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Sexual Scripts and Sexual Risk Behaviors among Black Heterosexual Men: Development of the Sexual Scripts Scale

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Abstract

Sexual scripts are widely shared gender and culture-specific guides for sexual behavior with important implications for HIV prevention. Although several qualitative studies document how sexual scripts may influence sexual risk behaviors, quantitative investigations of sexual scripts in the context of sexual risk are rare. This mixed methods study involved the qualitative development and quantitative testing of the Sexual Scripts Scale (SSS). Study 1 included qualitative semistructured interviews with 30 Black heterosexual men about sexual experiences with main and casual sex partners to develop the SSS. Study 2 included a quantitative test of the SSS with 526 predominantly low-income Black heterosexual men. A factor analysis of the SSS resulted in a 34item, seven-factor solution that explained 68% of the variance. The subscales and coefficient alphas were: Romantic Intimacy Scripts ($\alpha = .86$), Condom Scripts ($\alpha = .82$), Alcohol Scripts (α = .83), Sexual Initiation Scripts (α = .79), Media Sexual Socialization Scripts (α = .84), Marijuana Scripts ($\alpha = .85$), and Sexual Experimentation Scripts ($\alpha = .84$). Among men who reported a main partner (n = 401), higher Alcohol Scripts, Media Sexual Socialization Scripts, and Marijuana Scripts scores, and lower Condom Scripts scores were related to more sexual risk behavior. Among men who reported at least one casual partner (n = 238), higher Romantic Intimacy Scripts, Sexual Initiation Scripts, and Media Sexual Socialization Scripts, and lower Condom Scripts scores were related to higher sexual risk. The SSS may have considerable utility for future research on Black heterosexual men's HIV risk.

Keywords

Sexual scripts; sexual risk behaviors; Black/African American men; HIV risk; Mixed methods

INTRODUCTION

Sexual scripts are widely shared gender and culture-specific guides for sexual behavior (Frith & Kitzinger, 2001). Simon and Gagnon (1984) (Gagnon & Simon, 1987; Simon & Gagnon, 1984, 1986, 1987), the originators of sexual script theory, theorized that sexual behavior is influenced at three levels: cultural scenarios, interpersonal scripts, and intrapsychic scripts (for a definition and examples of each type of sexual script, see Table 1). Cultural scenarios reflect culturally shared social norms and values (e.g., mass media images, gender role norms) that influence interpersonal scripts. Interpersonal scripts inform sexual interactions with regard to how partners interpret cultural scenarios. Intrapsychic scripts reflect individuals' sexual motives, such as sexual pleasure, sexual conquest, passion, and/or emotional intimacy (Seal, Smith, Coley, Perry, & Gamez, 2008). Far from being just passive receptors of cultural scenarios, Simon and Gagnon (1984) characterized people as "partial scriptwriters" who fashioned, shaped, and adapted cultural scenarios into scripts for sexual behavior across a variety of contexts (e.g., with this type of partner, at that place, when feeling this emotion).

Although Simon and Gagnon (1984) theorized three levels of sexual scripts, most of the sexual scripts literature has focused on traditional interpersonal sexual scripts for heterosexual interactions (Seal et al., 2008). Traditional cultural scenarios and interpersonal heterosexual scripts encourage men to initiate sex; to be always ready, willing, and able to have sex; and to control all aspects of sexual activity (Bowleg, 2004; Campbell, 1995; Dworkin & O'Sullivan, 2005; Ku, Sonenstein, & Pleck, 1993; Masters, Casey, Wells, & Morrison, 2012; Seal et al., 2008). Traditional intrapsychic heterosexual scripts for men suggest that men are motivated to have sex for pleasure, sexual conquest, and emotional intimacy (Seal & Ehrhardt, 2003). Although men typically initiate sexual contact in traditional heterosexual relationships, there is some evidence that heterosexual scripts are becoming more egalitarian (Dworkin & O'Sullivan, 2005; Masters et al., 2012; Seal & Ehrhardt, 2003) with an increase in the number of women initiating sexual contact. Moreover, the culturally-specific nature of sexual scripts (Frith & Kitzinger, 2001) suggests that men's sexual scripts are likely to vary across a variety of domains such as race, ethnicity, socioeconomic status, sexual orientation, and geographic region.

Theoretically, all three levels of sexual scripts influence all aspects of sexual behavior, including with whom sexual behaviors should be conducted, which sexual activities should be done, when and in which sequence, and where (Gagnon & Simon, 1987). Thus, the three script levels may *interact* to produce sexual behaviors. Similar to norms for any behavior, scripts may change over time both individually and collectively. As such, sexual scripts theory and research have important implication for HIV prevention. There is a critical need to understand how sexual scripts vary by population, how condoms may or may not be integrated into sexual scripts, how scripts can be changed to reduce sexual HIV risk, and how sexual scripts can be integrated into HIV reduction messages (Kelly & Kalichman, 1995; Seal & Ehrhardt, 2004).

Informed by sexual scripts theory, numerous qualitative studies have documented how sexual scripts may influence sexual risk for U.S. populations such as adolescents (e.g.,

Stephens & Few, 2007; Stokes, 2007), multi-ethnic HIV-positive men who have sex with men (MSM) (Parsons et al., 2004), multi-ethnic college students (Dworkin & O'Sullivan, 2005; Edgar & Fitzpatrick, 1993; Miller, Bettencourt, DeBro, & Hoffman, 1993), multi-ethnic women (Bowleg, Lucas, & Tschann, 2004; Dworkin, Beckford, & Ehrhardt, 2007; Jones & Oliver, 2007; Ortiz-Torres, Williams, & Ehrhardt, 2003), and multi-ethnic heterosexual couples (Seal et al., 2008). There is, however, a dearth of sexual scripts research focused on Black heterosexual men.

Yet, there is a dire need to understand Black heterosexual men's sexual scripts and how these scripts may be associated with sexual risk behaviors. Epidemiological data highlight the stark racial disparity in HIV incidence due to heterosexual exposure among men. Although they represented just 13% of the population in 2009, Black men accounted for 67% of new HIV cases due to heterosexual exposure among men in 2009 (CDC, 2011a). By comparison, White men, who represented 75% of the population, accounted for 11% of newly diagnosed HIV cases among men due to heterosexual exposure. Moreover, Black heterosexual men ranked fifth in the list of the nine groups at highest risk for HIV in 2009 (CDC, 2011a). There is also evidence of a generalized HIV epidemic (i.e., > 1%) among heterosexuals in poor U.S. urban communities that are predominantly Black (Denning & DiNenno, 2010; Denning, DiNenno, & Wiegand, 2011).

In Philadelphia, the site of the current study, heterosexual contact is a growing exposure category that accounted for 21% of new HIV cases among Black men in 2009 (Philadelphia Department of Public Health & AIDS Activities Coordinating Office, 2011). Yet, HIV prevention theory, research, and interventions for Black heterosexual men have lagged considerably (Bowleg & Raj, 2012). An additional concern is that heterosexual transmission accounted for 88% of HIV incidence among Black women in 2010 (CDC, 2012). Thus, HIV prevention efforts focused on Black heterosexual men have important implications not only for Black men, but also their female sexual partners.

We are aware of just four HIV prevention-related sexual scripts studies focused on samples of predominantly or exclusively Black heterosexual men, all of them qualitative. The first investigated interpersonal and intrapsychic sexual scripts relevant to romance, courtship, and sex with predominantly Black low-income heterosexually active urban men recruited from health clinics and community centers (Seal & Ehrhardt, 2003). The study found that many participants reported a tension between their desires for emotional intimacy and sexual pleasure with women. The second study, conducted with a multiethnic low-income sample of community college men, found that although many participants reported the traditional interpersonal sexual script of initiating sex, most desired egalitarian sexual initiation (Dworkin & O'Sullivan, 2005). The third study involved interviews with predominantly Black community-based low-income heterosexual couples to examine interpersonal and intrapsychic sexual scripts about their sexual experiences (Seal et al., 2008). Traditional interpersonal scripts, reflected in narratives in which men initiated or controlled sexual encounters, were most prevalent in couples with a Black male partner. Finally, a qualitative sexual scripts study with a predominantly low-income sample of Black heterosexual men highlighted cultural scenarios and interpersonal scripts for men who reported engaging in high (i.e., multiple sex partners and inconsistent condom use) or low (i.e., one sexual partner

or "always" using condoms) risk sexual behaviors (Hussen, Bowleg, Sangaramoorthy, & Malebranche, 2012). In contrast to the men classified as high risk, men in the low risk group were more likely to articulate alternative scripts (e.g., abstinence) or to reinvent scripts (e.g., have fewer sexual partners). Although these four qualitative studies highlight the diversity of interpersonal sexual scripts among diverse samples of low-income Black heterosexual men, they also exemplify the advantages of qualitative methods for highlighting the context, nuances, and complexities of psychosocial phenomena like sexual scripts.

Quantitative methods, in contrast, are ideally suited for testing hypothesized relationships between sexual scripts and sexual risk behaviors. Yet, few quantitative studies have focused on sexual scripts and sexual risk behaviors. We are aware of just two quantitative studies (Diekman, McDonald, & Gardner, 2000; Hynie, Lydon, Cote, & Wiener, 1998) focused on sexual scripts and sexual risk. The first study examined the interpersonal sexual scripts of a predominantly White sample of Canadian college undergraduates and found that when sexual attitudes were controlled for, women who endorsed more traditional interpersonal sexual scripts (as measured by their completion of an essay in which they imagined what happened up to the point that a young heterosexual couple had sex) reported less positive attitudes about condoms and were less likely to report condom use compared with those who endorsed more non-traditional relational sexual scripts (Hynie et al., 1998). The second quantitative study examined the sexual scripts typically portrayed in romance novels by assessing the reading habits of a predominantly White sample of undergraduate women and found that women who read more romance novels reported less favorable attitudes towards condoms than those who reported reading fewer romance novels (Diekman et al., 2000).

These two studies indicate how few quantitative studies have focused on sexual scripts, particularly among Black heterosexual men. They also highlight a critical gap in the sexual scripts and HIV prevention literature: the absence of validated quantitative sexual script measures. This mixed methods study addresses this gap with the development and test of the Sexual Scripts Scale (SSS) with a predominantly low-income sample of Black heterosexual men in Philadelphia. The study used an exploratory sequential mixed methods design (Creswell & Plano Clark, 2011) in which we used qualitative methods (Study 1) followed by quantitative methods (Study 2) to develop and test the SSS.

Studies have documented how cultural scenario scripts, such as gender ideologies (e.g., Bowleg, 2004; Bowleg, Teti, et al., 2011; Pleck, Sonenstein, & Ku, 1993) and media images (e.g., Brown et al., 2006; Ward, Hansbrough, & Walker, 2005), are associated with the sexual risk behaviors of Black male adolescents and men. To date, however, no quantitative studies have examined Black heterosexual men's sexual scripts in the context of sexual risk. Accordingly, this study's test and development of the SSS focused exclusively on sexual scripts in this population. Our goal was to develop a scale to assess the behavioral manifestations of sexual scripts. Study 1, the measurement development phase, involved individual interviews with 30 Black heterosexual men to gain a culturally-specific understanding of the sexual scripts relevant to sexual behaviors with main and casual partners. Study 2, the reliability and initial validity-testing phase, tested the SSS with a sample of 526 Black heterosexual men. Study 2 utilized factor analysis to assess the structure of the SSS.

Informed by the empirical HIV prevention literature on Black heterosexual men as well as sexual script theory and research, we expected that men who reported more traditional sexual scripts such as those characterized by male-initiated sexual activity (Seal & Ehrhardt, 2003; Seal et al., 2008) would report more sexual risk behaviors with partners compared with men who did not report such scripts. We also expected that men who reported more nontraditional sexual scripts such as those characterized by sexual egalitarianism or relational aspects (e.g., dating, romance, emotional intimacy) (Dworkin & O'Sullivan, 2005; Seal & Ehrhardt, 2003; Seal et al., 2008) would report less sexual risk compared with men who did not report such scripts.

Study 1: Qualitative Development of the Interpersonal Sexual Scripts Scale METHOD

Participants—Participants were 30 self-identified Black/African American heterosexually-identified men who ranged in age from 18 to 44 years (M = 31.47, SD = 8.41). Demographic characteristics of the sample are shown in Table 2.

Procedure—We recruited Study 1 participants from randomly selected venues (e.g., barbershops, parks, street corners) in Philadelphia, PA based on U.S. Census blocks with a Black population of at least 50%. Two Black men who were trained recruiters approached Black men who appeared to be between the ages of 18 and 44 and handed them a copy of the study's recruitment postcard, which invited men to participate in a confidential study about the "health and sexual experiences of Black men." Prospective participants were screened by phone to determine whether they met the study's eligibility criteria of: identifying as Black/African American, heterosexual, being between the ages of 18 and 44, and having had vaginal sex in the last 2 months. We enrolled all eligible participants until we met our targeted sample size of 30. Participants received a \$50 cash incentive. The Institutional Review Board at Drexel University, the first author's former institution, approved all study procedures.

Measures—The study used a standardized open-ended interview (also known as a semi-structured interview) approach in which interviewers posed questions to participants using the same wording and sequence (Patton, 2002). The interview guide included questions relevant to the key domains for Study 2's quantitative phase. These included gender role norms, sexual relationships, gender role stress, religiosity and spirituality, and sexual scripts. The majority of the interview guide focused on sexual scripts. Interviewers informed participants that the sexual scripts questions would be very personal and explicit, but were important to assisting the research team to learn more about Black men's health and sexual experiences.

Two trained Black male interviewers conducted the face-to-face, digitally recorded individual interviews in private offices at Drexel University. Interviewers first asked: "So pretend I'm not a researcher, but I'm one of your boys, one of your friends. Tell me what happened the first time you had sex with [main partner's name]. When was that? What happened?" Interviewers asked many probes of, "And then what happened?" after each question to elicit more elaboration about the topic. Interviewers then asked about the last

time participants had sex with their main partner. For participants reporting more than one partner, the interviewer asked the same series of questions about the first and last time they had sex with their other sex partners, as time allowed. For all partners, interviewers asked about sexual initiation, sexual behaviors, alcohol and marijuana use during sex, condom use, communication about condoms, and where sex typically happens. Interviews ranged in length from 45 to 90 minutes. After the interview, participants completed a brief self-administered demographic questionnaire.

Analyses—Interviews were professionally transcribed and edited to remove identifiers. After multiple readings, the transcripts were imported into Nvivo 9.0, a qualitative data analysis software package. The first and fourth author and a trained graduate research assistant coded all of the data independently. We created a preliminary codebook that included a priori coding categories based on key themes in the study interview guide. Sample coding categories included: "First time sex with main partner," "Alcohol use for first time sex," and "Communication about condoms." The codebook also instructed coders to record coding categories that were not in the preliminary codebook (e.g., "pornography"). Coders met weekly to discuss and compare coding. During these meetings, we assessed agreement of coding categories, codes, revised the codebook accordingly, and recoded transcripts to ensure that they reflected the newly emergent codes about which we agreed. We conducted all of our checks of coding consistency verbally and reached consensus through discussion. As coding progressed, we developed more refined hierarchical subcategories. For example, "Communication about condoms" included subcategories such as "No communication, nonverbal communication, verbal communication." We generated coding reports that included coded text relevant to each category.

To advance the analysis from coding categories to the themes described in Table 3 (Bowleg, Malebranche, & Tschann, 2011), the first and fourth author created analytical memos relevant to the developing categories. For example, to develop the theme "romantic intimacy," the first author reviewed the coding reports for all of the coded data relevant to romance and then wrote memos to reflect patterns in the data. This involved the use of several qualitative analytical tactics (see Richards, 2009, pp. 172–173) such as writing reflections on dating narratives; developing typologies of the types of reported romantic intimacy (e.g., kissing passionately, enjoying time spent together); and using coding matrices to assess patterns in the data (e.g., how many participants' narratives included descriptions of romantic intimacy).

To develop the items for the SSS, the coding team distilled the coded text into phrase codes, brief phrases of text that reflected the themes developed from the qualitative analysis. We disseminated the list of phrase codes to members of the research team. The team met regularly by conference call to discuss the phrase codes and to develop items based on these codes for the SSS. To ensure that the items reflected the voices and experiences of participants, we used the participants' verbatim responses as much as possible (see Table 3). The team decided to omit slang to ensure that the developed items would be comprehensible to a general audience. In order to develop Likert-type response options that would facilitate statistical analyses, the team framed the items in terms of frequency (e.g., "How often do you get together just to have sex?") or magnitude (e.g., "How much do you consider having

sex (with her) as making love?"). We disseminated the created lists to all team members. We discussed and resolved all disagreements until we reached consensus on a final list of 49 items that we used to develop the SSS.

RESULTS

Table 3 presents the list of key themes with sample phrase codes from the study's interviews that the team developed as a result of the qualitative analyses. Findings from the team's analyses identified seven dimensions: romantic intimacy, sexual settings, condom use and communication, alcohol and marijuana use before sex, sexual initiation, media sexual socialization, and sexual experimental scripts.

Study 2: Initial Reliability And Validity Testing of The Sexual Scripts Scale METHOD

Participants—Participants were self-identified Black/African American heterosexually-identified men who ranged in age from 18 to 45 years (M = 28.80, SD = 7.57 (CI 95: 28.20–29.40). Demographic characteristics of the sample are shown in Table 2.

Procedure—We utilized a venue-based probability sampling approach (MacKellar, Valleroy, Karon, Lemp, & Janssen, 1996) to recruit Black heterosexual men from randomly selected venues in Philadelphia, PA based on U.S. Census blocks with a Black population of at least 50%. Recruitment procedures are described in detail in Massie et al. (2011). Prospective participants were screened at the venue to determine whether they met the study's eligibility criteria of identifying as Black/African American, being between the ages of 18 and 44, and reporting having had vaginal sex in the last 2 months. We defined as heterosexual men those who reported that they had had vaginal sex with a woman in the last 2 months, who self-identified as heterosexual, and who reported that they had not had sex with a man within the last 2 months. A total of 578 study-eligible men completed the Audio Computer Assisted Self Interview (ACASI) at the project's offices at Drexel University. We eliminated data from 42 men who reported no occasions of vaginal sex in the last 2 months, 8 men who reported a sexual orientation status other than heterosexual, and 2 men who reported only anal sex to obtain a final sample size of 526.

Measures

Sexual Scripts Scale (SSS): Based on the qualitative sexual script findings, we developed a total of 49 items for the SSS. The SSS asked participants to answer based on their relationship with their main sexual and/or romantic female partner. The 5-point Likert-type scale assessed the frequency of the reported sexual script (1 = never to 5 = every time). The descriptive statistics for the SSS subscales are included in Table 4.

<u>Sexual risk behaviors:</u> To develop the sexual risk measure, we adapted the sexual risk behavior items from the National Sexual Health Survey (NSHS) (Center for AIDS Prevention Studies, 1996). Consistent with the NSHS and other researchers (Grinstead, Gregorich, Choi, Coates, & Voluntary HIV-1 Counselling and Testing Efficacy Study Group, 2001), we asked participants to indicate on a partner-by-partner basis (primary

partner and up to 10 casual partners) how many times they had vaginal sex in the past 2 months, and how many times they used condoms during the same period. From this information, we created a ratio of reported number of vaginal sex occasions reflecting consistent use (100%), inconsistent use, and no condom use in the last 2 months. Low risk (=1) men reported that they were monogamous and used condoms 100% of the time. Moderate risk (=2) men reported that they were monogamous and used condoms inconsistently or never, or that they were not monogamous and used condoms consistently. High risk (=3) men reported that they were not monogamous and used condoms inconsistently or never. We did not include anal sex in this coding because reports of men who engaged in only anal sex were rare (n = 2) and also because anal sex represents a different kind of sexual risk for men having sex with women than does vaginal sex. Thus, the dependent variable includes information on unprotected vaginal sex and monogamy.

Demographic variables: We included several demographic variables in the analyses: (1) Age in years; (2) Education, which ranged from 1 (some high school) to 5 (graduate degree); (3) Income, ranging from 1 (< \$10,000) to 4 (\$40,000-\$59,000); (4) Employment Status, based on responses to two questions (Are you employed? and If no, how long has it been since you were last employed?), and ranging from 0 (employed) to 4 (last employed more than 12 months ago); (5) Relationship Status, which consisted of 2 levels: single (0 = single, widowed, or divorced) and committed (1 = married or domestic partnership); and (6) Incarceration History, which was based on responses to two questions (Have you ever been incarcerated? and What is the total amount of time you were incarcerated?), and ranging from 0 (never) to 8 (10 years or more).

Analyses—We used factor analysis to explore the underlying dimensions of the 49 sexual scripts items. Prior to conducting the final factor analysis, the team decided to drop 13 items that the sample did not widely endorse (e.g., anal sex, cocaine use, or heroin use) or that response pattern analyses suggested were confusing to participants based on initial analyses. After conducting the factor analysis, we dropped two items that cross-loaded on two different factors. This resulted in 34 items. Three percent of the sample had missing values on two items. None of the other items had missing data. In light of the small percentage of missing data, we replaced missing values with the sample mean for each of those two items.

All factor analyses were conducted using SAS (Version 9.0). Because the variables were ordinal, we performed the factor analysis using the %POLYCHOR macro in SAS. This macro can generate a correlation matrix that accounts for the ordinal nature of the data. The resulting matrix was submitted to factor analysis using PROC FACTOR. Since there was no theoretical reason to expect that factors would be uncorrelated, we used oblique rotation. We computed Cronbach's alpha for each emerging subscale. Finally, we examined correlations between sexual scripts subscales, demographic variables, and sexual HIV risk behavior to establish initial predictive validity for the subscales. We examined the correlations between the sexual scripts subscales and sexual risk for two subgroups of men: (1) men who reported a main partner with whom they had an emotionally committed relationship (n = 401); and (2) men who reported having at least one casual partner (n = 238). A total of 126 men were in both groups (i.e., reported both a main and one or more casual partners).

RESULTS

Factor Analyses—Factor analysis yielded seven factors that accounted for 68% of the variance (see Table 4). Evaluation of the number of factors is typically made by examining the Cattel scree plot (which indicated that there were 7 factors) and by retaining factors with eigenvalues >1 (8 factors indicated). Examination of 6, 7, and 8-factor solutions indicated that the 7-factor solution achieved the best results in terms of conceptual match with the qualitative data, high factor loadings, and minimal numbers of cross-loaded items.

The seven resulting sexual scripts subscales are shown in Table 4. Items in each subscale were averaged to form the subscale scores; higher scores represented more endorsement of the particular script. Scores could range from 1 to 5. Scripts included: (1) Romantic Intimacy Scripts ($\alpha = .86$), which reflect where sex happens (e.g., home) and the types or sequence of sexual behaviors in romantic relationships (e.g., spending the night together after sex, spending time on date-related activities prior to sex). Higher scores on the Romantic Intimacy Scripts scale represent more romantic or emotionally intimate behaviors with partners. (2) Condom Scripts ($\alpha = .82$) include verbal and nonverbal communication about condoms. Higher scores on the Condom Scripts scale represent more communication about condom use. (3) Alcohol Scripts ($\alpha = .83$) focus on motivations for and amount of alcohol use as a precursor to sexual activity. Higher scores on the Alcohol Scripts subscale represent more frequent alcohol use before sex. (4) Sexual Initiation Scripts ($\alpha = .79$) reflect the kinds of sexual activities that precede sexual intercourse such as mutual initiation and foreplay. Higher scores on the Sexual Initiation Scripts subscale represent more sexual initiation. (5) Media Sexual Socialization Scripts ($\alpha = .84$) reflect the use of informational sources (e.g., television, pornography) as a guide to sexual behaviors. Higher scores on the Media Sexual Socialization Scripts represent the incorporation of more ideas from media into sexual encounters. (6) Marijuana Scripts ($\alpha = .85$) focus on the motivations for marijuana use as a precursor to sex. Higher scores on the Marijuana Scripts subscale represent more frequent marijuana use before sex. (7) Sexual Experimentation Scripts ($\alpha = ...$ 84) reflect experimentation with new sexual behaviors based on either verbal or nonverbal communication with sex partners. Higher scores on this subscale represent more sexual experimentation based on both partners' suggestions.

In line with the existing literature on sexual scripts that suggests that traditional scripts encourage men to initiate sex and control the sexual encounter (Bowleg, 2004; Campbell, 1995; Dworkin & O'Sullivan, 2005; Ku et al., 1993; Masters et al., 2012; Seal et al., 2008), higher scores on Alcohol Scripts, Marijuana Scripts, and Media Socialization Scripts appear to reflect traditional sexual scripts, while higher scores on Romantic Intimacy Scripts, Condom Scripts, Sexual Initiation Scripts, and Sexual Experimentation Scripts appear to reflect nontraditional sexual scripts.

Correlation Analyses

<u>Demographic variables and the Sexual Scripts subscales:</u> Table 5 shows the correlations between the demographic variables and the SSS subscales. Older men reported more Romantic Intimacy Scripts and Alcohol Scripts than younger men, and younger men reported more Condom Scripts. Men with less education reported more Marijuana Scripts

than those with more education. Men with higher incomes reported more Romantic Intimacy Scripts and Alcohol scripts. Men with longer histories of unemployment reported higher Condom Scripts and Marijuana Scripts scores. Longer incarceration time was associated with higher Alcohol and Marijuana Scripts scores. Men who were married or in committed relationships reported higher Romantic Intimacy Scripts scores than single men and lower Condom and Alcohol Scripts scores compared with single men.

<u>Correlations between SSS subscales:</u> As shown in Table 5, the Alcohol Scripts and Marijuana Scripts subscales were the most highly correlated (r = .43 p < .01). Thus, the Alcohol and Marijuana Script subscales could be combined into a single substance use subscale (e.g., Substance Use Script, a = .83) or used as separate subscales depending on the goals of the analysis.

SSS and sexual HIV risk behavior: Table 6 shows the correlations between the SSS and sexual HIV risk for the two subgroups of men: those who reported that they had a main partner to whom they were emotionally committed (n = 401), and those who reported at least one casual partner (n = 238). Among men who reported a main partner, higher Alcohol Scripts, Media Sexual Socialization Scripts, and Marijuana Scripts, and lower Condom Scripts scores were correlated with more sexual risk behavior. Among participants who reported at least one casual partner, higher Romantic Intimacy Scripts, Sexual Initiation Scripts, and Media Sexual Socialization Scripts scores, and lower Condom Scripts scores, were correlated with higher sexual risk. Sexual Experimentation Scripts were not significantly correlated with sexual risk in either group.

DISCUSSION

It has been four decades since Gagnon and Simon (1973) introduced the concept of sexual scripts and almost three decades since they posited that sexual scripts involve "a process that transforms the social actor from being exclusively an actor to being a partial scriptwriter or adapter shaping the materials of relevant cultural scenarios into scripts for behavior in particular contexts" (Simon & Gagnon, 1984, p. 53). Following Simon and Gagnon's lead, investigators have advocated for research to understand how these sexual scripts guide behavior (Noar & Edgar, 2008; Noar, Zimmerman, & Atwood, 2004). Yet, quantitative investigations of sexual scripts remain surprisingly rare. We designed this study to assess Black heterosexual men's behavioral manifestation of sexual scripts or what Simon and Gagnon (1984) called "scripts for behavior" (p. 53). This mixed methods study is the first to develop a quantitative sexual scripts measure, the Sexual Scripts Scale (SSS), and use it to examine associations between sexual scripts and Black heterosexual men's sexual HIV risk behaviors.

Qualitative methods were invaluable to the development of the SSS. Based on verbatim phrases drawn from the study's interviews with Black heterosexual men, the SSS provides a culturally specific understanding of sexual scripts that we expected to be associated with Black heterosexual men's sexual risk behaviors. The exploratory sequential mixed methods approach that we used to develop and test the SSS allowed us to capitalize on the strengths of both qualitative and quantitative methods (Creswell & Plano Clark, 2011). The factor

analysis revealed seven SSS subscales: Romantic Intimacy Scripts, Condom Scripts, Alcohol Scripts, Sexual Initiation Scripts, Media Sexual Socialization Scripts, Marijuana Scripts, and Sexual Experimentation Scripts.

Because understanding the relationship between sexual scripts and sexual risk was a key focus of our research, we assessed the validity of the SSS by examining it in relation to men's reported sexual risk behavior with main and casual partners. Most sexual scripts were related to sexual risk for one or both groups of men. Among men reporting a main partner, greater endorsements of Alcohol Scripts, Marijuana Scripts, and Media Sexual Socialization Scripts were related to more sexual risk. Among men reporting at least one casual partner, greater endorsements of Romantic Intimacy Scripts, Sexual Initiation Scripts, and Media Sexual Socialization Scripts were related to more sexual risk. Greater endorsement of Condom Scripts was related to less sexual risk for both groups of men.

We expected that men who reported sexual scripts such as those characterized by sexual egalitarianism or relational aspects (e.g., dating, romance, and emotional intimacy) would report less sexual risk behavior compared with men who did not report these scripts. The Romantic Intimacy Scripts, Sexual Initiation Scripts, and the Sexual Experimentation Scripts are conceptually similar to the relational and sexually egalitarian scripts that heterosexual men have articulated in previous sexual scripts research (Dworkin & O'Sullivan, 2005; Seal & Ehrhardt, 2003; Seal et al., 2008). That is, in contrast to traditional scripts that highlight sexual conquest and male sexual initiation, these nontraditional scripts focus on emotional intimacy, and sharing day-to-day activities (e.g., watching a movie) that precede sex (Romantic Intimacy Scripts), both partners' roles in sexual initiation (Sexual Initiation Scripts) or sexual experimentation (Sexual Experimentation Scripts). However, we found that the Romantic Intimacy Scripts and Sexual Initiation Scripts were associated with increased sexual risk behavior, among men who reported at least one casual partner.

These findings accord with empirical evidence from numerous studies that many people perceive that condoms interfere with emotional intimacy and trust (e.g., Corbett, Dickson-Gomez, Hilario, & Weeks, 2009; Flood, 2003). The findings also underscore a need for more research on the context of Black men's relationships with casual partners, particularly because some Black heterosexual relationships deemed "casual" may share attributes of "main" sexual partnerships (e.g., regularity of sexual interactions, emotional intimacy) (Bowleg, Teti, King, & Massie, 2013; Noar et al., 2012). As such, we echo other HIV prevention scholars who have advocated that interventions for heterosexual men align with the reality of heterosexual men's sexual behaviors (Seal & Ehrhardt, 2004). For example, the recognition that some men's casual sexual relationships may be characterized by romance and intimacy, signals that HIV prevention messages that emphasize "Don't bring HIV/STDs home" (Seal & Ehrhardt, 2004, p. 216) and promote consistent condom use with extra-dyadic partners may be more effective than those that recommend a reduction in the number of partners or condom use with all partners, including main partners.

The Romantic Intimacy Scripts also attest to the importance of romance and emotional intimacy in many men's sexual relationships (Bowleg, 2004; Dworkin & O'Sullivan, 2005; Seal & Ehrhardt, 2003) and have important implications for HIV prevention research and

interventions targeted to Black heterosexual men. Relationship dynamics (e.g., emotional intimacy, relationship power, violence) often feature prominently in HIV prevention research and interventions for Black heterosexual women (e.g., Harvey, Bird, Galavotti, Duncan, & Greenberg, 2002; Hogben & Williams, 2001; Paranjape et al., 2006; Reid, 2000; Tucker, Elliott, Wenzel, & Hambarsoomian, 2007), but are less often included in HIV interventions for Black heterosexual men. Yet, a recent meta-analysis of HIV prevention interventions for Black heterosexual men reports that relationally-focused interventions may be a promising HIV risk reduction strategy for Black heterosexual men (Henny et al., 2012).

Indeed, one of this study's most noteworthy aspects is what it reveals about the importance of a relational, rather than exclusively individualistic approach to HIV prevention research and interventions focused on Black heterosexual men. Historically, HIV prevention research has examined influences on condom use from a primarily individual perspective (e.g., Adimora & Schoenbach, 2005; Amaro, 1995; Sheeran, Abraham, & Orbell, 1999). One consequence of the individual-level approach to condom use is that it often decontextualizes sexual situations by excluding any assessment of the dyadic nature of sexual interaction and sexual dynamics within heterosexual relationships such as gendered and relationship power or sexual violence (Amaro, 1995; Beadnell, Baker, Morrison, & Knox, 2000; Frye et al., 2011; Sheeran et al., 1999). More research is needed to explore the relationship between sexual scripts and gendered and relationship power in Black heterosexual relationships.

But whereas research has documented the efficacy of a relationship-based approach to HIV prevention, HIV prevention research with Black heterosexual couples in the U.S. remains rare (for an exception, see El-Bassel et al., 2001). With the exception of the Media Sexual Socialization Scripts subscale, all of the SSS subscales highlight the behaviors of both men and their female sexual partners. Thus, although the SSS was developed for and administered to individual Black heterosexual men, it nonetheless affirms the importance of the relationship context for Black heterosexual men's sexual risk and protective behaviors with female partners.

Greater endorsement of the Condom Scripts was associated with lower sexual risk behavior both among men who reported a main partner, and men who reported at least one casual partner. Men who endorsed more scripts related to communication and/or provision of condoms reported less sexual risk behavior compared with those who had lower scores on these scripts. Echoing the findings of a meta-analysis of 55 studies that demonstrated that communication about safer sex was associated with condom use (Noar, Carlyle, & Cole, 2006) and qualitative studies focused on condom communication and condom use among with Black heterosexual men and women (Bird, Harvey, Beckman, & Johnson, 2001; Bowleg, Valera, Teti, & Tschann, 2010), results from the current study underscore the importance of educating both partners about how to verbally and nonverbally communicate about condom use before and during a sexual encounter.

We found that men who endorsed higher levels of the Media Sexual Socialization Scripts engaged in more sexual risk behavior with both main and casual partners. The Media Sexual Socialization Scripts, which focus on acquiring information about things to try sexually from

sexually explicit sources (e.g., pornography), are conceptually consistent with traditional cultural scenarios that valorize men's casual and recreational approaches to sex. This finding has important implications for future HIV prevention research and interventions for Black heterosexual men. The rise in readily accessible Internet-facilitated "sexually explicit media" (Rosser et al., 2012, p. 1373) highlights a need for more research on this topic. A scant literature suggests that low-income Swedish men consume more cyber-sexually explicit media than middle class men or women (Lewin, 1997), and that U.S. adolescents who consume more sexually explicit materials report more sexual partners (Braun-Courville & Rojas, 2009). We are aware of no existing studies that have examined sources of sexual information and sexual risk in Black heterosexual men, however.

With the exception of Nia, an intervention for Black heterosexual men that incorporates videos and media clips to promote condom use (Centers for Disease Control and Prevention, 2011b; Kalichman, Cherry, & Browne-Sperling, 1999), media literacy is typically not a core element of HIV interventions for Black heterosexual men. Our research suggests that it should be. Specifically, our study's finding about the Media Sexual Socialization Scripts suggests that interventions focused on Black heterosexual men might integrate a media literacy component challenging media portrayals of sexual behavior that rarely involve condom use, neglect the health risks of unprotected sex, and emphasize sexual pleasure over safer sex (Brown & Witherspoon, 2002).

We also found that men who reported more Alcohol and/or Marijuana scripts reported more sexual risk behavior with main partners. This result is consistent with the findings of previous HIV prevention research with Black heterosexual men (Adimora, Schoenbach, & Doherty, 2007; Raj et al., 2009), and advances knowledge about the scripted nature of substance use. A recurrent theme in many of this study's qualitative interviews was the notion of using alcohol or marijuana to relax or get high as a precursor to sexual behavior. This suggests that using these substances is part of the script of a sexual encounter. Consistent with sexual script theory's assertion that cultural scenarios inform interpersonal sexual scripts (Simon & Gagnon, 1984), participants' endorsement of Alcohol and Marijuana Scripts may reflect the behavioral enactment of ubiquitous popular cultural depictions of alcohol and marijuana as precursors to sex. The Internet, movies, and music are rife with the cultural scenario that alcohol and marijuana are preludes to and enhance sex. Research also documents the prevalence of sexual activity and references to alcohol and marijuana in popular music, particularly Rap (Primack, Gold, Schwarz, & Dalton, 2008). These findings highlight the need for interventions that challenge the Alcohol and Marijuana Scripts, and teach skills that will facilitate condom use among men who want to use alcohol or marijuana as part of sexual activity. Such skills might emphasize the importance of having condoms available before drinking or using marijuana, or limiting these substances before sex. Our study underscores the need for interventions to address alcohol and marijuana use as core elements in interventions targeted to Black heterosexual men.

There is some evidence that the most effective HIV prevention interventions are those specifically tailored to particular audiences (Henny et al., 2012; Noar, 2008). The results of our study suggest that a sexual scripts-informed intervention should be culturally and demographically reflective of the experiences and needs of the targeted population. Such an

intervention could also incorporate recommendations from the meta-analysis conducted by Henny et al. (2012). They found that the most effective HIV prevention interventions for Black heterosexual men were specifically designed for Black heterosexual men and men with histories of incarceration, incorporated provisions or referrals to medical services, had male facilitators, had shorter periods for follow-up, and emphasized the importance of HIV reduction behaviors for protecting families and significant others. A sexual scripts-informed intervention that incorporates key findings from the current study, in combination with recommendations from Henny et al. may be an effective risk reduction strategy for low-income Black heterosexual men.

One of this study's most notable contributions to the sexual scripts literature is the development of the first quantitative measure of sexual scripts. Further research is needed, however, to clarify which levels of sexual scripts the SSS assesses: cultural scenarios, interpersonal scripts, and/or intrapsychic scripts. Although most SSS items appear to reflect the interpersonal level, the items may also encompass cultural scenarios and intrapsychic scripts (see Table 1). Thus, our research underscores a need for further investigations to measure all levels of sexual scripts: cultural scenarios, interpersonal and intrapsychic. Such research could advance our understanding about when and how the different levels of sexual scripts guide sexual behavior, and about how to develop more effective HIV prevention interventions.

Limitations

This study's contributions to advancing knowledge about sexual scripts and sexual risk in Black heterosexual men notwithstanding, there are limitations to our research. One limitation is that because this was a cross-sectional study, causal relationships between variables cannot be determined. Another limitation is that the qualitative interviews elicited descriptive information about what happened sexually, but not about why sexual behaviors occurred. As a result, most of the items of the SSS focus on the behavioral manifestations of scripts, although some items do reflect men's motivations or thoughts. A challenge for future research will be to assess motivations underlying these scripted sexual behaviors and how best to ask questions about motivations. As noted above, future sexual scripts research would benefit from including questions about the various levels of sexual scripts. It would also benefit from information about the influence of different contexts or sexual partners on sexual scripts. Another limitation of this research is that our findings may not be generalizable to other groups of Black heterosexual men, such as middle class or upper middle class men, those who live in rural areas, or other populations of Black men such as Black men who have sex with men (MSM). The culturally-specific nature of sexual scripts (Frith & Kitzinger, 2001) also suggests a need for more sexual scripts research to examine how scripts vary by gender, race, ethnicity (e.g., Latinos, Asian Americans), geographic region (e.g., south vs. northeast), socioeconomic status, and sexual orientation (e.g., gay, lesbian, bisexual, heterosexual) to assess how sexual scripts may be similar and different across diverse groups. Finally, potential social desirability bias is a limitation of the research. Participants may have provided socially desirable responses to the study's questions about self-identification as heterosexual, and/or gender and number of their sexual partners.

Conclusion and Future Directions

The HIV/AIDS epidemic's continued and disproportionate spread in Black heterosexual communities, particularly in those that are urban and impoverished (Denning et al., 2011), signals a critical need for more research and novel interventions for Black heterosexual men and their sexual partners. The Sexual Scripts Scale has identified sexual scripts that may increase and decrease sexual risk for Black heterosexual men and their sexual partners. Our findings suggest that the SSS has considerable utility for sexual health and HIV prevention researchers who conduct research with or develop interventions for low-income urban Black heterosexual men, and potentially other populations as well. The qualitative methods that we used to develop the SSS were invaluable for gaining a culturally specific understanding of Black men's sexual scripts, intimate relationships and sexual behaviors. Accordingly, we advocate that future sexual scripts research utilize a mixed methods approach to enhance the cultural validity of study measures. We also encourage the adaptation and further testing of the SSS with diverse populations to assess its external validity. Finally, given the relational focus of the SSS, we advocate for future sexual scripts research to investigate how the sexual scripts of both partners in a sexual relationship influence sexual risk and protective behaviors.

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REFERENCES

- Adimora AA, Schoenbach VJ. Social context, sexual networks, and racial disparities in rates of sexually transmitted infections. Journal of Infectious Disease. 2005; 191:S115–S122.
- Adimora AA, Schoenbach VJ, Doherty IA. Concurrent sexual partnerships among men in the United States. American Journal of Public Health. 2007; 97:2230–2237. [PubMed: 17971556]
- Amaro H. Love, sex, and power: Considering women's realities in HIV prevention. American Psychologist. 1995; 50:437–447. [PubMed: 7598292]
- Beadnell B, Baker SA, Morrison DM, Knox K. HIV/STD risk factors for women with violent male partners. Sex Roles. 2000; 42:661–689.
- Bird ST, Harvey SM, Beckman LJ, Johnson CH. Getting your partner to use condoms: Interviews with men and women at risk of HIV/STDs. Journal of Sex Research. 2001; 38:233–240.
- Bowleg L. Love, sex, and masculinity in sociocultural context: HIV concerns and condom use among African American men in heterosexual relationships. Men and Masculinities. 2004; 7:166–186.
- Bowleg L, Lucas KJ, Tschann JM. "The ball was always in his court": An exploratory analysis of relationship scripts, sexual scripts, and condom use among African American women. Psychology of Women Quarterly. 2004; 28:70–82.
- Bowleg, L.; Malebranche, DJ.; Tschann, JM. [Sexual script themes]. 2011. Unpublished raw data.
- Bowleg L, Raj A. Shared communities, structural contexts, and HIV risk: Prioritizing the HIV risk and prevention needs of Black heterosexual men. American Journal of Public Health. 2012; 102:S173–S177. [PubMed: 22401513]
- Bowleg, L.; Teti, M.; King, S.; Massie, J. "I got a casual [partner] and it's a baby mama too": What Black heterosexual men's experiences with main and casual partners imply for condom use, HIV prevention research, and interventions. 2013. Manuscript in preparation.

Bowleg L, Teti M, Massie JS, Patel A, Malebranche DJ, Tschann JM. 'What does it take to be a man?' What is a real man?': ideologies of masculinity and HIV sexual risk among Black heterosexual men. Culture, Health and Sexuality. 2011; 13:545–559.

- Bowleg L, Valera P, Teti M, Tschann JM. Silences, gestures, and words: Nonverbal and verbal communication about HIV/AIDS and condom use in Black heterosexual relationships. Health Communication. 2010; 25:80–90. [PubMed: 20390673]
- Braun-Courville DK, Rojas M. Exposure to sexually explicit web sites and adolescent sexual attitudes and behaviors. Journal of Adolescent Health. 2009; 45:156–162. [PubMed: 19628142]
- Brown JD, L'Engle KL, Pardun CJ, Guo G, Kenneavy K, Jackson C. Sexy media matter: Exposure to sexual content in music, movies, television, and magazines predicts Black and White adolescents' sexual behavior. Pediatrics. 2006; 117:1018–1027. [PubMed: 16585295]
- Brown JD, Witherspoon EM. The mass media and American adolescents' health. Journal of Adolescent Health. 2002; 31:153–170. [PubMed: 12470911]
- Campbell CA. Male gender roles and sexuality: Implications for women's AIDS risk and prevention. Social Science and Medicine. 1995; 41:197–210. [PubMed: 7667682]
- Center for AIDS Prevention Studies. National Sexual Health Survey. 1996. Retrieved from http://www.caps.ucsf.edu/capsweb/pdfs/NSHS_Quex_English.pdf
- Centers for Disease Control and Prevention. HIV/AIDS Surveillance Report, 2009. 2011a; Vol. 21 Retrieved from http://www.cdc.gov/hiv/surveillance/resources/reports/2009report/pdf/2009SurveillanceReport.pdf.
- Centers for Disease Control and Prevention. NIA: A program of purpose for African American men. 2011b. Retrieved from http://www.cdc.gov/hiv/topics/prev_prog/rep/packages/nia.htm
- Centers for Disease Control and Prevention. Diagnoses of HIV infection and population among adult and adolescent females, by race/ethnicity, 2010 -- 46 states. 2012. Retrieved from http://www.cdc.gov/hiv/topics/surveillance/resources/slides/women/slides/Women.pdf
- Corbett AM, Dickson-Gomez J, Hilario H, Weeks MR. A little thing called love: Condom use in high-risk primary heterosexual relationships. Perspectives on Sexual and Reproductive Health. 2009; 41:218–224. [PubMed: 20444176]
- Creswell, JW.; Plano Clark, VL. Designing and conducting mixed methods research. 2nd ed. Thousand Oaks, CA: 2011.
- Denning, PH.; DiNenno, EA. Communities in crisis: Is there a generalized HIV epidemic in impoverished urban areas of the United States?. 2010. Retrieved from http://www.cdc.gov/hiv/topics/surveillance/resources/other/poverty.htm
- Denning PH, DiNenno EA, Wiegand RE. Characteristics associated with HIV Infection among heterosexuals in urban areas with high AIDS prevalence--24 cities, United States, 2006–2007. Morbidity and Mortality Weekly Report. 2011; 60:1045–1049. [PubMed: 21832975]
- Diekman AB, McDonald M, Gardner WL. Love means never having to be careful: The relationship between reading romance novels and safe sex behavior. Psychology of Women Quarterly. 2000; 24:179–188.
- Dworkin SL, Beckford S, Ehrhardt A. Sexual scripts of women: A longitudinal analysis of participants in a gender-specific HIV/STD prevention intervention. Archives of Sexual Behavior. 2007; 36:269–279. [PubMed: 17186128]
- Dworkin SL, O'Sullivan L. Actual versus desired initiation patterns among a sample of college men: Tapping disjunctures within traditional male sexual scripts. Journal of Sex Research. 2005; 42:150–158. [PubMed: 16123845]
- Edgar T, Fitzpatrick MA. Expectations for sexual interaction: A cognitive test of the sequencing of sexual communication behaviors. Health Communication. 1993; 5:239–261.
- El-Bassel N, Witte SS, Gilbert L, Sormanti M, Moreno C, Pereira L, Steinglass P. HIV prevention for intimate couples: A relationship-based model. Families, Systems and Health. 2001; 19:379–395.
- Flood M. Lust, trust and latex: Why young heterosexual men do not use condoms. Culture, Health and Sexuality. 2003; 5:353–369.
- Frith H, Kitzinger C. Reformulating sexual script theory: Developing a discursive psychology of sexual negotiation. Theory and Psychology. 2001; 11:209–232.

Frye V, Ompad D, Chan C, Koblin BA, Galea S, Vlahov D. Intimate partner violence perpetration and condom use-related factors: Associations with heterosexual men's consistent condom use. AIDS and Behavior. 2011; 15:153–162. [PubMed: 20069447]

- Gagnon, JH.; Simon, W. Sexual conduct: The social sources of human sexuality. Chicago, IL: Aldine; 1973.
- Gagnon JH, Simon W. The sexual scripting of oral genital contacts. Archives of Sexual Behavior. 1987; 16:1–25. [PubMed: 3579554]
- Grinstead OA, Gregorich S, Choi KH, Coates TJ. Voluntary HIV-1 Counselling and Testing Efficacy Study Group. Positive and negative life events after counselling and testing: The Voluntary HIV-1 Counselling and Testing Efficacy Study. AIDS. 2001; 15:1045–1052. doi: http://journals.lww.com/aidsonline/pages/default.aspx. [PubMed: 11399987]
- Harvey SM, Bird ST, Galavotti C, Duncan EA, Greenberg D. Relationship power, sexual decision making and condom use among women at risk for HIV/STDs. Women and Health. 2002; 36:69– 84. [PubMed: 12555803]
- Henny KD, Crepaz N, Lyles CM, Marshall KJ, Aupont LW, Jacobs ED, Charania MR. Efficacy of HIV/STI behavioral interventions for heterosexual African American men in the United States: A meta-analysis. AIDS and Behavior. 2012; 16:1092–1114. [PubMed: 22234436]
- Hogben M, Williams SP. Exploring the context of women's relationship perceptions, sexual behavior, and contraceptive strategies. Journal of Psychology and Human Sexuality. 2001; 13(2):1–19.
- Hussen S, Bowleg L, Sangaramoorthy T, Malebranche DJ. Parents, peers and pornography: The influence of formative sexual scripts on adult HIV sexual risk behaviour among Black men. Culture, Health and Sexuality. 2012; 14:863–877.
- Hynie M, Lydon JE, Cote S, Wiener S. Relational sexual scripts and women's condom use: The importance of internalized norms. Journal of Sex Research. 1998; 35:370–380.
- Jones R, Oliver M. Young urban women's patterns of unprotected sex with men engaging in HIV risk behaviors. AIDS and Behavior. 2007; 11:812–821. [PubMed: 17160484]
- Kalichman SC, Cherry C, Browne-Sperling F. Effectiveness of a video-based motivational skills-building HIV risk-reduction intervention for inner-city African American men. Journal of Consulting and Clinical Psychology. 1999; 67:959–966. doi:http://www.apa.org/pubs/journals/ccp/index.aspx. [PubMed: 10596517]
- Kelly JA, Kalichman SC. Increased attention to human sexuality can improve HIV-AIDS prevention efforts: Key research issues and directions. Journal of Consulting and Clinical Psychology. 1995; 63:907–918. doi: http://www.apa.org/pubs/journals/ccp/index.aspx. [PubMed: 8543713]
- Ku L, Sonenstein FL, Pleck JH. Young men's risk behaviors for HIV infection and sexually transmitted diseases, 1988 through 1991. American Journal of Public Health. 1993; 83:1609–1615. [PubMed: 8238687]
- Lewin, B. Part 2: Pornography: Attitudes and use. In: Lewin, B., editor. Sex in Sweden: On the Swedish sexual life. Stockholm: National Institute of Public Health; 1997. p. 252-263.
- MacKellar D, Valleroy L, Karon J, Lemp G, Janssen R. The Young Men's Survey: Methods for estimating HIV seroprevalence and risk factors among young men who have sex with men. Public Health Reports. 1996; 111(S1):138–144. [PubMed: 8862170]
- Massie, J.; Cole, R.; Teti, M.; Tschann, JM.; Malebranche, D.; Bowleg, L. The quandary in using venue-time-based sampling for recruiting a Black heterosexual men for HIV prevention research; Paper presented at the National HIV Prevention Conference; Atlanta, GA. 2011.
- Masters NT, Casey E, Wells EA, Morrison DM. Sexual scripts among young heterosexually active men and women: Continuity and change. Journal of Sex Research. 2012; 50:409–420. [PubMed: 22489683]
- Miller, LC.; Bettencourt, BA.; DeBro, SC.; Hoffman, V. Negotiating safer sex: Interpersonal dynamics. In: Pryor, JB.; Reeder, GD., editors. The social psychology of HIV infection. Hillsdale, NJ: Lawrence Erlbaum; 1993. p. 85-123.
- Noar SM. Behavioral interventions to reduce HIV-related sexual risk behavior: Review and synthesis of meta-analytic evidence. AIDS and Behavior. 2008; 12:335–353. [PubMed: 17896176]

Noar SM, Carlyle K, Cole C. Why communication is crucial: Meta-analysis of the relationship between safer sexual communication and condom use. Journal of health communication. 2006; 11:365–390. [PubMed: 16720536]

- Noar, SM.; Edgar, T., editors. The role of partner communication in safer sexual behavior: A theoretical and empirical review. New York, NY: Lawrence Erlbaum; 2008.
- Noar SM, Webb E, Van Stee S, Feist-Price S, Crosby R, Willoughby JF, Troutman A. Sexual partnerships, risk behaviors, and condom use among low-income heterosexual African Americans: A qualitative study. Archives of Sexual Behavior. 2012; 41:959–970. [PubMed: 22194089]
- Noar, SM.; Zimmerman, RS.; Atwood, KA. Safer sex and sexually transmitted infections from a relationship perspective. In: Harvey, JH.; Wenzel, A.; Sprecher, S., editors. The handbook of sexuality in close relationships. Mahwah, NJ: Lawrence Erlbaum; 2004. p. 519-544.
- Ortiz-Torres B, Williams SP, Ehrhardt AA. Urban women's gender scripts: Implications for HIV prevention. Culture, Health and Sexuality. 2003; 5:1–17.
- Paranjape A, Bernstein L, George DMS, Doyle J, Henderson S, Corbie-Smit G. Effect of relationship factors on safer sex decisions in older inner-city women. Journal of Women's Health. 2006; 15:90–97.
- Parsons JT, Vicioso KJ, Punzalan JC, Halkitis PN, Kutnick A, Velasquez MM. The impact of alcohol use on the sexual scripts of HIV-positive men who have sex with men. Journal of Sex Research. 2004; 41:160–172. [PubMed: 15326541]
- Patton, MQ. Qualitative research and evaluation methods. 3rd ed. Thousand Oaks, CA: Sage; 2002.
- Philadelphia Department of Public Health, & AIDS Activities Coordinating Office. [African American males 2009]. 2011. Unpublished raw data.
- Pleck JH, Sonenstein FL, Ku LC. Masculinity ideology: Its impact on adolescent males' heterosexual relationships. Journal of Social Issues. 1993; 49:11–29. [PubMed: 17165216]
- Primack BA, Gold MA, Schwarz EB, Dalton MA. Degrading and nondegrading sex in popular music: A content analysis. Public Health Reports. 2008; 123:593–600. [PubMed: 18828414]
- Raj A, Reed E, Santana MC, Walley AY, Welles SL, Horsburgh CR, Silverman JG. The associations of binge alcohol use with HIV/STI risk and diagnosis among heterosexual African American men. Drug and Alcohol Dependence. 2009; 101:101–106. [PubMed: 19117698]
- Reid PT. Women, ethnicity, and AIDS: What's love got to do with it? Sex Roles. 2000; 42:709-722.
- Richards, L. Handling qualitative data: A practical guide. 2nd ed. Los Angeles, CA: Sage; 2009.
- Rosser B, Grey J, Wilkerson J, Iantaffi A, Brady S, Smolenski D, Horvath K. A commentary on the role of sexually explicit media (SEM) in the transmission and prevention of HIV among men who have sex with men (MSM). AIDS and Behavior. 2012; 16:1373–1381. [PubMed: 22252476]
- Seal DW, Ehrhardt AA. Masculinity and urban men: Perceived scripts for courtship, romantic, and sexual interactions with women. Culture, Health and Sexuality. 2003; 5:295–319.
- Seal DW, Ehrhardt AA. HIV-prevention-related sexual health promotion for heterosexual men in the United States: Pitfalls and recommendations. Archives of Sexual Behavior. 2004; 33:211–222. [PubMed: 15129040]
- Seal DW, Smith M, Coley B, Perry J, Gamez M. Urban heterosexual couples' sexual scripts for three shared sexual experiences. Sex Roles. 2008; 58:626–638.
- Sheeran P, Abraham C, Orbell S. Psychosocial correlates of heterosexual condom use: A meta-analysis. Psychological Bulletin. 1999; 125:90–132. [PubMed: 9990846]
- Simon W, Gagnon JH. Sexual scripts. Society. 1984; 22:53-60.
- Simon W, Gagnon JH. Sexual scripts: Permanence and change. Archives of Sexual Behavior. 1986; 15:97–120. [PubMed: 3718206]
- Simon, W.; Gagnon, JH., editors. A sexual scripts approach. New York: Plenum; 1987.
- Stephens DP, Few A. Hip hop honey or video ho: African American preadolescents' understanding of female sexual scripts in hip hop culture. Sexuality and Culture. 2007; 11:48–69.
- Stokes CE. Representin' in cyberspace: Sexual scripts, self-definition, and hip hop culture in Black American adolescent girls' home pages. Culture, Health and Sexuality. 2007; 9:169–184.

Tucker JS, Elliott MN, Wenzel SL, Hambarsoomian K. Relationship commitment and its implications for unprotected sex among impoverished women living in shelters and low-income housing in Los Angeles County. Health Psychology. 2007; 26:644–649. [PubMed: 17845116]

Ward LM, Hansbrough E, Walker E. Contributions of music video exposure to Black adolescents' gender and sexual schemas. Journal of Adolescent Research. 2005; 20:143–166.

Table 1
Three Levels of Sexual Scripts (Simon & Gagnon, 1984)

Sexual Script	Definition	Example
Cultural scenarios	Reflect culturally shared social norms and values about sexual behavior communicated through gender role norms, mass media, etc.	Gender role norms that men should initiate sexual activity Music video images that show men being sexually active with multiple women
Interpersonal scripts	Reflect how people believe they should enact the cultural scenarios in their sexual behaviors	Using alcohol and/or marijuana as a prelude to sex based on mass media images of this behavior Sequencing of behaviors from "hanging out" to foreplay to sexual intercourse based upon expectations of how such interactions should unfold
Intrapsychic scripts	Reflect individuals' sexual motives for engaging in sexual behaviors	Making love to demonstrate emotional intimacy with a sexual partner Having sex with many women as a form of sexual conquest

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 $\label{eq:Table 2} \label{eq:Table 2}$ Demographic Characteristics of Black Heterosexual Men Participating in Study 1 (Qualitative, n = 30) and Study 2 (Quantitative, n = 526)

	Study 1 Qualitative Interviews (n = 30)	Study 2 Quantitative (n = 526)
	N (%)	N (%)
Age (years)	M=31.47, SD=8.41	M =28.80, SD =7.57
Education		
Some high school	7 (23)	90 (17)
HS graduate or GED	13 (43)	241 (46)
Some college	8 (27)	165 (31)
Bachelors degree	1 (3)	22 (18)
Graduate degree	1 (3)	8 (2)
Income		
<\$10,000	15 (50)	251 (48)
\$10,000–\$19,999	2 (7)	67 (13)
\$20,000–\$39,999	5 (17)	101 (19)
\$40,000–\$59,999	5 (17)	107 (20)
Employment status		
Employed	11 (37)	191 (36)
Unemployed	16 (53)	335 (64)
Length of unemployment		
< 3 months		90 (17)
3–6 months		70 (13)
7–12 months		60 (11)
> 12 months		115 (22)
Relationship status		
Single (Separated, divorced, widowed)		385 (73)
Married or domestic partner		141 (27)
Incarceration history		
No		247 (47)
Yes		295 (56)
Length of incarceration		
< 6 months		79 (15)
6–11 months		23 (7)
1.0–1.99 years		49 (9)
2.0–2.99 years		29 (6)
3.0-4.99 years		32 (6)
5.0-7.99 years		33 (6)
8.0–9.99 years		9 (2)
10 years		22 (4)

 $\it Note.$ Items marked with a "--" were not assessed in Study 1

Table 3

Sexual Script Themes, Sample Phrase Codes Developed from Study 1(Qualitative Phase) with Black Heterosexual Men (N=30)

Theme	Sample Phrase Codes from Qualitative Interviews	Developed SSS Item
Romantic Intimacy	"I took her back down to 69 th Street and we went to the movies probably to get something to eat. We went to the movies. We was having a good time." "We was chillin' at her house, you know, watching movies in her room. We was drinking and then we got the little touchy feely going on, and you know, she started kissing me."	1. How often do you spend time together out doing things like going to a movie or a restaurant before you have sex? 2. How often do you spend time together at home (like hanging out, watching TV or movies) before you have sex?
Sexual Settings	"It took place at her house It started on her couch and ended in her bed." "So we started there, we started downstairs and went up stairs. Everything usually happens at my house."	4. How often do you have sex at the place where she lives? 5. How often do you have sex at the place where you live?
Condom Use & Communication	"I turned her around and pulled her underwear down. And well I was diggin' in my pocket for my condom. And as I was diggin' she asked, 'Did you have a condom?" "We really never talked about [condoms] before we did it."	9. How often have you talked about condoms before you had sex, for example, before you started touching each other or taking your clothes off? 14. How often have you just pulled out a condom without talking about it first?
Alcohol & Marijuana Use Before Sex	"I was drunk as hell too I'm going to blame it on the liquor, that's all I'm going to say. The liquor makes you do stupid things." "We were drinking Margaritas and we smoked [marijuana]. We went out to the parking lot and we smoked some weed."	17. How often do you get drunk before you have sex with her? 28. How often do you smoke marijuana to relax or get a little buzzed before you have sex?
Sexual Initiation	"I [initiated it with] a little foreplay. Kissin'. Rubbin' on her titties"	23. How often are you the person who initiates sexual activity (things like touching, kissing or oral sex) with her?
Media Sexual Socialization	"Well, in today's society, everything's [sexual and] tend to be too free on the commercials They're more sexual, explicit, even in the music videos."	24. How often have you tried things sexually with her that you saw on TV or in the movies?
Sexual experimentation	"Days—yeah, days before. I mean, we had discussed these things about what each other likes and dislike [sexually] and you know, expectations [about having sex] and what-not."	33. How often have you gotten ideas about things to do sexually from asking her what kinds of things she likes?

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Factor Analysis Loadings Using Oblique Rotation of Sexual Scripts Scale Items, Study 2 (Quantitative Phase) with Black Heterosexual Men (n = 526)

Table 4

Sexual Scripts Scale ⁴⁴	Romantic Intimacy Scripts	Condom Scripts	Alcohol Scripts	Sexual Initiation Scripts	Media Sexual Socialization Scripts	Marijuana Scripts	Sexual Experiment- ation Scripts
1. How often do you spend the whole night together with her after you have sex?	.92	.02	00:	02	02	.10	04
2. How often do you have sex at the place where you live together?	.91	07	.05	20	90.	.13	05
3. How often do you spend time together with her at home (like hanging out, watching TV or movies) before you have sex?	.73	.07	02	80.	00.	04	.04
4. How often do you have sex at the place where she lives?	.72	04	.02	07	05	.05	.03
5. How often do you have sex with her at the place where you live?	.71	08	09	00.	.12	.19	12
6. How much do you consider having sex with her as "making love"?	.65	.03	.04	.23	90.	23	04
7. How often do you spend time together with her out doing things like going to a movie or a restaurant before you have sex?	4 9.	.12	80.	.05	.05	33	.04
8. How often do you kiss her passionately?	.63	.00	.01	.30	.02	19	.03
9. How often does one of you leave right after you have had sex ?	53	90.	.27	.00	.12	02	00.
10. How often have you talked about condoms before you had sex (e.g., before you started touching each other or taking your clothes off)?	01	98.	08	.12	.01	02	08
11. How often have you talked about condoms \overline{after} sexual activity had started but before you had $\sec?$	01	.82	09	60:	11.	.03	.12
12. How often has she just pulled out a condom without talking about it first?	11.	.75	.07	19	05	60:	.13
13. When you use condoms, how often is she the one who provides the condoms?	.17	.73	.10	11	26	.03	.23
14. How often have you and she talked about condoms after having sex?	90.	.76	.02	07	90.	05	00.
15. How often have you just pulled out a condom without talking about it first?	22	09.	10	01	03	.20	.12
16. After not using a condom with her how often have you thought that you should have used a condom?	26	.63	.03	60.	.18	03	16
17. How often does she drink alcohol to relax or get a little buzzed before you have sex?	01	08	.91	.02	08	.04	80.
18. How often does she get drunk before you have sex?	00.	.01	68.	.02	.05	01	.01
19. How often do you get drunk before you have sex with her?	03	.02	.81	.03	.10	.05	11
20. How often do you drink alcohol to relax or get a little buzz before you have sex with her?	.00	04	.72	01	02	.22	08
21. How often do you both seem to initiate sexual activity?	.01	.07	.01	.85	00.	03	02
22. How often does she initiate sexual activity with you?	07	.03	.20	.85	04	07	02
23. How often do you engage in foreplay with her (e.g., things like touching, kissing, or oral sex) before you have sex?	.05	10	10	.70	08	.17	.14

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Sexual Scripts Scale ^a	Romantic Intimacy Scripts	Condom Scripts	Alcohol Scripts	Sexual Initiation Scripts	Media Sexual Socialization Scripts	Marijuana Scripts	Sexual Experiment- ation Scripts
24. How often are you the person who initiates sexual activity (things like touching, kissing, or oral sex) with her?	.10	08	15	89.	.01	.31	.03
25. How often have you tried things sexually with her that you saw on TV or in the movies?	.07	.03	05	.01	.87	02	.04
26. How often have you tried things sexually with her that you saw in erotic or pornographic material?	01	13	.00	.04	8 .	01	.15
27. How often have you gotten ideas about things to do sexually with her from talking to your friends?	.05	90:	00.	03	.83	60.	05
28. How often have you gotten ideas about things to do sexually with her from things you saw at strip clubs or adult entertainment clubs?	01	.04	60:	16	.74	.04	.10
29. How often do you smoke marijuana to relax or get a little buzzed before you have sex with her?	01	.05	.07	.12	01	.92	01
30. How often do you smoke marijuana to get totally high or stoned before you have sex with her?	.03	90:	.00	.04	.10	.87	03
31. How often does she smoke marijuana to relax or get a little buzzed before you have sex?	01	.05	.31	.01	02	69.	.04
32. How often have you tried new things sexually that she suggested you do together?	.07	.07	02	90:	02	01	.82
33. How often have you tried new things sexually that you suggested you do together?	04	01	06	.00	80.	90.	.87
34. How often have you gotten ideas about things to do sexually from asking her what kinds of things she likes?	10	00.	00.	.07	.13	10	.82
M	3.18	2.05	1.67	2.96	1.93	1.69	2.50
SD	1.03	0.79	0.74	0.94	0.85	1.00	1.02
α	.87	.82	.83	62:	.84	.85	.84

Note. Factor loadings >.40 are in boldface

 a All variables were measured using a 5-point Likert-type scale (1 = Never to 5 = Every Time)

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Table 5

Correlations between Demographic Variables and Sexual Scripts Subscales, Study 2 (Quantitative) with Black Heterosexual Men (n = 526)

Variable	1	2	3	4	w	9	7	∞	6	10	11	12	13
I. Age	1.0												
2. Education Level	03	1.0											
3. Income	**61.	.24**	1.0										
4. Unemployment	00	27**	.35**	1.0									
5. Incarceration	.22**	18**	10*	.20**	1.0								
6. Relationship status	80.	02	.04	04	.05	1.0							
7. Romantic Intimacy Scripts	.16**	00.	*21.	03	.02	*4.	1.0						
8. Condom Scripts	24**	00.	06	*11.	01	-17**	**11	1.0					
9. Alcohol Scripts	*80.	.02	*60:	.00	*41.	*80	*80	80.	1.0				
10. Sexual Initiation Scripts	90.	.07	.07	08	02	.11	**04.	90	90	1.0			
11. Media Sexual Socialization Scripts	07	02	.04	.04	.01	01	*11.	.20**	.31**	80.	1.0		
12. Marijuana Scripts	08	10*	00	.18**	.14**	90	05	80.	.43**	*21.	***	1.0	
13. Sexual Experimentation Scripts	07	.07	04	07	01	.07	.28**	.20**	.05	.37**	.36**	.08	1.0

Note. p < .05, p < .05, **

Table 6

Correlations between Sexual Scripts Scale (SSS) and Sexual Risk Behavior for Two Subgroups of Black Heterosexual Men: Those Who Reported a Main Partner (n = 401), and Those Who Reported at Least One Casual Partner (n = 238)

Sexual Scripts	Men Reporting a Main Partner (n = 401)	Men Reporting at Least one Casual Partner (n = 238)
Romantic Intimacy Scripts	.09	.39**
Condom Scripts	13**	26**
Alcohol Scripts	.13**	.04
Sexual Initiation Scripts	.02	.16*
Media Sexual Socialization Scripts	.13**	.14*
Marijuana Scripts	.15**	.12
Sexual Experimentation Scripts	.06	.10

Note.

^{*} p < .05,

p < .0