed, not completed, or partially completed the survey. Each case was de-identified, so we also added our administrative notes to the web site.

To encourage full engagement with the surveys, we designed two alternate survey modules. The initial questions asked whether participants had engaged in violence or almost engaged in violence. If they answered "yes," participants were prompted with the first module: a series of questions that asked for additional information about that situation. If they answered "no," participants were skipped to the second module of questions that required a similar amount of time to complete. These modules guarded against underreporting violence as a way of shortening time spent on the survey.

For interviews, we met participants at a location of their choosing such as a library, school, or church. If needed, we reimbursed them for bus fare. The design asked all participants to attend at least one in-person interview, primarily to clarify or expand on information provided through the EMA tool. The secondary purpose of the discussions was for participants to feel connected to and engaged with the research team.

Data Collection and Analysis

Our mixed-method approach was based on a concurrent triangulation design (Creswell 2009). We collected quantitative (from the web site and surveys) and qualitative (from field notes and surveys) data simultaneously, analyzed them separately, and then compared and combined findings. The web-based data collection system interfaced with a Qualtrics survey. It provided in-depth information on completion rates, overall participant engagement, and participants' study status: on study, off study (e.g., needs a replacement phone for one that is lost, broken, or stolen, or is institutionalized [incarcerated or in the hospital]), on hold (missed two consecutive surveys), and withdrawn.

The enrollment survey provided information on demographics, student status, employment status, source of income, living situation, arrests, and incarcerations. The exit survey added closed-ended questions that assessed reasons for missed surveys and hypothetical questions about further participation in the study. Open-ended (qualitative) questions probed for reasons participants initially agreed to enroll in the study and likes/dislikes about participation. We turned to our field notes (jottings from four of the research team members were converted into 22 single-spaced pages of complete field notes) to elaborate on descriptive findings when necessary.

Because the quantitative analysis only involved basic univariate or bivariate descriptives, we performed both the quantitative and qualitative analyses using Dedoose 7 software. Qualitative analyses involved focus coding. First, our coding grouped responses to individual open-ended questionnaire items into themes. Second, we performed focused coding of field notes and open-ended responses to look for key words related to unanticipated quantitative findings. Themes for this stage of coding included comments about the PI, views of the study as a "program," and gendered interactions between participants and researchers. The postdoctoral scholar and PI performed initial coding in the first and second steps, respectively, and each of the coauthors reviewed the coding and original data to assure agreement before establishing a finding.

Results

Recruitment

Figure 1 documents the source of contact information for participants, and Table 1 provides more detailed information about the efficiency of these sources. Our community organizer provided the greatest number of contacts. However, the community organizer's contacts had a slightly lower participation rate than the dean's connections (53% and 62%, respectively). In contrast, the contacts initiated by the PI resulted in a 100% participation rate. Very few of the participants' referrals resulted in participation (three of 17), primarily due to inclusion criteria limitations.

Recruitment was slightly hampered by incorrect or out of date contact information (13% of potential participants). In all, our contact list consisted of 55 individuals. Of the criterion-eligible participants with correct contact information, only three declined to participate (a 90% cooperation rate vs. a 51% overall response rate). According to open-ended responses on the exit survey, one in five participants (20%) primarily agreed to participate

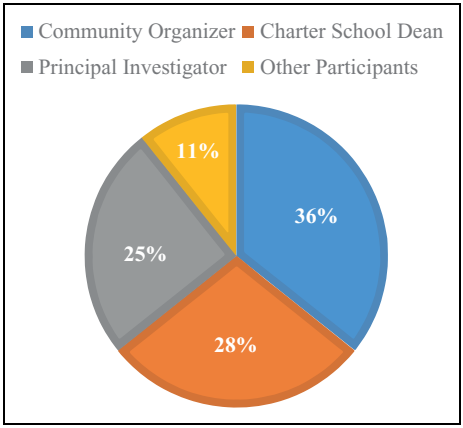

Figure 1. Percentage of participants recruited from each information source.

Table 1. Source of Contact Information Used to Recruit Participants.

				Nonparticipants		
Source of Information	Contacts	Participants	Participation Rate (%)	Ineligible	Declined	Wrong Info
Community builder	19	10	53	1	3	5
Other participants	17	3	18	10	1	3
Charter school dean	13	8	62	5	0	0
Principal investigator	7	7	100	0	0	0
Total	56	28	50	16	4	8

because of the external incentive (i.e., the phone and data plan or to earn VISA gift cards). A more substantial portion—one of every two (50%)—cited internal motivations as the primary motive. These young men wrote statements such as "seemed like the public needed some new statistics," "to give my input," and "I wanted to help the community any way I could."

Table 2 shows that our group of participants included the disconnected young black men who are typically underrepresented in clinical and public health studies. The sample consisted of students from eight different high

Table 2. Characteristics of the Participants.

Characteristic	Number of Participants	Percentage of Participants
School enrollment status		
High school	23	82
Alternative adult school	3	11
Not enrolled	2	7
Employment status		
Traditionally employed	9	32
Earns money other ways	16	57
Both traditional and other	3	11
Not working	6	22
Living situation		
With a parent/grandparent	17	61
With a friend/other family	6	21
On own	3	11
Other (but not homeless)	2	7
Contact with justice system[a]		
Arrested	7	32
Juvenile detention	4	14
Adult detention	1	4

[a]Contact with the justice system was asked in the exit interview, so only 22 participants answered these questions.

schools. Also, two participants had dropped out of high school and three attended an alternative adult school. At enrollment, 32% of the adolescents reported they were employed. Although not mutually exclusive, a larger percentage, 57%, said they currently make money in some other way (through an underground economy). Nearly a third (32%) had been arrested (ranging anywhere from one to four times). This rate is on par with national statistics indicating that 30% of black male adolescents will be arrested by age 18 and 49% of black men will be arrested by age 23 (Brame et al. 2014).

Engagement and Retention

Retention was relatively high (79%) for a longitudinal study placing this amount of burden on participants. Twenty-two participants remained active at the study's end, two had formally withdrawn, and four had implicitly withdrawn by failing to reenroll after we suspended service on their phones. Attrition only occurred in the first 42 days of the study, meaning that if

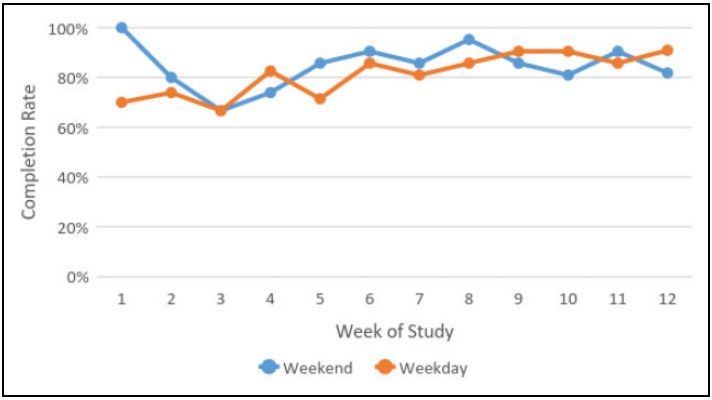

Figure 2. Survey completion rates by day of week.

participants made it halfway through the study, they completed the study. The service on six phones was suspended at some point during the study.

Perhaps most revealing is that none of the participants who attended the first monthly in-person interview withdrew from the study. The six young men who missed their first interview were the six young men who ultimately left the study, after an average of 37 days enrolled. Those who completed were in the study for an average of 89 days.

If all 28 participants completed two surveys a week from the time in which they enrolled in the study until the study ended, we would have received 556 completed surveys. However, at the study's end, 448 surveys were completed for an 81% completion rate (see Figure 2). For those who remained enrolled in the study, completion rates ranged from 53% to 100%. No apparent trend differentiates rates of completion for weekends versus weekdays. The findings regarding retention after the first monthly interview are evident: Completion rates hit a low in the third week but rebounded and remained stable after that.

Table 3 provides a summary of answers to the open-ended questions on the exit interview. When asked what they liked most about participating in the study, responses fell into three categories: the iPhones (seven responses), viewing the study as a positive program (seven responses), and the standardized design (four responses). No one answered "nothing" when we asked them what he liked best about the study. However, when asked "What was your least favorite part of the study?" 10 respondents reported "nothing."

Table 3. Answers to the Question "What Did You Like Best about the Study?" by Category Grouping.

The iPhones (Seven)	Program-like Feel (Seven)	Study Design (Four)
• The iPhone • The phones • Phone and money • It's a free phone • The phone • Free phone • Having a Phone	• I like the program and how it tried to keep us out the streets • By showing me who I am • It basically checks up on you by asking certain questions • Got to tell (the team) a lot • The awareness • Everyone in program was kind and helpful • Networking	• The question they (*sic*) asked were consisted (consistent) • It was straight forward to the point • It was consistent • It's not to [*sic*] long

Finally, in the exit survey, 100% of the respondents—all 22 adolescents—indicated that they would continue participating in the study if given the opportunity. One respondent noted that he would be willing to participate for another month. Four would be willing to participate for "a couple more months," and 16 would participate "as long as I can." (One participant failed to answer that follow-up question.)

Discussion and Lessons Learned

Our goal was to recruit young black men living in different areas of concentrated disadvantage into a study where they would share information about their violent behavior, without succumbing to the typical bias associated with recruiting through gatekeeping organizations. We designed a recruitment and retention plan that took these aims into account. We also relied on existing knowledge to deal with trust, taboo topics, and high participant burden as potential barriers to the successful completion of the project. Overall, our administrative data indicate that our recruitment and retention plan worked well given our aims.

Recruitment Lessons Learned

During the consent and recruitment process, we learned that participants can become unexpected recruiters. However, participants were not efficient

sources for recruitment because the study had strict inclusion criteria (the most common issue was age limitation and being related to another participant). The strict inclusion criteria may explain why our recruitment results differ from others' efforts such as Sankare et al. (2015), who found that referrals by study participants for a study involving Blacks and Latinos were the most effective means of recruitment.

Both the dean of the charter high school and the community organizer were instrumental in the recruitment process. Their equal success reinforces the value of not only identifying key recruiters who have a rapport with the study population but also targeting community connections based on both formal and informal ties. One of our chief initial concerns was the bias introduced by recruiting through gatekeeping institutions, which could be represented by our relationship with the dean. The diversity of our participants (regarding schools attended, geographic location, and general connection with formal institutions and economy) suggests that adding recruitment through informal ties—not wholly replacing recruitment from institutions—may be an appropriate way to address selection bias without introducing new bias.

Many of our strategies adhered to the 33 overlapping strategies that Waheed and colleagues (2015) identified to address recruitment barriers. The most common themes in their work that we integrated into our strategies were ethnically matched staff and experienced (i.e., working with this population) researchers. Extending on their discussion, we learned that these characteristics are most important for the PI, because these characteristics can counteract the hierarchy that potential participants recognize within the research team.

Our data on recruitment (100% participation by those contacted by the PI) and our field notes indicate that the experience and characteristics of the PI may be especially influential, distinct from the experience and ethnic/racial concordance of other research team members. Potential participants and their parents made statements such as "[explaining to another community member] This is the doctor. She is a professor, and she's doing the study," "Oh, this is Dr. Leech? [smiling and reaching out to shake my hand with his two hands]." Recognizing concordance with the "person in charge"—or perhaps just seeing the face of the person in charge and not "simply the support staff"—seemed important in developing interest and potential trust in the study. Even after recruitment, the presence of the PI (accompanying the project coordinator) was noticed at one participant's interview when he stated, "You Dr. Leech? I thought you was just made up." The importance of the PI's involvement could be a valuable lesson

learned, given that PIs tend to perceive patients' psychological characteristics and recruiters' lack of information and awareness as the primary barriers to black participation, rather than the PIs' characteristics and engagement (Tanner et al. 2015).

Engagement and Retention Lessons Learned

While EMA was designed to be our primary source of information, we found that in-person meetings both provided rich data and supported engagement. Meetings (as the participants began referring to them, instead of interviews) lasted on average 30 minutes, while participants completed the survey in an average of three minutes. At these meetings, the participants engaged in semistructured interviews that allowed two of the team members and the young men to participate in real conversations (instead of the one-sided communication of the survey). Also, before the official interview began, the team and the participants engaged in non-study-related chitchat. These factors may help explain how meetings helped build rapport between the participants and the study team, which is supported by the positive findings of retention and completion rates following the first meeting. They also point to the utility of integrating qualitative methods into quantitative studies that anticipate struggling to retain this type of hard-to-reach population.

The project coordinator may have been one of the primary reasons for the positive rapport between the research team and the participants. The project provided her with a cell phone, and she was almost always available to the participants via text. We originally designed the study to have a young black man in this position and were concerned that replacing the man with a woman might limit the participants' level of comfort and trust (Formea et al. 2014). When the project coordinator first met the participants, she noted that several of the young men referred to her as ma'am "which was funny considering we're only a few months apart in age."

Eventually, many participants began using slang in conversations with her, some talked with her about drugs or their personal issues before the interviews began, and other team members' field notes noted the high levels of comfort between the project coordinator and participants. The relationships were not devoid of gendered aspects—with a few participants commonly giving compliments about the coordinator's physical appearance or people referring to team members as "Nubian princesses." However, there was a high level of mutual respect, with most team members, including the project coordinator referred to as "Miss [fill in the first name]." Our

experience indicates that a young woman with lived experience in the area can serve as a competent coordinator who engenders trust, but she must be supported by a team who recognizes and can support her when navigating gendered interactions.

The team learned that once they placed participants on hold, it was difficult to get them back in the study. The difficulty was likely due to many factors: They did not have another phone or working number where researchers could reach them, the onus was on the participant to contact the study team to reenter the study, and some were unaware of or forgot how to contact us. We only reengaged with a third of the participants whom we placed on hold due to unexcused, missing surveys. However, we reengaged with six of the seven other participants who experienced a lapse due to lost, stolen, or malfunctioning phones. This differential tells us that suspending service might work as a deterrent to missing surveys but does not seem to support retention of participants. We still do not know whether this was a way for participants to remove themselves from the study passively or whether it is merely a weakness in our engagement strategy.

Our study was limited to a small sample size, and our process and method may seem daunting or unrealistic to researchers aiming to recruit a large study sample. However, we were successful at efficiently recruiting 28 young men with stringent inclusion criteria. Studies with more relaxed age, relationship, or geographic limitations may be able to use these strategies effectively. We received contact information for 56 individuals, although we informally screened out interest from or suggestions for a large number of others (we did not formally keep track) who we immediately knew were ineligible for the study.

Overall, despite the sensitivity of the topic and the risks associated with documenting it, our experience indicates that researchers and practitioners can recruit a diverse group of at-risk urban black young men for studies about violence with high levels of engagement and retention. Twenty-two participants completed the study from beginning to end. Many of them saw the study as a program to help keep them off the streets, and most teens seemed to value participation in the study. Participants' responses and our data paint a very different picture from the oft-cited literature that this population feels distrustful of health research and that they question the value of participating in research efforts. Many of our strategies can be transposed to other studies and should be evaluated as part of research and intervention efforts that aim to include "disconnected youth."

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