# **Original Paper**

# Recruiting Black Men Who Have Sex With Men (MSM) Couples via Dating Apps: Pilot Study on Challenges and Successes

Yong Darin Witkovic<sup>1</sup>, MA, MS; Hyunjin Cindy Kim<sup>2</sup>, MPH; Darius Jovon Bright<sup>2</sup>; Judy Y Tan<sup>2</sup>, MA, PhD

## **Corresponding Author:**

Judy Y Tan, MA, PhD Division of Prevention Science Center for AIDS Prevention Studies University of California San Francisco 550 16th Street 3rd Floor San Francisco, CA, 94158 United States

Phone: 1 415 514 7419 Email: judy.tan@ucsf.edu

# **Abstract**

**Background:** HIV disproportionately impacts Black men who have sex with men (MSM), and targeting the primary relationship (ie, couples) using mobile technology for health holds promise for HIV prevention. Web-based recruitment of MSM is commonly employed in HIV prevention and intervention research. However, little known about recruiting Black MSM couples on the internet in the United States.

**Objective:** This study describes the process of recruiting Black MSM couples over social networking and dating apps frequented by MSM. We describe the activities for recruiting, screening, and enrolling participants as part of a randomized trial employing a multipronged recruitment approach.

**Methods:** Black MSM in couples were recruited via three apps (ie, *Jack'd*, *Adam4Adam*, and *Growlr*) between May 2020 and March 2021 during the COVID-19 pandemic in the United States. Black MSM couples were eligible if one or both partners are Black, MSM, and living with HIV, and if both partners were 18 years or older, and have been together for at least 2 months in what they both consider a primary relationship (ie, one in which both partners reported feeling most committed to over any other partner or relationship).

**Results:** A total of 10 Black MSM couples (n=20) were enrolled via social networking apps. App recruitment activities were a combination of passive (eg, in-app advertisements) and active (eg, direct messaging of users) engagement. Recruitment approaches varied by the social networking app owing to differences in app features. A full-time recruiter experienced challenges such as bugs (ie, technical errors in computer program or system), navigating technical requirements specific to each app, and web-based harassment.

**Conclusions:** Despite challenges, it was possible to recruit Black MSM couples virtually into research as part of a multipronged recruitment strategy. We identify tips for using web-based dating and other social networking apps as part of a recruitment strategy in future research with Black MSM couples.

(JMIR Form Res 2022;6(4):e31901) doi: 10.2196/31901

## **KEYWORDS**

African American; sexual and gender minorities; homosexuality, male; HIV; mHealth intervention; mobile applications; apps; sexual partners; investigative techniques; community engagement; MSM; Black men; mobile app; LGBT; research methods; recruitment; online dating; social network



<sup>&</sup>lt;sup>1</sup>Department of Psychology, Palo Alto University, Palo Alto, CA, United States

<sup>&</sup>lt;sup>2</sup>Division of Prevention Science, Center for AIDS Prevention Studies, University of California San Francisco, San Francisco, CA, United States

# Introduction

HIV remains a global health issue requiring continued efforts in prevention and intervention in low-, middle-, and high-income countries [1,2]. Within the United States, HIV disproportionately affects men who have sex with men (MSM). This health disparity is even greater among Black or African American (hereafter "Black") men [3-6]. Half of all Black MSM are estimated to acquire HIV in their lifetimes compared to one in 11 for White MSM [7]. The primary romantic relationship is an intervention target given high rates of seroconversion among MSM in these relationships [8-11]. Among Black MSM, nationwide estimates indicate that one-third to a half of those with HIV are in a primary relationship [12-14]. Therefore, research on couples remains crucial in HIV/AIDS prevention and intervention.

Location-based dating and social networking apps have become an option for participant recruitment in HIV/AIDS and sexual health research [15-17]. The advantages of app-based recruitment in HIV research are recently highlighted by the COVID-19 pandemic whereby in-person recruitment was prohibited owing to physical distancing and other public health measures [18]. Recruiting couples on the internet requires special consideration for relationship verification and data validation [19-21]. Emergent studies have used apps and other social media (eg, Facebook and Instagram) to recruit MSM couples [22,23]. However, knowledge gaps exist for using dating and social networking apps to engage racial or ethnic minority MSM couples.

Recruiting Black MSM couples into research studies presents important considerations and is challenging for myriad reasons. Distrust of research and medical institutions and cultural stigma concerning race, sexual orientation, and HIV status are barriers to research participation for Black MSM [24,25]. MSM in couples may have a diverse range of agreements regarding sex with others outside of their relationship. Sexual agreements are the mutual understanding between primary partners regarding what sexual behaviors are allowed [26]. These agreements are prevalent among 58% to 99% of same-sex male couples [27], with 11% to 64% of these agreements including sex with outside partners [27]. Given that some MSM have agreements regarding outside partners, dating and social networking apps provide a way to reach partnered MSM that may use apps to socialize or find potential sexual partners.

Few studies have presented details on using dating and social networking apps to recruit Black MSM couples, highlighting a potential knowledge gap on methods for engaging couples into research. Thus, the goal of this study is to describe the process of using dating and social networking apps to recruit same-sex couples to inform future trial designs. This study is part of a multipronged recruitment approach of a pilot randomized controlled trial (RCT) with Black MSM couples with HIV.

# Methods

## **Study Overview**

The dating app recruitment process described herein was part of a multipronged recruitment approach of a pilot RCT to test the feasibility and acceptability of a mobile app intervention for improving HIV care and treatment among Black MSM couples living with HIV. We targeted recruitment efforts on dating and social networking apps frequented by Black MSM: Jack'd, Adam4Adam (A4A), and Growlr [19,28-31]. Qualitative data particular to each app are described below to highlight the unique success and challenges experienced using this underutilized recruitment approach. To maximize engagement with Black MSM, we hired a Black, cisgender, same-gender-loving-identified man as the study recruiter who performed all recruitment activities and documented the recruitment process. Recruitment occurred between May 2020 and March 2021. Black MSM couples were eligible if one or both partners are Black, MSM, and living with HIV, if both partners were 18 years or older, and have been together for at least 2 months in what they both consider a primary relationship (ie, one in which both partners reported feeling most committed to over any other partner or relationship).

Owing to differences in user engagement requirements by app, we used different engagement approaches by app. On *Jack'd*, recruitment was conducted through their in-app advertisements. Interested candidates who clicked on the advertisement were directed to a Qualtrics prescreener questionnaire that obtained basic qualifying information (eg, current place of resident, race, relationship and HIV status, and length of time on antiretroviral medications for HIV). Study staff then contacted eligible candidates via SMS text message using the telephone number provided.

Recruitment on A4A was carried out by sending private SMS text messages to potential participants using the in-app messaging feature. The recruiter identified potential participants using the app's search filters which allowed users to filter through other users' profiles on the basis of set criteria such as their race, HIV status, and relationship status. The study recruiter identified users whose race or ethnicity was set to Black, African American, or mixed. We included "mixed" race because many Black MSM may identify as mixed race given the diversity among Black communities. We also found that some users identify their race as mixed to avoid being filtered out by users who filter out Black-identified users within the app. The study recruiter identified users whose HIV status was set to HIV-positive, undetectable, or unanswered. Users who left their HIV status unanswered were considered for the study as it would encompass anyone who has never been tested or chose not to disclose their serostatus on the internet. Finally, the study recruiter identified users whose relationship status was set to dating, partnered, open relationship, polyamorous, or married.

Once potential participants were identified, the study recruiter privately messaged each individually. *A4A* has a message delivery report in its platform, which allowed recruiters to know if a message has been read or not. Users who read but did not respond within 48 hours of the first message being sent were



sent a follow-up message asking if they were still considering participation in the study or were no longer interested. The messages that remained unread would require no follow-up as those users were likely inactive. Users who communicated interest then were asked to complete a phone screener with a study staff to determine eligibility.

Recruitment on *Growlr* was carried out by sending private messages to potential participants using the in-app messaging feature and in-app advertisements contained the weblink to a Qualtrics prescreener. A *Growlr* paid service, the "SHOUT!" feature, allowed the recruiter to send the study information to multiple people in a specified vicinity.

A total of 10 couples (N=20) recruited via apps were enrolled in the trial, including 7 same-race Black couples and 3 interracial couples.

#### **Ethical Considerations**

This study received ethics approval from the institutional review board of University of California, San Francisco (IRB#15-18042). All participants provided informed consent to participate in the study.

# Results

#### **Results Overview**

Individual- and couple-level characteristics of the couples recruited via apps are reported in Tables 1 and 2, respectively. The following outlines findings resulting from the process of recruiting participants via each app.

Table 1. Individual-level participant demographic characteristics of couples recruited from dating apps (N=20).

Characteristics	Values	
Age (years), mean (SD), range	36 (13), 20-54	
Length of relationship (months), mean (SD), range	5.7 (9.3), 2-336	
Ethnicity, n (%)		
Hispanic or Latino	3 (15)	
Not Hispanic or Latino	17 (85)	
Race, n (%)		
African American or Black	15 (75)	
White	3 (15)	
More than one race	2 (10)	
Serostatus, n (%)		
Living with HIV	15 (75)	
Not living with HIV	5 (25)	
Cohabitation, n (%)		
Living together	16 (80)	
Not living together	4 (20)	

**Table 2.** Couple-level characteristics by HIV serostatus and race (N=20).

Status	Same-race participants, n	Interracial participants, n	Couples, n (%)
Seroconcordant-positive (both members are HIV-positive)	4 <sup>a</sup>	1	5 (50%)
Serodiscordant (one partner with an HIV-positive status and the other with an HIV-negative or unknown status)	3	2	5 (50%)
Total	7 (70%)	3 (30%)	10

<sup>&</sup>lt;sup>a</sup>There was one serodiscordant-positive couple in which both partners are multiracial. They identify as African American or Black and another race (eg, Latinx and Native American).

#### Jack'd

## **Overall Findings**

In-app advertisements on *Jack'd* were used for recruitment on the platform. Eligible candidates who completed the Qualtrics prescreener questionnaire through the study advertisement and were contacted by recruiters via SMS text message with the

telephone number they had provided. If the candidate did not respond to the SMS text message within 24 hours, a recruiter would follow up with a telephone call and leave a voicemail message if there was no answer. Potential candidates had 1 week to respond before another attempt to make contact was made. This pattern of correspondence continued until either the candidate indicated that he/she was no longer interested or the



telephone number was no longer in service. Interested and eligible candidates who completed the Qualtrics prescreener would then complete a telephone screener. Participants were scheduled for an interview once they provide informed consent to participate.

A total of 35,912 unique impressions, or the number of times the study advertisement was displayed to a user for the first time, occurred on *Jack'd* in 4 major cities (Atlanta, Georgia; Los Angeles, California; Houston, Texas; and Washington, District of Columbia). Of these views, 924 users clicked on our advertisement at least once. Consequently, the click-through rate, or number of unique clicks divided by the number of unique impressions, ranged between 0.85% (Atlanta, Georgia) to 1.16% (Houston, Texas).

# Character Limits for Advertisement Placement

Though recruitment on *Jack'd* was carried out through in-app advertisements, imposed character limits made it difficult to fully describe the target population and goals of the study. One solution was to include part of the study description into the image selected for our profile at an extra cost (Figures 1 and 2). *Jack'd* removed our advertisements and stated that adding more text to our recruitment advertisements would be an extra cost. Our team elected to pay the additional fee to include more description in our in-app advertisements so that interested applicants had more information prior to completing the prescreening measure.

Figure 1. Inclusion of part of the study description into the image selected for our profile at an extra cost in the app interface.





Figure 2. Screenshot of the image selected for our profile in the app.



#### Adam4Adam

#### Technical Bugs

The recruiter experienced functionality issues with the web-based browser and mobile app versions of A4A. The web-based version was designed to look like the app, but there were technical bugs with several functions. For example, the recruiter made edits to the profile on the web-based version; however, these edits were not always reflected in the app version. Moreover, blocks of text from the recruiter profile would often be removed without notification or explanation, which would leave out key details of the study and regular monitoring would be required to ensure that information published to the app profile was not deleted by the app. Unfortunately, when information was deleted from the profile no error messages or warnings had been communicated to the recruiter. As such, there may have been times when potential candidates missed vital information about the study.

Potential candidates were contacted on the basis of their eligibility potential, which was determined by using app search

filters (eg, candidate identified race, relationship, and HIV status). Additionally, recruiters scanned through details on their candidates' profiles for information that may qualify or disqualify them for the study. A total of 292 potential candidates were contacted on A4A across 15 different states. Searches were conducted across all large geographical regions of the United States including the West (California, Nevada, Arizona, and Washington), Midwest (Ohio, Illinois, and Wisconsin), South (Mississippi, Texas, Georgia, Florida, North Carolina, and Tennessee), and Northeast (Massachusetts and New Jersey). Participants contacted in accordance with the state were as follows: Arizona (n=10), Georgia (n=17), Illinois (n=34), Massachusetts (n=7), Mississippi (n=14), Nevada (n=10), New Jersey (n=12), North Carolina (n=45), Ohio (n=19), Tennessee (n=18), Texas (n=25), Washington (n=9), and Wisconsin (n=3). Owing to an unexpected account suspension, we were unable to breakdown numbers between California and Florida (n=69).

#### Existence of Bots

Successful engagements with potential participants on A4A could be improved simply by the recruiter distinguishing



themselves from automated "bot" profiles that function to send spam and are often ignored by app users. The recruiter found positive changes in user responses when he developed rapport with other users. For example, one user had a profile photo with a dog, prompting the recruiter to comment, "Cute dog, it reminds me of my childhood pet," followed by a self-introduction. In another successful recruitment interaction, the recruiter started a conversation inquiring about the reference of a song in a user's profile name. The shared knowledge between the user and recruiter about the song lead to the user's interest in further discussion. After sharing the recruiter's role with the study, the user chose to enroll in the study.

# Inability to Track Profiles and Messages

Tracking contacts on A4A were not straightforward and required additional steps. A4A offers a feature to "favorite" users, allowing their profile to be bookmarked through an in-app list. This list enabled the recruiter to stay connected to contacts even if they changed their username. However, the feature did not allow for more than one person to be added owing to technical bugs. Thus, the recruiter used the web-based version to save the URLs of users' profiles for tracking purposes. Additionally, the chat function only allows for a limited number of messages to be sent before older messages are lost. To save relevant information, the recruiter tracked and recorded usernames, dates of interaction, follow-up dates, user profile URLs, and other notes in Microsoft Excel.

# Removal of Flyer Image From Recruiter Profile

During the recruitment process on A4A, the recruiter received an automated message indicating that the study's flyer image—which had been uploaded to the recruiter's profile—was removed because it violated the app's standards. The recruiter then changed the study's profile picture to a photo of himself. Thereafter, when potential participants expressed interest in the study through private SMS text messaging, the recruiter would send the flyer image directly to them.

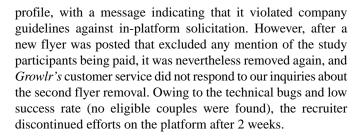
### Harassment

The recruiter experienced racially and politically charged verbal abuse during the height of the Black Lives Matter protests in 2020. Racial epithets (eg, "mountain caucus monkey") were used by an app-user without provocation. Romantic and sexual harassment were common.

#### Growlr

Similar to A4A and Jack'd, Growlr recruitment procedures involved both active and passive approaches. The study recruiter identified potential participants through the app's search filters and messaged eligible users privately; in-app advertisements with the study information also contained a weblink to the prescreener. A Growlr paid feature "SHOUT!" was used to send the study information to multiple users in a specified region. We paid for "SHOUT!" broadcasts in 4 separate cities (eg, Charlotte and Raleigh, North Carolina; Nashville, Tennessee; and Cleveland, Ohio). Users within a 25-30-mile radius were able to see these advertisements and resulted in 2955 total views.

Similar to A4A, the recruiter experienced verbal abuse and harassment. Growlr removed the study flyer from the recruiter's



# Discussion

# **Principal Findings**

HIV incidence among Black MSM in the United States continues to be disproportionately high [3,4] with one-third to half of Black HIV-positive MSM to be in a primary relationship [13,14,32]. Nonetheless, societal stigma, distrust of research and medical institutions, and other systemic barriers negatively impact HIV prevention and treatment for this underserved community [24,25]. As such, novel approaches to recruiting Black MSM couples are needed.

There are relatively few dyadic HIV research studies with Black MSM couples (eg, time and staffing). Little information exists detailing the successful strategies for web-based recruitment of Black MSM couples into HIV research. While dating and social networking apps have been commonly used to recruit single MSM for research studies [19], no research has used dating apps to explicitly recruit couples of MSM. This study demonstrated the feasibility of dating and social networking apps for recruiting Black MSM couples as part of a pilot RCT of a couples-focused app for improving HIV care engagement. Recruiting MSM couples through dating and social networking apps is a necessary recruitment strategy given the prevalence of sexual agreements among MSM couples [27].

Consistent with previous research, this sample of couples contained predominately same-race Black partnerships [32]. The search and filter functions in the apps, such as filtering users on the basis of their reported relationship status, helped to identify potential participants per the eligibility criteria. A4A and Growlr offered the functionality to filter through user-identified race or ethnicity categories, which reduced the time needed to search for eligible users. Paid advertising campaigns through Jack'd and Growlr were an opportunity to recruit passively, instead of actively searching through users and initiating conversations to determine eligibility and interest.

Although the strategy of privately messaging potential participants on A4A was a successful recruitment strategy, it was not without challenges. Our Black, same-gender-loving-identified recruiter reported multiple episodes of harassment of various types (eg, sexual, racial, and political). Additionally, app-specific guidelines for study advertisements varied (eg, character limits and other rules). Regular check-ins between the principal investigator and recruiters and careful attention to the guidelines for each app are necessary.

#### Limitations

Our study recruited for a one-time interview, and we do not know how these findings generalize to other, longer-term



research requirements. Further, biases in the sample skew toward nonmonogamous couples owing to the generally sexual purposes of MSM using the apps. Finally, given the evolving nature of the software, some of the app features reported during the time of publication may or may not reflect what is currently available.

#### **Comparison With Prior Work**

Apps designed for MSM have become increasingly popular and users on those platforms may visit them frequently (eg, daily) [33]. Research has recruited single MSM [19,34-36] and Black MSM [37-39] via apps. Given high HIV transmission rates between MSM primary partners [8-11], recent studies have also recruited MSM couples through a combination of web-based engagement (eg, Facebook and gay websites) and apps [10,40-44], but not exclusively on apps. No research documents the utility of app-based recruitment for Black MSM couples [45,46]. Given the disproportionate rates of HIV [6,7,47] and

the importance of coordinating HIV prevention, care, and treatment [45,48,49] within this community, there is urgency to finding novel approaches to recruiting Black MSM couples for HIV prevention studies.

## **Conclusions**

Dyadic HIV research with Black MSM couples is important but knowledge gaps remain. Challenges to research with this population include participant recruitment, which can be resource intensive, underscoring the need for recruitment strategies that have been demonstrated to be feasible and acceptable. We discuss our strategies for engaging Black MSM couples via social networking apps, and associated technical challenges, including issues with harassment directed at our recruiter. We have identified a way forward with using social networking apps to engage Black sexual-minority couples to inform future research.

# Acknowledgments

This research was supported by a grant from the National Institute of Mental Health R01MH118967 (JYT). The contents of this publication are solely the responsibility of the authors and do not represent the official views of the National Institutes of Health. The authors would like to thank Chadwick Campbell for his valuable contributions to the development of this research project.

#### **Conflicts of Interest**

None declared.

#### References

- 1. Le PM, Nguyen PT, Nguyen HV, Bui DH, Vo SH, Nguyen NV, et al. Adherence to highly active antiretroviral therapy among people living with HIV and associated high-risk behaviours and clinical characteristics: A cross-sectional survey in Vietnam. Int J STD AIDS 2021 Sep;32(10):911-918. [doi: 10.1177/09564624211002405] [Medline: 33861666]
- 3. Garofalo R, Hotton A, Kuhns L, Gratzer B, Mustanski B. Incidence of HIV Infection and Sexually Transmitted Infections and Related Risk Factors Among Very Young Men Who Have Sex With Men. J Acquir Immune Defic Syndr 2016 May 01;72(1):79-86 [FREE Full text] [doi: 10.1097/QAI.00000000000000033] [Medline: 26745827]
- 4. Matthews DD, Herrick AL, Coulter RWS, Friedman MR, Mills TC, Eaton LA, POWER Study Team. Running Backwards: Consequences of Current HIV Incidence Rates for the Next Generation of Black MSM in the United States. AIDS Behav 2016 Jan;20(1):7-16 [FREE Full text] [doi: 10.1007/s10461-015-1158-z] [Medline: 26267251]
- 5. Sullivan PS, Peterson J, Rosenberg ES, Kelley CF, Cooper H, Vaughan A, et al. Understanding racial HIV/STI disparities in black and white men who have sex with men: a multilevel approach. PLoS One 2014;9(3):e90514 [FREE Full text] [doi: 10.1371/journal.pone.0090514] [Medline: 24608176]
- 6. Sullivan PS, Rosenberg ES, Sanchez TH, Kelley CF, Luisi N, Cooper HL, et al. Explaining racial disparities in HIV incidence in black and white men who have sex with men in Atlanta, GA: a prospective observational cohort study. Ann Epidemiol 2015 Jun;25(6):445-454 [FREE Full text] [doi: 10.1016/j.annepidem.2015.03.006] [Medline: 25911980]
- 7. Hess KL, Hu X, Lansky A, Mermin J, Hall HI. Lifetime risk of a diagnosis of HIV infection in the United States. Ann Epidemiol 2017 Apr;27(4):238-243 [FREE Full text] [doi: 10.1016/j.annepidem.2017.02.003] [Medline: 28325538]
- 8. Goodreau SM, Carnegie NB, Vittinghoff E, Lama JR, Sanchez J, Grinsztejn B, et al. What drives the US and Peruvian HIV epidemics in men who have sex with men (MSM)? PLoS One 2012;7(11):e50522 [FREE Full text] [doi: 10.1371/journal.pone.0050522] [Medline: 23209768]
- 9. Marsack J, Kahle E, Suarez NA, Mimiaga MJ, Garofalo R, Brown E, et al. Relationship Characteristics and Dyadic Approaches to HIV Health-Enhancing Behaviours Among a Sample of Same-Sex Male Couples From Three U.S. Cities. J Relat Res 2018 May 23;9:e10. [doi: 10.1017/jrr.2018.9]
- 10. Starks TJ, Dellucci TV, Gupta S, Robles G, Stephenson R, S Sullivan P, et al. A Pilot Randomized Trial of Intervention Components Addressing Drug Use in Couples HIV Testing and Counseling (CHTC) with Male Couples. AIDS Behav 2019 Sep;23(9):2407-2420 [FREE Full text] [doi: 10.1007/s10461-019-02455-2] [Medline: 30887190]



- 11. Sullivan PS, Salazar L, Buchbinder S, Sanchez TH. Estimating the proportion of HIV transmissions from main sex partners among men who have sex with men in five US cities. AIDS 2009 Jun 01;23(9):1153-1162. [doi: 10.1097/QAD.0b013e32832baa34] [Medline: 19417579]
- 12. Eaton LA, Matthews DD, Bukowski LA, Friedman MR, Chandler CJ, Whitfield DL, POWER Study Team. Elevated HIV Prevalence and Correlates of PrEP Use Among a Community Sample of Black Men Who Have Sex With Men. J Acquir Immune Defic Syndr 2018 Nov 01;79(3):339-346 [FREE Full text] [doi: 10.1097/QAI.000000000001822] [Medline: 30063650]
- 13. Koblin BA, Mayer KH, Eshleman SH, Wang L, Mannheimer S, del Rio C, HPTN 061 Protocol Team. Correlates of HIV acquisition in a cohort of Black men who have sex with men in the United States: HIV prevention trials network (HPTN) 061. PLoS One 2013;8(7):e70413 [FREE Full text] [doi: 10.1371/journal.pone.0070413] [Medline: 23922989]
- 14. Okafor C, Hucks-Ortiz C, Hightow-Weidman L, Magnus M, Emel L, Beauchamp G, et al. Brief Report: Associations Between Self-Reported Substance Use Behaviors and PrEP Acceptance and Adherence Among Black MSM in the HPTN 073 Study. J Acquir Immune Defic Syndr 2020 Sep 01;85(1):23-29 [FREE Full text] [doi: 10.1097/QAI.00000000000002407] [Medline: 32452970]
- 15. Grov C, Stief M, Westmoreland DA, MacCrate C, Mirzayi C, Nash D, Together 5000 Study Team. Maximizing Response Rates to Ads for Free At-Home HIV Testing on a Men-for-Men Geosocial Sexual Networking App: Lessons Learned and Implications for Researchers and Providers. Health Educ Behav 2020 Feb;47(1):5-13 [FREE Full text] [doi: 10.1177/1090198119893692] [Medline: 31896287]
- 16. Macapagal K, Li DH, Clifford A, Madkins K, Mustanski B. The CAN-DO-IT Model: a Process for Developing and Refining Online Recruitment in HIV/AIDS and Sexual Health Research. Curr HIV/AIDS Rep 2020 Jun;17(3):190-202 [FREE Full text] [doi: 10.1007/s11904-020-00491-5] [Medline: 32444929]
- 17. Sun CJ, Sutfin EL, Bachmann LH, Stowers J, Rhodes SD. Comparing men who have sex with men and transgender women who use Grindr, other similar social and sexual networking apps, or no social and sexual networking apps: Implications for recruitment and health promotion. J AIDS Clin Res 2018;9(2):757 [FREE Full text] [doi: 10.4172/2155-6113.1000757] [Medline: 29593933]
- 18. Belingheri M, Paladino M, Riva M. COVID-19: Health prevention and control in non-healthcare settings. Occup Med (Lond) 2020 Apr 20;70(2):82-83 [FREE Full text] [doi: 10.1093/occmed/kqaa048] [Medline: 32311040]
- Iribarren SJ, Ghazzawi A, Sheinfil AZ, Frasca T, Brown W, Lopez-Rios J, et al. Mixed-Method Evaluation of Social Media-Based Tools and Traditional Strategies to Recruit High-Risk and Hard-to-Reach Populations into an HIV Prevention Intervention Study. AIDS Behav 2018 Jan;22(1):347-357 [FREE Full text] [doi: 10.1007/s10461-017-1956-6] [Medline: 29124420]
- 20. Mitchell J, Lee J, Stephenson R. How Best to Obtain Valid, Verifiable Data Online From Male Couples? Lessons Learned From an eHealth HIV Prevention Intervention for HIV-Negative Male Couples. JMIR Public Health Surveill 2016 Sep 20;2(2):e152 [FREE Full text] [doi: 10.2196/publichealth.6392] [Medline: 27649587]
- 21. Mitchell JW, Chavanduka TMD, Sullivan S, Stephenson R. Recommendations From a Descriptive Evaluation to Improve Screening Procedures for Web-Based Studies With Couples: Cross-Sectional Study. JMIR Public Health Surveill 2020 May 12;6(2):e15079 [FREE Full text] [doi: 10.2196/15079] [Medline: 32396133]
- 22. Martinez O, Wu E, Shultz AZ, Capote J, López Rios J, Sandfort T, et al. Still a hard-to-reach population? Using social media to recruit Latino gay couples for an HIV intervention adaptation study. J Med Internet Res 2014 Apr 24;16(4):e113 [FREE Full text] [doi: 10.2196/jmir.3311] [Medline: 24763130]
- 23. Martinez O, Isabel Fernandez M, Wu E, Carballo-Diéguez A, Prado G, Davey A, et al. A couple-based HIV prevention intervention for Latino men who have sex with men: study protocol for a randomized controlled trial. Trials 2018 Apr 05;19(1):218 [FREE Full text] [doi: 10.1186/s13063-018-2582-y] [Medline: 29622045]
- 24. Mayer KH, Nelson L, Hightow-Weidman L, Mimiaga MJ, Mena L, Reisner S, et al. The persistent and evolving HIV epidemic in American men who have sex with men. Lancet 2021 Mar 20;397(10279):1116-1126. [doi: 10.1016/S0140-6736(21)00321-4] [Medline: 33617771]
- 25. Parchem B, Molock SD. Brief report: Identified barriers and proposed solutions for recruiting young Black sexual minority men in HIV-related research. J Adolesc 2021 Feb;87:1-5. [doi: 10.1016/j.adolescence.2020.12.011] [Medline: 33429132]
- 26. Hoff CC, Beougher SC. Sexual agreements among gay male couples. Arch Sex Behav 2010 Jun;39(3):774-787 [FREE Full text] [doi: 10.1007/s10508-008-9393-2] [Medline: 18686027]
- 27. Rios-Spicer R, Darbes L, Hoff C, Sullivan PS, Stephenson R. Sexual Agreements: A Scoping Review of Measurement, Prevalence and Links to Health Outcomes. AIDS Behav 2019 Jan;23(1):259-271. [doi: 10.1007/s10461-018-2212-4] [Medline: 29959719]
- 28. Badal HJ, Stryker JE, DeLuca N, Purcell DW. Swipe Right: Dating Website and App Use Among Men Who Have Sex With Men. AIDS Behav 2018 Apr;22(4):1265-1272. [doi: 10.1007/s10461-017-1882-7] [Medline: 28884248]
- 29. Brooks RA, Nieto O, Landrian A, Fehrenbacher A, Cabral A. Experiences of Pre-Exposure Prophylaxis (PrEP)-Related Stigma among Black MSM PrEP Users in Los Angeles. J Urban Health 2020 Oct;97(5):679-691 [FREE Full text] [doi: 10.1007/s11524-019-00371-3] [Medline: 31214977]



- 30. Duncan DT, Park SH, Hambrick HR, Dangerfield Ii DT, Goedel WC, Brewer R, et al. Characterizing Geosocial-Networking App Use Among Young Black Men Who Have Sex With Men: A Multi-City Cross-Sectional Survey in the Southern United States. JMIR Mhealth Uhealth 2018 Jun 14;6(6):e10316 [FREE Full text] [doi: 10.2196/10316] [Medline: 29903702]
- 31. Nieto O, Brooks RA, Landrian A, Cabral A, Fehrenbacher AE. PrEP discontinuation among Latino/a and Black MSM and transgender women: A need for PrEP support services. PLoS One 2020;15(11):e0241340 [FREE Full text] [doi: 10.1371/journal.pone.0241340] [Medline: 33151997]
- 32. Tieu H, Nandi V, Hoover DR, Lucy D, Stewart K, Frye V, NYC M2M Study Team. Do Sexual Networks of Men Who Have Sex with Men in New York City Differ by Race/Ethnicity? AIDS Patient Care STDS 2016 Jan;30(1):39-47 [FREE Full text] [doi: 10.1089/apc.2015.0237] [Medline: 26745143]
- 33. Zou H, Fan S. Characteristics of Men Who Have Sex With Men Who Use Smartphone Geosocial Networking Applications and Implications for HIV Interventions: A Systematic Review and Meta-Analysis. Arch Sex Behav 2017 May;46(4):885-894. [doi: 10.1007/s10508-016-0709-3] [Medline: 27043837]
- 34. Buckingham L, Becher J, Voytek CD, Fiore D, Dunbar D, Davis-Vogel A, et al. Going social: Success in online recruitment of men who have sex with men for prevention HIV vaccine research. Vaccine 2017 Jun 14;35(27):3498-3505 [FREE Full text] [doi: 10.1016/j.vaccine.2017.05.002] [Medline: 28526330]
- 35. Iott BE, Veinot TC, Loveluck J, Kahle E, Golson L, Benton A. Comparative Analysis of Recruitment Strategies in a Study of Men Who Have Sex with Men (MSM) in Metropolitan Detroit. AIDS Behav 2018 Jul;22(7):2296-2311. [doi: 10.1007/s10461-018-2071-z] [Medline: 29470808]
- 36. Newcomb ME, Clerkin EM, Mustanski B. Sensation seeking moderates the effects of alcohol and drug use prior to sex on sexual risk in young men who have sex with men. AIDS Behav 2011 Apr;15(3):565-575. [doi: 10.1007/s10461-010-9832-7] [Medline: 20960048]
- 37. Fields EL, Long A, Dangerfield DT, Morgan A, Uzzi M, Arrington-Sanders R, et al. There's an App for That: Using Geosocial Networking Apps to Access Young Black Gay, Bisexual, and other MSM at Risk for HIV. Am J Health Promot 2020 Jan;34(1):42-51. [doi: 10.1177/0890117119865112] [Medline: 31359764]
- 38. Frye V, Wilton L, Hirshfied S, Chiasson MA, Usher D, Lucy D, All About Me Study Team. "Just Because It's Out There, People Aren't Going to Use It." HIV Self-Testing Among Young, Black MSM, and Transgender Women. AIDS Patient Care STDS 2015 Nov;29(11):617-624 [FREE Full text] [doi: 10.1089/apc.2015.0100] [Medline: 26376029]
- 39. Koblin BA, Nandi V, Hirshfield S, Chiasson MA, Hoover DR, Wilton L, et al. Informing the Development of a Mobile Phone HIV Testing Intervention: Intentions to Use Specific HIV Testing Approaches Among Young Black Transgender Women and Men Who Have Sex With Men. JMIR Public Health Surveill 2017 Jul 07;3(3):e45 [FREE Full text] [doi: 10.2196/publichealth.7397] [Medline: 28687531]
- 40. Perry NS, Huebner DM, Baucom BR, Hoff CC. Relationship Power, Sociodemographics, and Their Relative Influence on Sexual Agreements Among Gay Male Couples. AIDS Behav 2016 Jun;20(6):1302-1314. [doi: 10.1007/s10461-015-1196-6] [Medline: 26391687]
- 41. Stephenson R, White D, Darbes L, Hoff C, Sullivan P. HIV testing behaviors and perceptions of risk of HIV infection among MSM with main partners. AIDS Behav 2015 Mar;19(3):553-560 [FREE Full text] [doi: 10.1007/s10461-014-0862-4] [Medline: 25081599]
- 42. Sullivan S, Sullivan P, Stephenson R. Acceptability and Feasibility of a Telehealth Intervention for Sexually Transmitted Infection Testing Among Male Couples: Protocol for a Pilot Study. JMIR Res Protoc 2019 Oct 01;8(10):e14481 [FREE Full text] [doi: 10.2196/14481] [Medline: 31573947]
- 43. Hoff CC, Chakravarty D, Bircher AE, Campbell CK, Grisham K, Neilands TB, et al. Attitudes Towards PrEP and Anticipated Condom Use Among Concordant HIV-Negative and HIV-Discordant Male Couples. AIDS Patient Care STDS 2015 Jul;29(7):408-417 [FREE Full text] [doi: 10.1089/apc.2014.0315] [Medline: 26057304]
- 44. Stephenson R, Suarez NA, Garofalo R, Hidalgo MA, Hoehnle S, Thai J, et al. Project Stronger Together: Protocol to Test a Dyadic Intervention to Improve Engagement in HIV Care Among Sero-Discordant Male Couples in Three US Cities.

  JMIR Res Protoc 2017 Aug 31;6(8):e170 [FREE Full text] [doi: 10.2196/resprot.7884] [Medline: 28860107]
- 45. Tan JY, Campbell CK, Tabrisky AP, Siedle-Khan R, Conroy AA. A Conceptual Model of Dyadic Coordination in HIV Care Engagement Among Couples of Black Men Who Have Sex with Men: A Qualitative Dyadic Analysis. AIDS Behav 2018 Aug;22(8):2584-2592 [FREE Full text] [doi: 10.1007/s10461-018-2070-0] [Medline: 29464429]
- 46. Wu E, El-Bassel N, McVinney LD, Hess L, Fopeano MV, Hwang HG, et al. The association between substance use and intimate partner violence within Black male same-sex relationships. J Interpers Violence 2015 Mar;30(5):762-781. [doi: 10.1177/0886260514536277] [Medline: 24919997]
- 47. Maulsby C, Millett G, Lindsey K, Kelley R, Johnson K, Montoya D, et al. HIV among Black men who have sex with men (MSM) in the United States: a review of the literature. AIDS Behav 2014 Jan;18(1):10-25. [doi: 10.1007/s10461-013-0476-2] [Medline: 23620241]
- 48. Millett GA, Peterson JL, Flores SA, Hart TA, Jeffries WL, Wilson PA, et al. Comparisons of disparities and risks of HIV infection in black and other men who have sex with men in Canada, UK, and USA: a meta-analysis. Lancet 2012 Jul 28;380(9839):341-348. [doi: 10.1016/S0140-6736(12)60899-X] [Medline: 22819656]



49. Smith D, Herbst J, Rose C. Estimating HIV protective effects of method adherence with combinations of preexposure prophylaxis and condom use among African American men who have sex with men. Sex Transm Dis 2015 Feb;42(2):88-92. [doi: 10.1097/OLQ.0000000000000238] [Medline: 25585067]

#### **Abbreviations**

A4A: Adam4Adam

**MSM:** men who have sex with men **RCT:** randomized controlled trial

Edited by A Mavragani; submitted 08.07.21; peer-reviewed by P Nguyen, A Tannoubi, MA Pando; comments to author 13.08.21; revised version received 06.10.21; accepted 09.12.21; published 08.04.22

Please cite as:

Witkovic YD, Kim HC, Bright DJ, Tan JY

Recruiting Black Men Who Have Sex With Men (MSM) Couples via Dating Apps: Pilot Study on Challenges and Successes

JMIR Form Res 2022;6(4):e31901

URL: https://formative.jmir.org/2022/4/e31901

doi: 10.2196/31901

PMID:

©Yong Darin Witkovic, Hyunjin Cindy Kim, Darius Jovon Bright, Judy Y Tan. Originally published in JMIR Formative Research (https://formative.jmir.org), 08.04.2022. This is an open-access article distributed under the terms of the Creative Commons Attribution License (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work, first published in JMIR Formative Research, is properly cited. The complete bibliographic information, a link to the original publication on https://formative.jmir.org, as well as this copyright and license information must be included.

