A Mixed-Methods Pilot Evaluation of Manhood 2.0, a Program to Reduce Unintended Pregnancy Among Young Men

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Abstract
One promising though understudied approach to addressing race/ethnic disparities in teen pregnancy rates is through sexual and reproductive health (SRH) programming for young men. This pilot study assessed the feasibility, quality, and preliminary efficacy of Manhood 2.0—a group-based, after-school SRH program for young Black and Latino men, which examines gender norms. This mixed-methods study describes program attendance and quality; participant experiences and engagement in the program; and changes in participant gender norms, knowledge, attitudes, self-efficacy, and social support. Quantitative data from baseline and post-intervention surveys (n = 51) were analyzed using paired t-tests and McNemar’s tests. Qualitative data from five post-intervention focus groups (n = 27) were transcribed, coded, and analyzed for themes. At baseline, participants were ages 15 to 18 years (M = 16.4 years), 30% were Latino, 66% were Black, 34% ever had sex, and 44% of sexually active participants had sex without any contraceptive method or condom. Quality ratings by program observers were high. The majority of participants (61%) attended at least 75% of sessions, and 96% rated Manhood 2.0 as “very good” or “excellent.” Pre–post comparisons showed increases in receipt of SRH information; contraception knowledge; positive attitudes about supporting partners in pregnancy prevention; self-efficacy in partner communication about sex; discussing program content with friends and family; and social competence and support. Focus group participants described benefits from the Manhood 2.0 content (i.e., full range of contraceptive methods, sexual consent, gender norms) and delivery (i.e., reflective discussion, nonjudgmental facilitators). Findings suggest that Manhood 2.0 is a promising SRH program for young men.

Keywords
sexual health promotion, young men, pilot evaluation

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Background
Teen birth rates in the United States remain higher than in other industrialized countries, even after recent declines, and approximately three-quarters of teen pregnancies are unintended (Finer & Zolna, 2016). In addition, there are significant disparities in teen birth rates and contraceptive use by race/ethnicity. For example, Black and Latino teens have birth rates that are 50% higher than the national average (National Center for Health Statistics, 2020) and are less likely to use effective contraceptive methods than Whites (Centers for Disease Control and Prevention, 2012). These disparities may be due to a range of social and structural factors, including lower

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parental education and income levels, the neighborhoods where individuals reside, and a lack of available sexual and reproductive health (SRH) services and programming (Penman-Aguilar et al., 2013; Romero et al., 2016). Young people of color often face structural barriers to obtaining SRH services, such as discrimination (e.g., poorer quality care) and bias from health care providers (that over-emphasize long-acting reversible contraceptive [LARC] methods) (Higgins, 2014; Thorburn & Bogart, 2005). Historical and ongoing reproductive abuses resulting from structural racism have fostered distrust in the medical system and discouraged people of color from seeking SRH services (Higgins, 2014; Prather et al., 2018). Given this context, SRH programs designed to meet the unique needs of Black and Latino youth are warranted.

One promising though understudied approach to addressing high teen pregnancy rates is through the inclusion of teen and young adult men (hereafter, “young men”) in SRH programming. In particular, more research is needed on programs designed to meet the specific needs of Black and Latino young men, who have historically been underserved by SRH efforts (Kalmuss & Tatum, 2007). Young men can play an important role in couple-level decisions about whether and when to have sex and preventing unintended pregnancy. For instance, men’s contraceptive preferences and participation in sexual and contraceptive use decision-making may influence a partner’s decision to use effective contraceptive methods (Grady et al., 2010; Harvey et al., 2018). While a recent meta-analysis of teen pregnancy evaluations identified that single gender programs may be especially effective in reducing sexual risk behaviors (Juras et al., 2019), there are few evidence-based interventions designed specifically for young men (Centers for Disease Control and Prevention, 2018). Previous studies have identified challenges around engaging young men in pregnancy prevention and contraceptive decision-making (Raine et al., 2010; Vargas et al., 2017), highlighting the need for more programs tailored to young men.

Previous research has identified that Black and Latino young men report more traditional gender norms than other men, which may inhibit communication with partners about sex and contraception and contribute to sexual risk behaviors (Kirby & Lepore, 2007; Pleck et al., 1993; Tschann et al., 2010). Developing programming for young men—particularly young men of color—that includes discussions about sex and contraceptive use, gender norms, and relationship dynamics could play a key role in reducing unintended teen pregnancy in the United States.

This study provides information about participant experiences in Manhood 2.0, an eight-session group-based SRH program designed for teen and young adult Black and Latino men. The program examines rigid gender norms; develops social support; and builds knowledge, attitudes, and self-efficacy related to healthy relationships and reproductive health with the goal of preventing unintended pregnancy. As part of a randomized controlled trial, Manhood 2.0 was implemented after school with Black and Latino young men ages 15 to 18 years in a large, urban city in the Mid-Atlantic region between 2017 and 2018. Because of the short data collection period and small sample size, we focus on data from the Manhood 2.0 program participants in this paper. This evaluation data can serve as a pilot study and provide valuable information for program development and implementation of SRH programming for young men.

This pilot study applies a mixed-methods design using quantitative data from program implementation and program participants’ baseline and post-intervention surveys and qualitative data from focus groups with program participants. The purpose of this study is to: (1) assess the feasibility and quality of program implementation; (2) describe Manhood 2.0 participants’ experiences with program content and implementation; and (3) explore preliminary efficacy by assessing participant changes in key mediators linked to unintended pregnancy. Results contribute to an important but limited body of research on SRH programs that engage and address the reproductive health needs of young men.

Method

Study Overview

The Manhood 2.0 evaluation study was reviewed and approved by the Child Trends Institutional Review Board (study approval #1372) and took place between November 2017 and September 2018. We incorporated an individual randomized block design, and participants were recruited through a youth center in a major Mid-Atlantic city in the United States and various high schools in the surrounding neighborhoods. To be eligible, individuals had to meet all the following criteria, identified through a screener: male, aged 15 to 18 years, not actively planning a pregnancy with someone, never participated in the youth center’s SRH program, received no SRH programming in the last 3 months, and were able to participate in a program delivered in English.

Recruitment

Participants were enrolled after school from public high schools by the youth center on a monthly basis for 6 months resulting in six program cohorts. Across these cohorts, 197 participants were screened for the study and 192 were eligible. Of the eligible participants, 110
enrolled in the study: 56 participants were randomized to Manhood 2.0 and 54 to the control group, a post-high school readiness program developed by the youth center. Each cohort had an average of eight participants.

Participants received a copy of the consent or assent form and provided written consent or assent to participate in the study. Participants were not required to obtain parental consent to participate in the study, although participants did receive a letter describing the study to share with their parent or guardian. Consented participants were invited to attend a welcome session at the implementation site where they completed the baseline survey, were randomly assigned within their cohort to either Manhood 2.0 or the control program, and attended their first program session. Program facilitators implemented eight 1- to 2-hour sessions twice a week for 4 weeks, totaling 15 hours of programming (Promundo Global, 2018). Because the study was not able to be completed as designed, and the resulting sample size is too small to assess efficacy utilizing both the intervention and control groups, we focus on the experiences of Manhood 2.0 program participants and present findings from this group only.

**Intervention**

The Manhood 2.0 curriculum is derived from Promundo’s Program H, which has been adopted in at least 36 countries and rigorously evaluated in international settings, such as India, Brazil, and Vietnam (Pulerwitz et al., 2006). The U.S. adaptation of Program H—Manhood 2.0—brings young men together to explore societal messages about masculinity and rigid gender norms with the goal of reducing relationship violence and unintended pregnancy. Manhood 2.0 is designed to be culturally appropriate and to incorporate an interactive, participatory process, where young men can critically reflect and share personal experiences and perspectives, including those related to identity and race/ethnicity. As an example of program content, the intervention includes an interactive activity referred to as “The Man Box” in which young men discuss messages they receive about how to be a man or act like a man, and messages they receive if they do not conform or behave accordingly. Trained program facilitators engage participants in interactive and respectful group discussions around these topics.

Promundo and the University of Pittsburgh adapted the Manhood 2.0 curriculum for the U.S. context and expanded its content on pregnancy prevention. Adaptations were informed by formative research conducted in 2016 with young Black and Latino men (ages 15–22) and with input from three Community Advisory Boards and implementation staff. Manhood 2.0 draws upon concepts from social cognitive theory (Bandura, 2002), the theory of gender and power (Wingood & DiClemente, 2000), and social norm theory (Berkowitz, 2004). Manhood 2.0 seeks to reduce rates of sex without any method of birth control or a condom (i.e., unprotected sex) and pregnancy by changing key mediators, including building knowledge, attitudes, and self-efficacy related to healthy relationships; improving partner communication about sex, contraception, and pregnancy intentions; fostering more equitable gender norms; and developing social support.

**Data Collection**

**Quantitative.** Between November 2017 and July 2018, Manhood 2.0 participants received a baseline survey and an immediate post-intervention survey. Self-administered baseline surveys took place in-person (either online or a paper survey based on the participant’s preference) at the welcome session. The immediate post-intervention survey was self-administered in the last hour of the final Manhood 2.0 intervention session, or remotely online if participants missed the final session. Participants received a US$10 gift card for completing each survey. Participants could receive up to US$75 in gift cards for attending all program sessions, as well as community service hours to fulfill school requirements for each hour attended, and free food at each session.

**Qualitative.** From February 2018 to August 2018, Child Trends conducted five focus groups with 27 of the 56 young men who participated in the Manhood 2.0 program (response rate, 48%), with an average of five young men per focus group. After the final Manhood 2.0 session of each cohort, Manhood 2.0 facilitators invited all young men in each cohort to participate in a focus group. The focus groups were held at that cohort’s implementation site within 1 week of completing the program. Participants signed consent or assent forms before the focus groups and agreed to have the discussions audio recorded. The participants were asked questions about their experiences participating in the program, lessons learned, and general feedback to improve the program. Participants were provided with food during the discussions and a US$25 gift card.

**Measures**

**Quantitative.** The survey included measures of demographic and community characteristics, perceptions of Manhood 2.0 facilitators and program content (post intervention), sexual risk behaviors, and mediators associated with unintended pregnancy and addressed by the Manhood 2.0 curriculum. The survey instruments were finalized in 2017 and included established measures from
rigorous evaluation studies that have been tested with adolescent populations (Chu et al., 2005; Miller et al., 2012; Pulerwitz & Barker, 2008), existing national surveys (Frost et al., 2012; Harris, 2007; Mathematica Policy Research, 2016; National Survey of Family Growth, 2013; Pleck et al., 1993; Smith & Colman, 2012; Centers for Disease Control and Prevention, 2017), as well as measures developed by the study team.

For key program mediators of interest, including knowledge, attitudes, self-efficacy, gender norms, and social competence and support, we formed scales using principal component analysis with varimax rotation (Abdi & Williams, 2010). We kept items with a factor loading of 0.5 or higher. Internal consistency for created scales (three or more items) was assessed with Cronbach’s alpha. For several constructs, we created binary measures based on theory and/or the distribution of our sample. Detailed descriptions of measures and scales are presented in the appendix. To assess the feasibility and quality of implementing Manhood 2.0, we used attendance records kept by facilitators for each session; participant perceptions of the Manhood 2.0 facilitators and program content (post-intervention); and ratings of program implementation quality for each cohort based on observations by trained observers.

Qualitative. Child Trends developed a 14-question semi-structured focus group protocol to guide the group discussions. The focus groups gathered participant’s perspectives on their experiences participating in Manhood 2.0; the delivery of the program; the program activities; aspects of the program that resonated with them; and their relationships with the facilitators.

Analysis

Quantitative. To examine preliminary program efficacy, we assessed differences between responses at baseline and post-intervention for the mediators noted above among Manhood 2.0 participants. Statistically significant changes were identified by paired t-tests for continuous measures and McNemar’s tests for binary measures (Fagerland et al., 2014). All analyses were completed using Stata 16.1 (StataCorp, 2019).

Qualitative. After each focus group, the study team transcribed the audio recordings (around 450 min total), reviewed the transcripts for completeness, and de-identified the transcripts before entry into Dedoose software (Dedoose, 2018) for data analysis. Two qualitatively trained researchers coded two transcripts together (40% of the transcripts), reconciled any discrepancies through consensus, and then independently coded the remaining three transcripts. After coding all five transcripts, the two coders, along with another qualitatively trained study team member, identified commonalities across groups. Through extensive discussion, they agreed upon the larger themes presented in this paper. After conducting the quantitative and qualitative analyses, we grouped the pre-/post-test findings with the qualitative themes and provide the combined findings in the “Results” section.

Results

Sample Characteristics

Quantitative data are provided for the 51 intervention participants who completed the immediate post-intervention survey (91% response rate). Table 1 presents participant baseline characteristics. Participants were an average age of 16.4 years, and most of the sample identified as Latino (30%, 15) or non-Latino Black (66%, 33). Baseline data indicate high levels of neighborhood violence. Most participants reported that they were not currently in a relationship (78%, 40), more than one third (17) ever had vaginal sex, and 18% (9) had sex in the past 3 months. Among those who had vaginal sex in the past 3 months, two thirds (6) reported having sex without a condom, and 44% (4) had sex without any method of birth control.

Program Feasibility and Quality

Across all six cohorts, 61% of participants (31) attended at least six out of the eight Manhood 2.0 sessions. Attendance was even higher among focus groups participants (89% attended at least six of eight sessions). High attendance rates for this voluntary, after-school intervention were due, in part, to continued communication between facilitators and participants between lessons, an emphasis on commitment to the program, and participant interest in the program content and the group-based process of reflecting on the content. Participants reported positive perceptions of the Manhood 2.0 program. For example, 96% of participants rated Manhood 2.0 as “very good” or “excellent,” and 92% would “definitely” recommend the program to a friend (Table 2).

Program observers observed nine sessions and reported high program quality across cohorts, including that program implementers were clear in their explanation of activities (4.5/5), participants appeared to understand the materials (4.6/5), and participants were actively engaged in discussion and activities (3.9/5). Observers gave facilitators consistently high scores (4 or 5) for measures, such as knowledge of the program, level of enthusiasm, poise and confidence, rapport with participants, and ability to address concerns and questions. Across all cohorts, program observers reported an average of 3.8 for
Table 1. Baseline Characteristics and Attendance of Intervention Sample.

| Measure | Intervention group |
|---------|--------------------|
| Total sample size | 51 |
| Age at random assignment (mean in years) | 16.4 |
| Race/ethnicity | |
| Latino | 15 | 29.4% |
| Non-Latino Black | 33 | 64.7% |
| Non-Latino other | 2 | 3.9% |
| Unknown | 1 | 2.0% |
| Grade | |
| 10th grade or less | 15 | 29.4% |
| 11th grade | 20 | 39.2% |
| 12th grade | 16 | 31.4% |
| Relationship type | |
| Cohabiting or in a serious dating relationship | 5 | 9.8% |
| In a casual dating relationship or only having sex | 6 | 11.8% |
| Not in a relationship | 40 | 76.5% |
| Unknown | 1 | 2.0% |
| During the past year, there was sometimes, very often or always... | |
| A fight in which a weapon like a gun or knife was used in your neighborhood | 12 | 23.5% |
| A violent argument between neighbors | 12 | 23.5% |
| People selling or using drugs in your neighborhood | 15 | 29.4% |
| A robbery or mugging in your neighborhood | 7 | 13.7% |
| Someone making unwanted sexual comments to a woman or girl in your neighborhood | 4 | 7.8% |
| Sexual experience | |
| Ever had sex | 17 | 33.3% |
| Sex in the past 3 months | 9 | 17.7% |
| Sex without a condom | 6 | 66.7% |
| Sex without any contraceptive method or condom | 4 | 44.4% |
| Attendance | |
| Attended at least 75% of program sessions (six out of eight sessions) | 31 | 60.8% |

*“Ever had sex” refers to whether respondents have ever had vaginal sex, which we define as a penis in a vagina. In the past 3 months, among participants who had sex in the past 3 months (n = 9). “Any contraceptive method” refers to: birth control pills, the shot (e.g., Depo Provera), the patch (e.g., Ortho Evra), the ring (e.g., NuvaRing), intrauterine device (e.g., Mirena, Skylla, or ParaGuard), and implants (e.g., Implanon or Nexplanon).*

Table 2. Perceptions of Program Content and Facilitators Among Intervention Sample.

| Measure | Intervention group |
|---------|--------------------|
| Total sample size | 51 |
| Perceptions of program content | |
| Felt interested in program sessions and content most/all of the time | 43 | 83.7% |
| Felt the material presented was clear most/all of the time | 44 | 88.6% |
| Felt the discussion and activities helped you learn program lessons most/all of the time | 44 | 84.1% |
| Felt you were respected as a person most/all of the time | 44 | 86.4% |
| Felt you had a chance to ask questions about topics or issues that came up in the program most/all of the time | 45 | 86.7% |
| Rated Manhood 2.0 as very good or excellent | 47 | 95.7% |
| Would definitely recommend Manhood 2.0 to a friend | 48 | 91.7% |
| Learned a lot from the Manhood 2.0 program | 47 | 78.7% |
| Perceptions of program facilitators | |
| Agree/strongly agree that you liked the Manhood 2.0 facilitators | 48 | 93.8% |
| Agree/strongly agree that you could trust your Manhood 2.0 facilitators | 47 | 97.9% |
| Agree/strongly agree that the facilitators were able to get everyone to talk | 47 | 95.7% |
the overall quality of program sessions. Observers reported fidelity ratings to assess content adherence. The average observed completion rate across all six cohorts was 75%, the average adaptation rate was 8%, and the average incompletion rate was 17%. Facilitators noted that the incompletion of activities was due, in part, to delays in starting sessions because of youth arriving late.

Participant Experiences and Pre-/Posttest Changes in Mediators

Theme 1: Manhood 2.0 facilitators were relatable and fostered a sense of brotherhood among participants. Participants noted that the Manhood 2.0 facilitators played a key role in creating a safe space and fostering trusting relationships between themselves and participants. Because facilitators were close in age to participants and came from similar backgrounds, they were able to develop strong connections with the young men. One participant said, “They’re young, so I feel like I can connect with them. They can relate to whatever we’re going through.” The facilitators’ informal approach to discussions made participants feel as though the facilitators were their friends, rather than their teachers. One participant said, “They just connected to me. He called me his ‘brother’ the first time.” This finding is supported by post-test survey findings that indicate 94% of Manhood 2.0 participants liked the facilitators, and 98% felt they could trust the facilitators. Facilitators also incorporated their own personal stories into the lessons, which engaged participants and promoted trust between participants and facilitators. The majority of post-test respondents (84%) reported that they felt interested in program sessions and content “most” or “all of the time” (Table 2). One young man said, “I can tell that they went through some of the stuff we were talking about, so we can actually believe them instead of someone who has never experienced that stuff ever in their life.”

Manhood 2.0 facilitators played a key role in helping foster relationships among the young men. The safe and trusting environment created by the facilitators allowed participants to form deep and meaningful bonds with one another. One young man explained how, “Since we’re minorities and we did the brotherhood talk about how everything stays in the room, I felt more safe.” Another focus group participant elaborated on how similar life experiences and the fact that they were all young men of color contributed to a sense of brotherhood. He commented, “I like Manhood because we’re all minorities and we’re like brothers. We could just all connect and share our experiences.”

In several focus groups, participants talked about how racism pervades their daily lives. One participant said, “For example, like walking into a store—a retail store, like Walmart or a corner store, and you have someone following you around to make sure you’re not stealing something. It’s just because of your appearance.” Another participant explained how:

Stereotyping also ties into jobs because a lot of the time if you’re Black and based on your name—they will automatically judge you. It’s like you’re already being interviewed before you get to an interview. And it’s like someone walks in with a name like “Walter” versus a name like “Tyrone,” they will automatically think that Walter will be better than Tyrone, just because of their names.

Manhood 2.0 gave participants a space to come together with other young men who had similar life experiences and helped them form connections with one another.

Theme 2: Manhood 2.0 exposes young men to new reproductive health knowledge and improves partner communication. Manhood 2.0 participants reported that the program gave them a broader and deeper understanding of female birth control methods, condoms, and sexual consent. Compared to baseline, Manhood 2.0 participants had greater self-reported knowledge about LARC methods (p < .001), birth control pills (p = .002), and other hormonal contraceptive methods (p < .001) (see Table 3). There was a 5% point increase (although non-significant) in correct answers to questions testing knowledge about birth control and condoms between baseline and post-test. However, focus group participants felt they had gained valuable knowledge about LARCs and condom efficacy and use from Manhood 2.0. One participant stated,

Before this program, I didn’t know that a girl could put a tool in her arm and not get pregnant . . . I thought, like, the only way was either birth control [pills] or condoms, but Manhood 2.0 opened my eyes to more.

Another participant said, “I didn’t know [condoms] had an expiration date. I know that sounds dumb that I didn’t know that.” In addition, compared to baseline, Manhood 2.0 participants were more likely to report having received information in the past 3 months about condoms (p = .025); birth control pills, the shot, the patch, implants, or intrauterine devices (p = .006); and sexually transmitted diseases (p = .005).

Young men shared how this new knowledge strengthened their communication skills with partners, which is reflected in several post-test findings. Participants were more likely to agree it is important to support a partner’s pregnancy prevention efforts (p = .005) and were more confident in their ability to communicate with their partner about sex (p = .022) than they were at baseline.
Compared to baseline, 13 to 20% more young men reported discussing program content, such as using protection against pregnancy, with friends or family at the end of the program (all ps < .005; Table 3). One focus group participant mentioned that the information he learned from Manhood 2.0 empowered him to be able to have conversations with his partner about birth control: “I can bring [birth control] up to my partner if she wants to talk about it, so I’m not clueless about it. And if she wants to talk about it, then I have knowledge about it too.” While Manhood 2.0 includes activities about how to support partners in pregnancy prevention efforts, it also

### Table 3. Pre- and Posttest Differences in Short-Term Mediators Among Intervention Sample.

| Measure                                                      | Intervention group mean (M/%) | n   | Pre- | Post- | Pre–post difference | p value |
|--------------------------------------------------------------|-------------------------------|-----|------|------|--------------------|---------|
| Total sample size                                            |                               | 51  |      |      |                    |         |
| Reproductive health knowledge, attitudes, and communication  |                               |     |      |      |                    |         |
| Knowledge                                                    |                               |     |      |      |                    |         |
| Receipt of information (% yes)                               |                               |     |      |      |                    |         |
| Relationships, dating, or marriage                           |                               |     |      |      |                    |         |
| Abstinence from sex                                          |                               |     |      |      |                    |         |
| Condoms                                                      |                               |     |      |      |                    |         |
| Other methods of birth control, such as birth control pills, the shot, the patch, implants, or IUDs |                               |     |      |      |                    |         |
| Sexually transmitted diseases                                |                               |     |      |      |                    |         |
| Self-reported knowledge (scale range: 0–3)                   |                               |     |      |      |                    |         |
| Birth control pills                                          |                               |     |      |      |                    |         |
| Other hormonal methods (patch, ring, shot)                   |                               |     |      |      |                    |         |
| LARC methods (IUD, implant)                                  |                               |     |      |      |                    |         |
| Knowledge (% correct)                                        |                               |     |      |      |                    |         |
| Condoms and birth control                                    |                               |     |      |      |                    |         |
| Consent                                                      |                               |     |      |      |                    |         |
| Attitudes                                                    |                               |     |      |      |                    |         |
| Supporting partner in pregnancy prevention (scale range: 0–3) |                               |     |      |      |                    |         |
| Healthy relationships (scale range: 0–3)                     |                               |     |      |      |                    |         |
| Communication                                                |                               |     |      |      |                    |         |
| Self-efficacy communicating with partners about sex (scale range: 0–3) |                               |     |      |      |                    |         |
| Discussed program content with friends and family (% yes)    |                               |     |      |      |                    |         |
| Using protection against pregnancy                           |                               |     |      |      |                    |         |
| Using protection against STDs/STIs                           |                               |     |      |      |                    |         |
| Sexual consent                                               |                               |     |      |      |                    |         |
| Whether or not to have sex                                   |                               |     |      |      |                    |         |
| Whether or not you would like to get pregnant                |                               |     |      |      |                    |         |
| Gender norms                                                 |                               |     |      |      |                    |         |
| GEM scale (scale range: 0–3)                                 |                               |     |      |      |                    |         |
| Discussed what it means to be a man (% yes)                  |                               |     |      |      |                    |         |
| Social competence and support                                |                               |     |      |      |                    |         |
| Social competence (scale range: 0–4)                         |                               |     |      |      |                    |         |
| Have someone to go to when you feel sad, depressed, or stressed (% yes) |                               |     |      |      |                    |         |

*Significant at p-value < .05.

Note. LARC = long-acting reversible contraceptive; IUD = intrauterine device; GEM = gender-equitable men; STD = sexually transmitted disease; STI = sexually transmitted infection.
emphasizes that decisions about using birth control is ultimately up to women. One participant acknowledged this lesson saying, “It’s her decision, but the more educated I am, at least, the more I can help her if she’s feeling doubtful or not aware of certain things.”

There were no significant increases in participants’ knowledge of sexual consent between baseline and post-test, but 13% more participants (6) reported talking with friends or family about consent from baseline to post-test ($p = .014$). In addition, young men in focus groups reported that Manhood 2.0 gave them a more nuanced understanding of sexual consent. For example, one participant explained how “[Manhood 2.0 facilitators] went in-depth about what consent really is. Consent is when the person actually says yes, but they say it’s an ongoing process so ‘yes’ can turn into a ‘no,’ like, three minutes later.” Participants discussed learning that consent must be verbalized as an affirmative statement, but that it is also important to pay attention to a partner’s body language. One participant explained how “Even though they might be saying yes, their body might be saying something different... her body language has to show that she’s comfortable as well.” In addition to defining consent, Manhood 2.0 taught young men about scenarios in which consent cannot be given. For example, one participant said, “If she says yes while she’s drunk or high, it doesn’t count.”

**Theme 3: Manhood 2.0 helps young men address stereotypes and think about gender norms.** Several Manhood 2.0 participants voiced that young men in the United States are often not taught how to express their emotions. For example, one participant discussed how rigid gender roles cause difficulties for young men saying,

Me personally, there’s... times that I wanted to bawl my eyes out, but when I think of the things I’ve been told, like ‘Be a man, you can’t cry, be strong...’ eventually that leads to emotional problems for men.

The program encourages participants to talk about the issues they face. Another participant said, “Guys are not really taught many ways to express ourselves, other than sports or physical means. I feel like a lot of mental issues are caused by people not being able to express themselves in healthy ways.” Manhood 2.0 encourages young men to talk about their emotions and experiences with gender norms and stereotypes to promote healthy ways of regulating emotions.

Many focus group participants mentioned that Manhood 2.0, and specifically the Man Box activity, changed their understanding of gender norms and helped them confront stereotypes. Commenting on the Man Box, one participant said, “It taught me that you shouldn’t be afraid of who you are in society and that there’s no real definition of what a man is.” This increased confidence in challenging gender norms may have increased participant’s comfort in discussing these topics outside of the program. Compared to baseline, 17% more young men (8) reported discussing “what it means to be a man” with friends or family at the end of the program ($p = .005$).

Other focus group participants reflected on how the Man Box activity deepened their understanding of gender fluidity and helped them confront stereotypes about homosexuality. One young man said, “I think it’s better to float out of the box, rather than stay in what society tries to put you in.” Others said, “Men can be feminine and... women can do the same things as men,” and “you can say, like, a gay person is supposed to be like this or dress like this, but he could look like any of us and act like that.” Despite these focus groups findings, there were no significant pre- and posttest changes in the gender-equitable men scale.

**Theme 4: Manhood 2.0 provided young, Black, and Latino men with a safe space to talk about their experiences and feelings.** Focus group participants frequently mentioned that young men have difficulty expressing their feelings and highlighted the need for shared, safe spaces to have open discussions with other young men. Young men appreciated having a safe environment to talk through issues that they don’t discuss in their daily lives, such as gender norms and expressing emotions. One participant reflected,

It was fun to get to talk about stuff... just like man stuff, like stuff I don’t really have conversations about... like gender... It was just nice to have a genuine discussion with a whole bunch of guys about regular stuff.

Another participant said, “There wasn’t any sort of bullying. What we did—we had a discussion; it was an open space for us to talk openly without judging.” Post-test survey results support these qualitative findings; young men had higher scores on a scale related to social competence ($p = .015$), which included measures, such as “How often do you listen to other people’s ideas?” and “How often do you respect other points of view, even if you disagree?” Young men were more likely to have someone to go to when they feel sad, depressed, or stressed at post-test compared to baseline ($p = .011$). Participants felt that they did not have other opportunities for this kind of open discussion, and they expressed a desire for more support or services that could offer safe spaces where they could “come and talk.” One participant said, “I would like to see programs like this grow. Like in my community, there
isn’t a program like this where people can sit and talk about their feelings.”

**Discussion**

This study extends the limited research on SRH programs designed specifically for young men by presenting mixed-methods results from a pilot evaluation of Manhood 2.0. Findings from quantitative and qualitative data with a sample of primarily Black and Latino young men who participated in an after-school implementation of Manhood 2.0 suggest preliminary efficacy and feasibility of a high-quality implementation of Manhood 2.0.

Most young men attended at least 75% of program sessions, and high participant ratings of the program indicate that Manhood 2.0 resonated with the young men. Pre–post increases in participant discussions about gender and SRH with friends and family members demonstrate the relevance of these topics for young men participating in the program. The very high facilitator ratings, as well as participant reports of the important role that the facilitators played in their connection to the program content, align with implementation research that finds that invested, nonjudgmental, and relatable facilitators help promote participant engagement and program effectiveness (Greene et al., 2013; Parekh et al., 2019). These findings indicate the importance of investing in and prioritizing facilitators who can discuss sensitive content and foster reflection. While research differs on whether facilitators should be a similar age, gender, and race/ethnicity to participants (Higginbotham & Myler, 2010), Manhood 2.0 participants appreciated having young adult male facilitators from similar backgrounds who they could relate to.

One notable finding from the focus groups was that the participants highly valued group discussions with other young men about sensitive topics, such as gender, sexual consent, and what it means to be a man. Young men described their strong feelings of brotherhood within the groups, which aligns with other research highlighting the importance of group-based interventions with strong facilitators for young men from disadvantaged neighborhoods (Miller et al., 2020). Group-based discussions in a safe space may be especially relevant for young Black and Latino participants who described the significant role that racism plays in their daily lives. Racism directly affects Black and Brown youths’ views about contraception due to a history of reproductive coercion and sterilization and limited economic opportunities in these communities (Prather et al., 2016, 2018, & Borroto et al., 2013). These views and opportunities, in turn, affect their sense of hope for the future and reproductive health choices, including comfort accessing reproductive health care services and preventing unintended pregnancy (Marcell et al., 2017). Researchers have reported that racism is associated with increased sexual risk-taking; however, this association can be buffered by strong social support networks (Hicks & Kogan, 2019).

Relatedly, participation in the Manhood 2.0 intervention was linked to an increase in perceived social support among participants. Other research has noted that social support is linked to better mental health outcomes and reduced sexual risk behavior among adolescents (Majumdar, 2006; Wight et al., 2006). Program participants reported higher social competence post-intervention, which is associated with reduced reports of behavior problems, sexual risk behaviors, and delinquency (Hawkins et al., 1999; Stepp et al., 2011).

Focus group participants reported the key role of Manhood 2.0 in expanding their understanding about female contraceptive methods. At baseline, participants reported low knowledge of contraceptive methods, which aligns with other research (Raine et al., 2010; Vargas et al., 2017). Increases in the young men’s self-reported knowledge of hormonal and LARC methods between baseline and post-intervention highlights the role of programs like Manhood 2.0 to build knowledge and awareness of contraceptive methods beyond condoms. Young men in the focus groups noted that this knowledge could improve their ability to support partners in contraceptive decision-making and pregnancy prevention. These reflections are supported by increases in participants’ perceptions around the importance of supporting partners in pregnancy prevention between baseline and the end of the program, as well as research linking greater contraceptive knowledge and awareness to greater consistency of contraceptive use (Frost et al., 2012). However, increased self-reported knowledge of contraceptive methods was not accompanied by significant increases in correct answers to questions testing knowledge about condoms and birth control pills, suggesting the potential benefit of expanding program content on contraceptive information.

Manhood 2.0 participants reported greater self-efficacy to communicate with their partner about safe sex at the end of the intervention, which other research has linked to safer sexual behaviors (Noar et al., 2006). Future research with a larger sample and longer-term follow-up will be necessary to test whether these improvements in knowledge, attitudes, and self-efficacy will result in increased partner communication, increased condom and contraceptive use, and reduced unintended pregnancy.

While findings from the focus groups and survey data generally align, there were some cases where focus group participants described changes in knowledge and
attitudes that were not evident in the survey data. These differences may be because focus group participants received more program content on average, than other participants. As one example, focus group participants reported an improved understanding of sexual consent, which may reduce the incidence of unwanted and unprotected sex (Rothman & Silverman, 2007; Santelli et al., 2018); however, survey respondents had a similarly low percentage of correct responses about consent (52% correct) after the program as they did before participating. This finding suggests the need for additional and more nuanced program content related to sexual consent.

In addition, previous research has linked rigid gender norms and attitudes to poor SRH outcomes, increased intimate partner violence, and low rates of condom use (Blanc, 2001; Foshee et al., 2004; Haberland, 2015). While focus group participants discussed learning about harmful gender norms in Manhood 2.0, there were not any significant changes in gender norms in the survey data for the full sample. Our nonsignificant findings align with another evaluation of Manhood 2.0 focused on reducing sexual violence that also highlighted the challenge of transforming gender norms (Miller et al., 2012). Others have hypothesized that the lack of program impacts on gender norms could be due to the fairly equitable gender norms reported at baseline in the United States, social desirability in responding equitably to these questions, and difficulty in changing these types of norms through a single program (Krumpal, 2013; Walter, 2018).

**Limitations**

Our study had some limitations, largely as a result of data collection and funding issues. Due to the discontinuation of all grants under the funding mechanism supporting this study, recruitment was ended early, we had a smaller sample size than anticipated, and we only included a post-intervention follow-up group, so we could not assess behavioral impacts. Because of the younger age group in the study, only about one in five participants were in a dating or sexual relationship, and only about one third of our sample had ever had sex at baseline. Thus, lessons focused on partner communication and discussions about sex and pregnancy prevention were more theoretical for some participants, although important for preparing young men for future sexual relationships and contraceptive decision-making.

While relatively few young men had ever had sex at baseline, reflecting the young age of the sample, a substantial percentage of those sexually active young men engaged in unprotected sex, indicating high risk of STIs and pregnancy. Our baseline data indicated high levels of neighborhood violence and exposure to substance use in participants’ neighborhoods—which are linked to increased sexual risk behaviors (Ritchwood et al., 2015); highlighting the need for programs to take contextual factors and experiences of youth into account in program development and curriculum design. Future studies, including a full-scale, rigorous evaluation, should incorporate a larger sample, a control group, a longer-term follow-up, and potentially an older (or more sexually active) sample to be powered to find impacts on sexual behaviors, including unprotected sex and unintended pregnancy. Despite these limitations, this study incorporates rich qualitative and survey data from a group of young Black and Latino men in a mid-Atlantic city.

**Conclusion/Implications**

Findings indicate the Manhood 2.0 program is a feasible approach to delivering unintended pregnancy prevention programming to young men and addresses their need for a safe place to talk to one another. Manhood 2.0 content, facilitation, and group-based discussion format were well received by the program participants. Integrating content related to race and gender, in a format that includes safe, open discussions about sensitive topics, can complement programming to build SRH knowledge and skills. For instance, discussing Black and Latino men’s experiences with racism and how they affect their health can create a more holistic approach to sexual health. In addition, discussing and developing a nuanced understanding of sexual consent and contraceptive decision-making can help prepare young men for navigating the complexities of shared responsibility for sexual decisions. These findings illustrate the promise of Manhood 2.0 and suggest future directions for SRH program development and implementation. Implementing programs with similar content, format, and delivery to Manhood 2.0 may help promote SRH equity for Black and Latino young men.
### Appendix. Measures of Short-Term Mediators.

| Measure                                      | Number of items | Sample item(s)                                                                                                                                                                                                 | Item response format       | Cronbach’s α | Measure response format |
|----------------------------------------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------|------------------------|
| **Knowledge**                                |                 |                                                                                                                                                                                                          |                           |               |                        |
| Receipt of information                       | 5               | In the past 3 months, have you received information about the following: “Condoms”                                                                                                                     | Yes; no                   | NA            | % responding “Yes”    |
| **Self-reported knowledge**                  |                 |                                                                                                                                                                                                          |                           |               |                        |
| Birth control pills                          | 1               | “How much do you know about the pill”                                                                                                                                                                     | Four-point scale          | NA            | Four-point scale “0: I have not heard of it” to “3: I know a lot” |
| Other hormonal methods (patch, ring, shot)   | 3               | “How much do you know about the ring (for example, NuvaRing)”                                                                                                                                             | Four-point scale          | NA            | Mean of three items (range 0–3; higher = know more) |
| LARC methods (IUD, implant)                  | 2               | “How much do you know about IUDs (for example, Mirena, Skyla, or Paragard)”                                                                                                                             | Four-point scale          | NA            | Mean of two items (range 0–3; higher = know more) |
| **Condom and birth control knowledge (%) correct** | 6               | “If birth control pills are used correctly and consistently, they can decrease the risk of getting sexually transmitted infections (STDs/STIs).”                                                                 | True; false; don’t know   | NA            | % correct              |
| Consent knowledge (%) correct                | 5               | “Is someone consenting to have sex with you if they make out with you clothed?”                                                                                                                            | True; false; don’t know   | NA            | % correct              |
| **Attitudes**                                |                 |                                                                                                                                                                                                          |                           |               |                        |
| Supporting partner in pregnancy prevention   | 3               | “How important is it for you to go to a doctor or clinic with your partner?”                                                                                                                               | Four-point scale          | 0.76          | Mean of three items (range 0–3) |
| Healthy relationships                         | 4               | “How important is it in a healthy relationship to listen to each other’s problems?”                                                                                                                          | Four-point scale          | 0.84          | Mean of four items (range 0–3) |
| **Communication**                            |                 |                                                                                                                                                                                                          |                           |               |                        |
| Self-efficacy communicating about sex        | 4               | “I feel confident that I can talk to my partner about using birth control.”                                                                                                                                | Four-point scale          | 0.91          | Mean of four items (range 0–3; higher = more confident) |
| Discussed program content                    | 5               | In the past year, did you talk about the following with friends and/or family: “Using protection against pregnancy”                                                                                     | Yes; no                   | NA            | % responding “Yes”    |
Gender norms

| Measure                                      | N | Description                                                                 | Scale                  | Mean | Range          | Higher means more equitable |
|----------------------------------------------|---|-----------------------------------------------------------------------------|------------------------|------|----------------|------------------------------|
| **Gender-equitable men (GEM) scale**         | 12| Please indicate if you agree or disagree: “A guy never needs to hit another guy to get respect” | Four-point scale “Strongly disagree” to “Strongly agree” | 0.70 | 0–3            |                              |
| **Discussed what it means to be a man**      | 1 | In the past year, did you talk about the following with friends and/or family: “What it means to be a man” | Yes; no                | NA   | % responding “Yes” |                              |

Social competence and support

| Measure                                      | N | Description                                                                 | Scale                  | Mean | Range          | Binary measure              |
|----------------------------------------------|---|-----------------------------------------------------------------------------|------------------------|------|----------------|------------------------------|
| **Social competence**                        | 5 | “How often do you listen to other people’s ideas?” or “How often do you respect other points of view, even if you disagree?” | Five-point scale “Never” to “Always” | 0.92 | 0–4            | NA                           |
| **Social support**                           | 1 | “When you feel sad, depressed, or stressed whom do you seek help from first?” | Mother; father; both parents together; girlfriend or partner; male friend; female friend; sibling; I don’t seek help from anyone; don’t know | NA   |                 | Binary measure = 1 if “mother,” “father,” “both parents,” “girlfriend/partner,” “male friend,” “female friend,” “sibling,” 0 otherwise |

Note. LARC = long-acting reversible contraceptive; IUD = intrauterine device; GEM = gender-equitable men; STD = sexually transmitted disease; STI = sexually transmitted infection.
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