



# Successfully Recruiting Black and Hispanic/Latino Adolescents for Sexually Transmitted Infection and HIV Prevention Research

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## Abstract

Disparities in rates of sexually transmitted infections (STIs) and HIV between Black/African American and Hispanic/Latino adolescents and their white counterparts are well documented. Researchers may encounter notable challenges recruiting Black/African American and Hispanic/Latino adolescents for sexual risk reduction studies. In this article, we present information to assist with planning, implementing, and evaluating recruitment and retention strategies. We also provide practical examples of challenges and solutions from three STI/HIV epidemiologic or prevention intervention studies with different study purposes and populations. Researchers can use this information to aid proposal development, create or refine a recruitment/retention protocol before implementation, and troubleshoot challenges during implementation.

**Keywords** Adolescent research · Recruit · Black/African American · Hispanic/Latino · Sexually transmitted infections · HIV/AIDS

## Introduction

Adolescents and young adults (aged 15–24 years) are at risk for sexually transmitted infections (STIs), including human immunodeficiency virus (HIV). In 2016, persons aged 15–24 years accounted for 63% (1,008,403 of 1,598,354), 46.6% (218,302 of 468,514), and 21.2% (8428 of 39,782) of reported cases of chlamydia, gonorrhea, and HIV diagnoses, respectively [1, 2]. For each of these infections, Blacks/African Americans (referred to hereafter as Black) and Hispanics/Latinos are disproportionately affected. For example, the rate of HIV diagnoses per 100,000 for Black adolescents (26.0) was nearly 19 times the rate for white adolescents

(1.4) in 2016; the rate for Hispanic/Latino adolescents (5.1) was 4 times that of their white peers that year [3]. A combination of cultural, biological, and behavioral factors increases adolescents' vulnerability for STI or HIV acquisition [4]. Targeted efforts are warranted to reach adolescents during this period of development when they are navigating changes in their physical and cognitive development, renegotiating relationships with family, friends, and community, and establishing patterns that will likely persist into adulthood [5].

Conducting STI/HIV prevention intervention research with adolescents, as well as the epidemiologic research that serves as its foundation, presents unique challenges. Although some attention has been devoted to developing appropriate

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measures and data collection methodologies for research conducted with adolescents, less attention has been given to strategies for more effective recruitment of adolescent research participants. This is especially important regarding Black and Hispanic/Latino adolescents because these populations are disproportionately affected by STI/HIV, and, historically, racial/ethnic minorities have been underrepresented in ethical research [6, 7]. Because of this gap in the method-focused evidence base, adolescent-focused researchers could benefit from additional guidance to facilitate recruitment, achieve study aims for adolescent engagement, and ensure more efficient use of human and material resources.

The purpose of this article is to share effective practices for recruitment and retention of adolescents in STI/HIV prevention research. The information is gleaned from our experiences successfully conducting research with Black and Hispanic/Latino adolescents. We provide information to assist with planning, implementing, and evaluating recruitment and retention strategies, as well as practical examples of challenges and solutions from three STI/HIV epidemiologic or prevention intervention studies with different topics, research designs, and study populations (see Table 1 for detailed study descriptions). This information can be useful for various purposes, including proposal development, developing or refining a recruitment/retention protocol before implementation, and troubleshooting challenges during implementation.

## Planning: Developing Effective Recruitment and Retention Strategies

Planning plays a vital role in successful recruitment. Careful consideration of the research context, including the study aims, population, resources, geographic location, and social and political climate, is needed to develop the most appropriate recruitment strategy (Table 2). For adolescent populations, it is necessary to consider limitations related to dependence on parents or other adults for financial resources or transportation, or differences in privacy compared with adults. Given potential changes in social norms, technology, or preferred methods for social interaction for example, which can occur rapidly, formative research can be used to develop a strategy that aligns with the adolescent population’s current context. Recruitment-specific queries can be integrated into formative research being conducted for other purposes, such as focus groups or surveys to identify appropriate intervention content.

Youth advisory boards (YAB) or community advisory boards (CAB) comprised of individuals who are representative of the study population also provide valuable insight [12, 13]. Because the lived experiences of racial/ethnic minorities are underrepresented in the existing body of literature, YABs are especially useful for identifying contextual nuance (e.g., cultural norms, racial/ethnic discrimination) that can inform the development of tailored recruitment/retention strategies.

**Table 1** Overview of selected epidemiologic and intervention studies of STI/HIV risk among Black/African American and Hispanic/Latino adolescents, 2018

Topic (principal investigator)	Purpose	Design	Methods	Sample characteristics
Couple-focused HIV prevention (Lanier)	Intervention development	Mixed methods	<ul style="list-style-type: none"> <li>Phase 1: individual and dyadic qualitative interviews (<i>N</i> = 30 couples)</li> <li>Phase 2: prospective quantitative survey (<i>N</i> = 200 couples)</li> <li>Phase 3: intervention development and pilot testing (<i>N</i> = 10 couples)</li> </ul>	<ul style="list-style-type: none"> <li>Heterosexual males and females</li> <li>Index partner (IP): Black/African American or Hispanic/Latino/a</li> <li>Nominated partner (NP): any race/ethnicity</li> <li>IP: ages 16–24; NP: minimum 14 years of age</li> <li>Currently in a reciprocal heterosexual romantic relationship</li> </ul>
Influence of parental support, religiosity, and spirituality on adolescent sexual behavior (Ukuku Miller)	Identifying determinants of sexual risk	Mixed methods	<ul style="list-style-type: none"> <li>Phase 1: quantitative survey administered to mothers (<i>N</i> = 75)</li> <li>Phase 2: qualitative interviews with mothers and teens separately</li> </ul>	<ul style="list-style-type: none"> <li>Mothers and teens</li> <li>Black/African American</li> <li>Ages 14–17; 12 girls, 2 boys</li> </ul>
STI/HIV prevention for adolescents with mental illness or difficulty with emotion regulation (Brawner) [8–11]	Intervention development and efficacy testing	Mixed methods	<ul style="list-style-type: none"> <li>Phase 1: qualitative focus groups (<i>N</i> = 33)</li> <li>Phase 2: quantitative surveys (<i>N</i> = 53)</li> <li>Phase 3: intervention prepilot “dress rehearsal” (<i>N</i> = 29)</li> <li>Phase 4: quantitative pre/postevaluation of intervention efficacy (<i>N</i> = 108)</li> </ul>	<ul style="list-style-type: none"> <li>Heterosexual males and females</li> <li>Current treatment by an outpatient mental health provider (in treatment sample only)</li> <li>Black/African American</li> <li>Ages 14–17</li> </ul>

STI sexually transmitted infection, HIV human immunodeficiency virus

**Table 2** Key considerations for developing an effective recruitment plan

Where	Identify specific locations (physical or virtual) or events that the population is likely to frequent and concentrate efforts there.
When	Certain times of the day or week might be best. Seasonal factors that impact activity (e.g., increase in outdoor events during summer), daily schedules (e.g., academic year vs. summer), etc. can affect recruitment yield. This also varies depending on the geographic location.
How	Identify the best way to approach potential participants (e.g., in person, by phone, online), generate interest, and screen confidentially. Using multiple methods for approaching people and multiple screening options is advisable. <ul style="list-style-type: none"> <li>• Passive recruitment methods typically do not maximize yield (e.g., posting a flyer).</li> <li>• Be sure to include all methods and materials in the Institutional Review Board application.</li> </ul>
Policies	Identify policies regarding approaching individuals and posting or distributing materials that might affect recruitment strategies (e.g., approval needed to post flyers, policies that prohibit approaching individuals in malls or other businesses). Be able to identify public vs. private property.
Timeline	Include extra time to buffer the impact of unexpected or undesirable circumstances (e.g., recruitment plateaus).
Special considerations	Consider practical limitations for adolescents, including dependence on adults or others for financial support or transportation. Also consider cultural practices (e.g., racial/ethnic, subculture), values, religious beliefs, social norms, political climate, and appropriate, desirable incentives for participation.

It is advantageous to obtain feedback about materials and strategies from an advisory board of adolescents who represent a range of perspectives from the population of interest. Opting not to use an advisory board can result in strategies that are not culturally relevant or culturally appropriate

For example, YABs can identify a clinic or other venue that is not a safe space for racial/ethnic minorities, or access and utilization issues based on the geographic location of a research site, which could hinder recruitment and/or retention.

Lanier et al. identified key community stakeholders through online searches for youth-serving organizations, community walkthroughs, and/or referrals. Based on the study purpose, she identified individuals who were from the population of interest, worked and/or lived in those communities, had experience working directly with the population, and/or had a strong background in youth sexual health research. YAB/CAB-specific recruitment materials, such as flyers and informational sheets about the study, were developed to inform individuals about the project. Financial compensation was offered, and refreshments were served during meetings to compensate YAB/CAB members for their time and insights.

Given the focus of her study, Brawner et al. strategically recruited YAB members from the schools, mental health programs, and community-based organizations that served as research sites [8]. Recruitment materials were disseminated at the sites. She and her research team held 30-min YAB information sessions to explain the purpose and inner workings of the board and to recruit members. This approach yielded overwhelming interest from the youth. Staff at the sites also referred youth for whom they believed the YAB would be mutually beneficial. This positively affected recruitment at each site because potential participants heard about the study from their peers who

were enthusiastic about the work. Of note, a key benefit of identifying YAB members from the different research sites was that they provided contextualized information in the study planning, implementation, and data analysis phases based on their unique knowledge of their specific contexts (e.g., issues that arise in schools might be different than those in mental health treatment programs). Youth who became aware of the YAB through other means (e.g., word of mouth, social media) and contacted the research team were also given information and invited to join the YAB if interested. Financial compensation and food/refreshments were also offered at the monthly, 1-hour long meetings.

Table 3 provides examples of different recruitment strategies. Lanier et al. and Brawner et al. recruited from public venues (e.g., public transportation stops, local concerts) to reach a wider range of potential participants than recruiting from traditional venues (e.g., clinic, school) alone. However, challenges can arise when conducting eligibility screenings in less-controlled settings (e.g., abrupt end if the individual's bus or train arrives, difficulty finding a private location for screening, engaging an adolescent who is with others). Yet, with appropriate planning (e.g., identifying an unoccupied seating area in advance, awareness of transit schedules), resources (e.g., pens with a phone number to call for screening later), and staffing (e.g., multiple staff members to effectively engage groups), it can be an effective strategy to consider.

Recruitment via social media has become increasingly popular and has demonstrated utility for engaging populations

**Table 3** Recruitment strategies from STI/HIV research with Black/African American and Hispanic/Latino adolescents, 2018

Topic (principal investigator)	Location(s)	Approach/communication	Eligibility screening	Special considerations
Couple-focused HIV prevention (Lanier)	<ul style="list-style-type: none"> <li>• High-traffic areas (e.g., subways, busy street corners, barbershops, and beauty salons)</li> <li>• Community centers</li> </ul>	<ul style="list-style-type: none"> <li>• Street intercept</li> <li>• Flyers</li> <li>• Face-to-face</li> </ul>	<ul style="list-style-type: none"> <li>• Index partner: face-to-face (primarily), phone (sometimes)</li> <li>• Nominated partner: phone (primarily), face-to-face (sometimes)</li> </ul>	<ul style="list-style-type: none"> <li>• Both individuals must be eligible to participate in the study</li> <li>• Parental consent needed for minors (youth 17 and under)</li> </ul>
Influence of parental support, religiosity, and spirituality on adolescent sexual behavior (Ukuku Miller)	<ul style="list-style-type: none"> <li>• Community organizations</li> <li>• Social media</li> <li>• Snowball sampling</li> </ul>	<ul style="list-style-type: none"> <li>• Face-to-face, going door to door in specific zip codes</li> <li>• Provider, community, partner, and participant referrals</li> <li>• Flyers</li> <li>• Social media, directed ads to specific zip codes</li> </ul>	<ul style="list-style-type: none"> <li>• Online screener</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Parents and adolescents were interviewed in separate rooms. Adolescents were always interviewed first, and in a private room/area</li> </ul>
STI/HIV prevention for adolescents with mental illness or difficulty with emotion regulation (Brawner)	<ul style="list-style-type: none"> <li>• Recreation centers</li> <li>• High schools</li> <li>• Teen-focused events (e.g., concerts)</li> <li>• Outpatient mental health providers</li> <li>• Social media</li> <li>• Public transportation stops</li> </ul>	<ul style="list-style-type: none"> <li>• Face-to-face</li> <li>• Provider, community, partner, and participant referrals</li> <li>• Flyers</li> <li>• Social media</li> </ul>	<ul style="list-style-type: none"> <li>• Face-to-face</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Youth community advisory boards can be invaluable in identifying recruitment events and location</li> <li>• Adequate staff must be scheduled to cover both the distribution of study materials and “on the spot” screening when feasible</li> </ul>

STI sexually transmitted infection, HIV human immunodeficiency virus

who might be harder to reach with traditional methods [14]. Ukuku Miller et al. recruited via Facebook by creating an account for the research study and purchasing ad space. The recruitment flyer was used as the ad. Potential participants who clicked on the ad were taken to the study page that prompted them to complete the eligibility screener. At the time, Facebook utilized targeted advertising, which allowed a user to identify key target areas through zip codes. She used three zip codes within the city to ensure the ad was reaching the population of interest. Brawner et al. recruited via study accounts the team created on Facebook, Twitter, and Instagram. The recruitment flyer used eye-catching imagery with popular slogans (e.g., “Keep Calm”) to encourage youth to call the research office for additional information and to be screened. To increase visibility of the postings, the team also built relationships with social media influencers to facilitate reposting for a broader audience, tagged relevant individuals and organizations, and used trending hashtags.

For longitudinal studies, it is important to develop an effective retention strategy. Attrition can negatively affect studies, as loss of participants can lead to a smaller sample than needed for sufficient statistical power [15]. Table 4 provides tips for creating an effective retention strategy. Effort devoted in the early phases of research (e.g., proposal development, protocol development) to formulate effective strategies for

recruitment and, if applicable, retention, can help maximize efficient use of time and resources, and alleviate frustration for researchers and study staff.

### Implementation: Building an Effective Recruitment and Retention Team

Once a plan is developed, selecting and training appropriate recruitment and retention staff members is essential. The best-laid recruitment or retention plan will not be effective if it is not implemented properly. Recruiters are the “face” of the research study. As a potential participant’s first point of contact with the research study, it is imperative that the recruiter makes a great first impression. Although all individuals require training, it is important to ensure that a recruiter possesses personal attributes (e.g., ability to engage, pleasant demeanor) to successfully accomplish the required tasks (e.g., approaching strangers, adhering to study protocol) before starting training. Additionally, to remove potential barriers to engagement, the recruitment/retention staff for each study discussed here was comprised of individuals from or similar to the priority population [7]. Although individuals who are not from or not demographically or culturally similar to the priority population might be effective, employing individuals

**Table 4** Key considerations for effective retention

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Collect and maintain accurate contact information.

- Obtain a comprehensive record of the participant's contact info (e.g., address, phone, email, social media).
- Identify the participant's preferred contact method and best time to reach.
- Include at least 3 additional contacts.
- Ask participants to alert contacts so the person knows they have permission to provide the participant's updated contact info to you. Also, assure participants that only general information will be shared, if asked (e.g., "This is a health and wellness program").

Confidentiality is key.

- Institutional Review Boards (IRB) or other entities provide guidance about what information can be collected, approved methods for contact, and measures to protect confidentiality.
- All communication that does not occur *directly with the participant* should be as general as possible. Confidentiality can be breached if others have access to the participant's devices or accounts (e.g., phone, email, social media).
- Carefully consider any information that could reveal too much. For example, it can be helpful to reference the intervention name (e.g., emerge) rather than the associated organization (e.g., STI clinic). It can also help to identify an intervention as a health and wellness program rather than STI/HIV-related intervention. Avoiding words such as "research" or "study" are advisable to protect confidentiality.

Contact regularly.

- Optimal frequency of contact varies; knowing the population well is key.
- Balance the use of less invasive (e.g., social media) and more invasive (e.g., cell phone) means to maintain contact.
- Assigning staff members to specific cohorts fosters rapport building, which can encourage continued participation.
- Investments in small items (e.g., pens, keychains, or other objects with logo and phone number) can help participants stay in touch more easily.

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familiar with participants' lived experiences facilitated more natural engagement with participants and yielded key insights about how to address recruitment/retention challenges that arose.

Recruiters play a key role in building trust with adolescents. Because participation in a research study can be inconvenient, time-consuming, or pose some risk, engaging with friendly, trustworthy recruiters is vital. Participants must be confident in accurately reporting sensitive or private information for eligibility screening or retention purposes. Further, because recruiters facilitate the consent process, each must be knowledgeable about the study aims and methods, and adherent to study protocol to ensure ethical treatment of participants. Inadequately trained recruiters can jeopardize the success of a particular study, as well as broader research and programmatic efforts. Community members likely will not distinguish one research study from another, or research from other programs or services that appear similar in nature. Ethical misconduct with adolescents can have long-lasting

detrimental consequences such as loss of a community's trust of researchers or entities offering programs and services, or loss of research funding. Additionally, positive interaction with trusted staff members encourages adolescents' continued participation, which supports retention efforts. Consequently, it is necessary to build a well-trained recruitment and retention team. Table 5 highlights important elements to consider when selecting and training recruitment staff.

## Evaluation: Monitoring and Improving Recruitment and Retention Strategies

Crafting an effective recruitment or retention strategy is an iterative process. It is beneficial to begin planning early and

**Table 5** Key considerations for recruitment/retention staffing

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Select recruiters carefully.

Recruiters must possess good "people skills."

- Additional training can be a first resort to address poor performance. However, leaving someone in this role when it is not a good fit can be detrimental to the recruiter (e.g., performance anxiety) and the study.

Consider employing members of the priority population.

- Individuals from the study population, or those very similar, can be effective recruitment/retention staff members. Possessing shared knowledge of participants' lived experiences allows them to connect for more natural engagement and to provide insight about how to address recruitment/retention challenges that arise.

Train recruiters well.

Clear explanation of study aims and cultural context.

- Highlighting the importance of the recruiter's role on the research team and how they fit into the "bigger picture" communicates their value and can be a motivating factor.
- Educating staff members about cultural norms (broader racial/ethnic population and local community norms) equips staff for respectful and culturally appropriate engagement. It is important to ensure the content is developed and delivered by someone who is very knowledgeable about and has experience effectively engaging with Black or Hispanic/Latino populations. To avoid inappropriate generalizations, the content should also reflect what is learned from the youth advisory board or community advisory board.

Overview of protocol and recruitment materials (e.g., flyers, eligibility form, contact forms).

- Staff members might be more likely to adhere to "little things" when they understand the importance of doing so.
- Regular team meetings can serve as a time to debrief and to address any immediate issues, if needed.

Practice (e.g., role play).

- Providing a script is useful for ensuring the recruiter is using the appropriate language.
- Role plays allow for observation and feedback about important aspects such as tone, volume (for confidentiality), and body language.

Field experience.

- Recruiters benefit from observing an experienced recruiter and being observed and provided with feedback.

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to regularly monitor progress. A basic tracking system can capture information used to identify and address challenges before they become insurmountable. For example, when recruiters document important information (e.g., recruitment location; the number of people approached, screened, and eligible or ineligible; reasons for ineligibility; other field notes), researchers are able to identify locations or strategies with the greatest yield and identify recruiters in need of additional training or other action. Presenting a summary of this information to staff during meetings creates opportunities for further discussion to generate solutions and to celebrate successes of individuals and the team (e.g., reaching milestones), which can boost morale. Having a system in place can also ease the process of generating summaries for reports to funders or other stakeholders or preparing manuscripts or presentations.

When possible, pilot testing recruitment strategies (e.g., location, time, materials, and methods) can be advantageous. For example, Lanier et al. documented the recruitment yield at several sites and recognized the number of adolescents screened at one site was comparable with another, but did not yield as many eligible participants. Early assessment provided the opportunity to make adjustments. Similarly, piloting strategies can help determine the best day and time for a particular location (e.g., Friday or Saturday evening near a movie theater for recruiting couples, transit stops after school). Additionally, when Lanier et al. consulted her YAB for feedback on couple-focused study materials, members noted that wording such as “romantic relationship” implied a serious and/or sexual relationship. Consequently, they believed this language could deter some youth from participating if they were not sexually active or if they did not define their relationship in that way. The language was revised to more accurately reflect how adolescents classified romantic relationships (i.e., romantic relationship was changed to dating relationship).

## Special Considerations

### Parental Consent

Minors, or youth under the age of 18, require special consideration to protect their well-being. A primary consideration is obtaining parental consent. Generally, research involving minors requires the assent of the minor and parental or guardian permission. However, in many states, minors can consent to sexual and reproductive health services without parental permission [16]. Also, for highly vulnerable minors, such as homeless or runaway youth, requiring parental consent might either not be feasible or might place the youth at substantial risk or harm. Researchers should determine whether parental consent is necessary or if a waiver of parental consent is

possible. One recommendation is that researchers consult with CAB members to get a better understanding of the community’s views on parental consent as well as specific challenges and opportunities to obtain parental consent. Engaging members of the community, including adolescents, parents, advocates, and adolescent service providers, in open dialogue can create opportunities to generate solutions that are in the best interest of the adolescent and that the community finds acceptable. In Lanier et al.’s study, YAB members noted that many parents might not be aware that their child/ren are currently involved in a relationship. Therefore, youth who have confidentiality concerns regarding their relationship status might decide not to participate if parental forms divulge their relationship status.

Researchers should also consult with their Institutional Review Board (IRB) office for advisory guidance regarding their study. Lanier et al.’s and Brawner et al.’s institutions offered consultation hours where investigators could meet one-on-one with IRB administrators; others may allow researchers to request a meeting with the review committee prior to review of their protocol. Researchers seeking a waiver of parental consent should present a clear argument about why the study would not be feasible with parental consent [9, 17]. This argument should include recommendations from their YAB or CAB. Investigators should also discuss specific safeguards in place to protect adolescents. For example, researchers recruiting adolescents at community organizations could consider appointing a child advocate within the organization who could observe and advocate on a child’s behalf.

If parental permission is needed, parents should be given adequate information about the study to make a fully informed decision about their child’s involvement. Researchers can develop supplemental materials, such as a frequently asked questions (FAQ) document, to provide information in addition to the consent form. To promote transparency and trust, Ukuku Miller et al. permitted parents to review survey items before their child completed the survey, if desired. She encouraged parents to ask questions and addressed any concerns. Additionally, all documents should be easy to understand and at an appropriate reading level. Researchers should conduct a Flesch-Kincaid grade level reading test to ensure the readability of their forms. Researchers working in communities where English is not the primary language might also consider developing parental forms in the primary language spoken within the community. Likewise, it could be helpful to have bilingual research staff members or phone-accessible translation service providers who are able to communicate directly with parents regarding the study and answer any questions.

Lastly, some studies exclude populations dealing with mental illnesses due to concerns regarding vulnerability and ability to complete the study procedures. While these concerns are valid, it is important to consider one’s actual ability to

consent to research without undermining their decision-making autonomy by assuming that because they have a mental illness they cannot participate in research [17, 18]. Brawner et al. enrolled youth receiving outpatient mental health treatment. At the time of screening, trained research team members assessed potential participants' ability to consent. The assessment included a determination of whether the individual was able to follow the screening procedures, and whether they verbally demonstrated comprehension of the study purpose and procedures. For studies involving populations with serious mental illnesses (e.g., psychosis, schizophrenia), there are also standardized measures that can be implemented to establish and document capacity to consent [19].

### Legal Issues

State laws regarding the age of consent are also important. Each state has laws regarding the age at which one can legally consent to sexual intercourse. Researchers should have a clear understanding of the age of consent and reporting requirements in their respective states. Investigators who are conducting research that could include age discordant couples might consider ensuring that participants are aware that federally funded research is covered by Certificates of Confidentiality to further protect participants' confidentiality and privacy [17].

### Dyadic Research

Research involving dyads requires both individuals to meet the study eligibility criteria and jointly agree to participate. Research staff typically recruit one member of the dyad (index participant) into the study and then invite the index partner to recruit the other dyad member (nominated participant). One main disadvantage of this approach is that the full responsibility for recruiting the nominated dyad member is placed on the index participant. There are a number of concerns with this approach including the ability of the adolescent index participant to effectively communicate the study purpose and protocol to their dyad member. One effective strategy is targeting sites and venues where adolescent couples frequent (e.g., movie theaters, parks). This allows for simultaneous recruitment and screening of both couple members. The approach not only takes the burden of recruitment off of the index participant, but it also allows for immediate scheduling of the data collection appointment, which is another major barrier to dyadic research.

Confidentiality is a key concern when adolescents disclose information about their sexual behaviors and practices. It is important that research staff ensure both dyad members know that their confidentiality will be maintained and any information collected will not be shared with anyone, including the other member of the dyad. In cases where confidentiality

cannot be maintained (e.g., reporting incidents of abuse to parents or legal authorities), this should be clearly stated during the consent process and research staff should ensure that adolescents fully understand reporting procedures. Additionally, data should be collected in a private area. For example, Lanier et al. and Ukuku Miller et al. conducted qualitative interviews in nonadjacent rooms to prevent members of the dyad from overhearing the other interview. If possible, conducting interviews simultaneously or creating another task (e.g., filling out a survey with noise-canceling headphones) for one member to complete while the other is being interviewed can aid confidentiality. If STI/HIV testing is conducted, test results should be disclosed to each dyad member separately in a private area. In dyad studies involving romantic partners or parents and children, research staff should provide participants with strategies for sharing results with their dyad member.

### Race, Ethnicity, and Culture

Research conducted with racial/ethnic minority adolescents can be strengthened by carefully considering the historical context of racial/ethnic minority communities' involvement in research and engagement with the US health care system. Well-documented unethical practices, such as the Tuskegee Syphilis Study [20], the Guatemala STI Experiments [21], gynecologic experiments performed on enslaved Black women [22], and the Birth Control Pill Trials in Puerto Rico [23], have helped shape individual and collective community experiences with research and medicine for Blacks and Hispanics/Latinos [7]. Such practices have had direct or indirect effects on some patients' trust of researchers and health care providers, as well as researchers' and health care providers' incorrect or incomplete knowledge about racial/ethnic minority patients or study populations that adversely affects how they engage racial/ethnic minorities.

Consequently, having members from or similar to the population be involved in key research study roles (e.g., investigators, study staff, advisory boards) and utilizing community-based participatory research approaches could help build trust and increase the likelihood of culturally appropriate research [12, 13, 24–30]. Some aspects of effective engagement strategies include (1) emphasizing transparency by ensuring community members fully understand study purposes and procedures; (2) providing community members an opportunity to voice their concerns (e.g., listening sessions), have their questions answered (e.g., community forums), and see pertinent concerns addressed in study design and implementation; and (3) selecting a study design that ensures all study participants eventually have access to an effective treatment (e.g., wait list control design). Additionally, cultural beliefs or norms regarding familial and relational structure,

or decision-making practices, for example, should be well understood. For communities with strong familial ties, research with parent-adolescent dyads can be valuable. Research strategies should be grounded in feedback from the YAB and CAB.

## Conclusions

In this article, we described approaches to recruitment and retention that have been effective in epidemiologic or intervention STI/HIV risk reduction studies conducted with racial/ethnic minority adolescents and used three studies as illustrations. Thoughtful planning for recruitment and retention, building a well-trained staff, and monitoring and improving processes throughout a study play an essential role in the successful recruitment of adolescents. Attention to planning, implementing, and monitoring recruitment and retention strategies can result in a better use of time and resources, and promote good morale and retention of study staff members.

Although research studies were discussed, the content may also be useful for programmatic or other efforts with a similar priority population. Additionally, because we provide questions to inform a process rather than specific guidance, much of the content might be useful for other racial/ethnic minority or white adolescent populations, or studies with adults. The strategies discussed are based on experiences of several researchers conducting studies in the southern and northeastern regions of the United States, which limits generalizability. Thus, each research study or program must develop a nuanced approach that best fits the context of their study. However, using principles described here could provide a foundation or starting point.

Research with Black and Hispanic/Latino adolescents can be a challenging and complicated endeavor, but it can also yield important and valuable insights. Findings from research with Black and Hispanic/Latino adolescents provide knowledge needed to inform culturally and developmentally appropriate efforts to establish healthy practices relatively early in life, especially in the context of heightened STI/HIV risk for adolescents and young adults. Taking the time to conduct thoughtful, considerate research that directly engages adolescents and young adults is a vital part of developing effective interventions to decrease the heavy STI/HIV burden within this age group and, over time, decrease these STI/HIV disparities.

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## Compliance with Ethical Standards

**Conflict of Interest** The authors declare that they have no conflict of interest.

**Ethical Approval** All procedures were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

**Informed Consent** Participants provided informed consent (or assent, if minors) prior to enrolling in the study.

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