

Final Progress Report for Research Projects Funded by Health Research Grants

Instructions: Please complete all of the items as instructed. Do not delete instructions. Do not leave any items blank; responses must be provided for all items. If your response to an item is “None”, please specify “None” as your response. “Not applicable” is not an acceptable response for any of the items. There is no limit to the length of your response to any question. Responses should be single-spaced, no smaller than 12-point type. The report **must be completed using MS Word**. Submitted reports must be Word documents; they should not be converted to pdf format. Questions? Contact Health Research Program staff at 717-783-2548.

1. **Grantee Institution:** Public Health Management Corporation
2. **Reporting Period (start and end date of grant award period):** January 1, 2010-June 30, 2011
3. **Grant Contact Person (First Name, M.I., Last Name, Degrees):** Archana B. LaPollo, MPH
4. **Grant Contact Person’s Telephone Number:** 215-731-2155
5. **Grant SAP Number:** 4100050907
6. **Project Number and Title of Research Project:** 1-The Impact of Masculinity Ideals on HIV Risk among Black and White Bisexually-Active Men
7. **Start and End Date of Research Project:** January 1, 2010-June 30, 2011
8. **Name of Principal Investigator for the Research Project:** Archana B. LaPollo
9. **Research Project Expenses.**

9(A) Please provide the amount of health research grant funds spent on this project for the entire duration of the grant, including any interest earned that was spent:

\$21,981.37

9(B) Provide the last names (include first initial if multiple individuals with the same last name are listed) of **all** persons who worked on this research project and were supported with health research funds. Include position titles (Principal Investigator, Graduate Assistant, Post-doctoral Fellow, etc.), percent of effort on project and total health research funds expended for the position. For multiple year projects, if percent of effort varied from year to year, report in the % of Effort column the effort by year 1, 2, 3, etc. of the project (x% Yr 1; z% Yr 2-3).

Last Name	Position Title	% of Effort on Project	Cost
LaPollo	Senior Research Associate	36%	\$17,384.00

9(C) Provide the names of **all** persons who worked on this research project, but who *were not* supported with health research funds. Include position titles (Research Assistant, Administrative Assistant, etc.) and percent of effort on project. For multiple year projects, if percent of effort varied from year to year, report in the % of Effort column the effort by year 1, 2, 3, etc. of the project (x% Yr 1; z% Yr 2-3).

Last Name	Position Title	% of Effort on Project
None		

9(D) Provide a list of **all** scientific equipment purchased as part of this research grant, a short description of the value (benefit) derived by the institution from this equipment, and the cost of the equipment.

Type of Scientific Equipment	Value Derived	Cost
None		

10. Co-funding of Research Project during Health Research Grant Award Period. Did this research project receive funding from any other source during the project period when it was supported by the health research grant?

Yes _____ No X _____

If yes, please indicate the source and amount of other funds:

11. Leveraging of Additional Funds

11(A) As a result of the health research funds provided for this research project, were you able to apply for and/or obtain funding from other sources to continue or expand the research?

Yes _____ No X _____

If yes, please list the applications submitted (column A), the funding agency (National Institutes of Health—NIH, or other source in column B), the month and year when the application was submitted (column C), and the amount of funds requested (column D). If you have received a notice that the grant will be funded, please indicate the amount of funds to be awarded (column E). If the grant was not funded, insert “not funded” in column E.

Do not include funding from your own institution or from CURE (tobacco settlement funds). Do not include grants submitted prior to the start date of the grant as shown in Question 2. If you list grants submitted within 1-6 months of the start date of this grant, add a statement below the table indicating how the data/results from this project were used to secure that grant.

A. Title of research project on grant application	B. Funding agency (check those that apply)	C. Month and Year Submitted	D. Amount of funds requested:	E. Amount of funds to be awarded:
	<input type="checkbox"/> NIH <input type="checkbox"/> Other federal (specify: _____) <input type="checkbox"/> Nonfederal source (specify: _____)		\$	\$
	<input type="checkbox"/> NIH <input type="checkbox"/> Other federal (specify: _____) <input type="checkbox"/> Nonfederal source (specify: _____)		\$	\$
	<input type="checkbox"/> NIH <input type="checkbox"/> Other federal (specify: _____) <input type="checkbox"/> Nonfederal source (specify: _____)		\$	\$

	_____)			
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11(B) Are you planning to apply for additional funding in the future to continue or expand the research?

Yes _____ No _____

If yes, please describe your plans:

12. Future of Research Project. What are the future plans for this research project?

As part of this Final Report, a draft manuscript has been submitted. Over the next two months, this draft will be reviewed and revised by the coauthors of the manuscript. The resulting final draft will be submitted to a peer-reviewed journal for publication.

13. New Investigator Training and Development. Did students participate in project supported internships or graduate or post-graduate training for at least one semester or one summer?

Yes _____ No _____

If yes, how many students? Please specify in the tables below:

	Undergraduate	Masters	Pre-doc	Post-doc
Male				
Female		1		
Unknown				
Total		1		

	Undergraduate	Masters	Pre-doc	Post-doc
Hispanic				
Non-Hispanic		1		
Unknown				
Total		1		

	Undergraduate	Masters	Pre-doc	Post-doc
White				
Black				
Asian		1		
Other				
Unknown				
Total		1		

14. Recruitment of Out-of-State Researchers. Did you bring researchers into Pennsylvania to carry out this research project?

Yes _____ No _____ _____

If yes, please list the name and degree of each researcher and his/her previous affiliation:

15. Impact on Research Capacity and Quality. Did the health research project enhance the quality and/or capacity of research at your institution?

Yes _____ _____ No _____

If yes, describe how improvements in infrastructure, the addition of new investigators, and other resources have led to more and better research.

The findings from this analysis have helped to inform the development of other HIV prevention studies and interventions being conducted at PHMC that target behaviorally-bisexual Black men.

16. Collaboration, business and community involvement.

16(A) Did the health research funds lead to collaboration with research partners outside of your institution (e.g., entire university, entire hospital system)?

Yes _____ No _____ _____

If yes, please describe the collaborations:

16(B) Did the research project result in commercial development of any research products?

Yes _____ No _____ _____

If yes, please describe commercial development activities that resulted from the research project:

16(C) Did the research lead to new involvement with the community?

Yes _____ No _____ _____

If yes, please describe involvement with community groups that resulted from the research project:

17. Progress in Achieving Research Goals, Objectives and Aims.

List the project goals, objectives and specific aims (as contained in the grant application's strategic plan). Summarize the progress made in achieving these goals, objectives and aims for the entire grant award period. Indicate whether or not each goal/objective/aim was achieved; if something was not achieved, note the reasons why. Describe the methods used. If changes were made to the research goals/objectives/aims, methods, design or timeline since the original grant application was submitted, please describe the changes. Provide detailed results of the project. Include evidence of the data that was generated and analyzed, and provide tables, graphs, and figures of the data. List published abstracts, poster presentations and scientific meeting presentations at the end of the summary of progress; peer-reviewed publications should be listed under item 20.

This response should be a DETAILED report of the methods and findings. It is not sufficient to state that the work was completed. Insufficient information may result in an unfavorable performance review, which may jeopardize future funding. If research findings are pending publication you must still include enough detail for the expert peer reviewers to evaluate the progress during the course of the project.

Health research grants funded under the Tobacco Settlement Act will be evaluated via a performance review by an expert panel of researchers and clinicians who will assess project work using this Final Progress Report, all project Annual Reports and the project's strategic plan. After the final performance review of each project is complete, approximately 12-16 months after the end of the grant, this Final Progress Report, as well as the Final Performance Review Report containing the comments of the expert review panel, and the grantee's written response to the Final Performance Review Report, will be posted on the CURE Web site.

There is no limit to the length of your response. Responses must be single-spaced below, no smaller than 12-point type. If you cut and paste text from a publication, be sure symbols print properly, e.g., the Greek symbol for alpha (α) and beta (β) should not print as boxes (□) and include the appropriate citation(s). DO NOT DELETE THESE INSTRUCTIONS.

The overall purpose of this project is to increase the current understanding of how contextual factors such as ideals of masculinity may contribute to HIV risk among Black and White men who have sex with men and women (MSMW). While the HIV epidemic in the United States has severely impacted all men who have sex with men (MSM), the highest HIV rates are among Black MSM. Black MSM are more likely than other MSM to identify as bisexual and report sex with women and are less likely to disclose their same-sex behavior. Social norms around gender roles and masculinity, particularly in Black communities, may preclude some men from disclosing same-sex behaviors. It is important to understand how contextual factors such as masculinity ideals may influence HIV risk among MSMW. Examining data collected from Black and White MSMW will help to identify racial differences in the association between masculinity ideals and HIV risk. The findings from this project will promote the development of more effective, culturally tailored HIV interventions and prevention messages for MSMW.

The data that will be used for this project were originally collected as part of a study funded by the Centers for Disease Control and Prevention (CDC) entitled Using Respondent-Driven Sampling to Reach Black and White Bisexually-Active Men, for which the Principal Investigator for this project served as a Senior Research Associate. This study was locally referred to as the Community Assessment of Respondent Driven Sampling (CARDS) Survey and was designed to both test the feasibility of using respondent driven sampling (RDS) to recruit Black and White MSMW as well as to examine HIV risk and resiliency among these populations. Data for the original study were gathered from December 2007 through June 2008 in Philadelphia, PA. Although investigators affiliated with the CARDS Survey continue to analyze data from this important study, the funding for this study has ended. Funding from the Commonwealth of Pennsylvania provides crucial support to continue new analyses from this very rich and unique dataset.

The specific aims of this project are to:

1. examine levels of masculinity ideals and patterns of sexual risk among Black and White MSMW.
2. examine potential correlates of masculinity ideals, including internalized homophobia and history of marriage among Black and White MSMW.
3. compare Black and White MSMW regarding levels of masculinity ideals, sexual risk, internalized homophobia and history of marriage.
4. assess the differential impact of masculinity ideals on sexual risk behaviors for Black and White MSMW, accounting for factors such as socio-demographic variables (i.e. age, SES), internalized homophobia, and history of marriage.

The key product that will result from this project will be a manuscript published in a peer-reviewed journal that will facilitate the sharing of important information about ideals of masculinity and HIV risk behavior among Black and White MSMW. This report reflects research that was completed for this project during the reporting period January 1, 2010 through June 30, 2011. Public Health Management Corporation (PHMC) received notice of approval of funding on March 19, 2010. At that time, PHMC determined that we would not be able to complete all the tasks for this project by the project end date of December 31, 2010 and requested a six-month extension of the expiration date. This request was granted and the expiration date was extended to June 30, 2011. Work began on this project in April 2010 after receipt of the notice of funding.

In order to achieve the objectives and specific aims of this project, a variety of activities were conducted over the period of the grant. These included: a) literature review to describe previous research on the link between masculinity and sexual risk for HIV; b) cleaning of the data set in preparation for data analysis; b) refinement of the study sample; c) data analyses to describe Black and White MSMW in the study sample, bivariate correlates of the outcome variables: numbers of male and female sex partners in the past 3 months and

hypermasculinity ideals, and multivariate predictors of numbers of male and female partners in the past 3 months; and d) preparation of a manuscript summarizing the findings of these analyses to be submitted for publication in a peer-reviewed journal. All four specific aims described above were achieved through bivariate and multivariate analyses conducted as part of this grant.

Included below is a draft manuscript summarizing the findings resulting from the activities conducted to achieve the objectives and specific aims of this project. This draft will be reviewed and revised by investigators who were involved in the original study for which the data was collected. Once the manuscript is finalized, it will be submitted for possible publication in a peer-reviewed journal.

THE IMPACT OF HYPERMASCULINITY IDEALS ON MULTIPLE SEXUAL PARTNERS AMONG BLACK AND WHITE BISEXUALLY-ACTIVE MEN

Introduction

While the HIV epidemic in the United States has severely impacted all men who have sex with men (MSM), the highest HIV rates are among Black MSM (CDC, 2005). Black MSM are more likely than MSM of other racial or ethnic groups to identify as bisexual or report bisexual behavior (Millett, 2005; Montgomery et al., 2003) and less likely to disclose their same-sex behavior (Millett, 2005). Few studies have focused specifically on this population, and currently, there are no effective interventions tailored specifically to the HIV risk behaviors of Black MSMW. Only one effective intervention is available specifically for Black MSM and that intervention does not differentiate between Black MSMW and MSM (Peterson et al., 1996). Development of effective HIV prevention interventions specifically for MSMW is hampered by the paucity of data on factors that influence MSMW's HIV risk behaviors. Most research studies to date have merely included MSMW in samples of MSM, obscuring the specific sexual health issues of MSMW. The few studies that have compared MSMW and MSM highlight unique HIV risk factors and prevention needs of MSMW (Dodge et al., 2008; Wheeler et al., 2008). For example, Wheeler et al. (2008) found that MSMW were less likely to disclose same-sex behavior and more likely to report recent sex exchange activity, recent substance use, and criminal justice involvement than MSM with male partners only. Findings from this and other studies suggest the need for HIV prevention interventions that consider more culturally and contextually specific approaches to work with Black MSMW (Mays et al., 2004; Wheeler, 2008). In the present study, we examined the impact of contextual factors including hypermasculinity ideals and internalized homophobia on sexual risk outcomes in a sample of Black and White MSMW. The inclusion of White MSMW allowed us to examine how hypermasculinity and homophobia, contextual factors that are impacted by culture and race, may differentially influence HIV risk and to describe the unique HIV prevention needs of both groups of men.

Black masculinity in the United States has been constructed in response to the historical experience of racism and slavery, and has been constructed in hypermasculine terms (Ward, 2005). Hypermasculinity refers to the exaggeration of traditionally masculine traits, extolling male physical strength, aggression, violence, competition, dominance, and sexual prowess,

while lack of these characteristics is seen as weak and feminine (Benson, 2001; Wolfe, 2003). Previous research has suggested that hypermasculine ideals among Black men are associated with higher rates of multiple sex partners and an aversion to using condoms (Wolfe, 2003; Rhodes, et al., 2011). A recent review of the few studies that have been conducted on associations between male gender roles and sexual risk behaviors found that men with more traditional ideologies are significantly more likely to report sexual infidelity, more casual partners, unprotected sex, and negative attitudes toward condoms (Santana et al., 2006). Although these studies suggest that masculine ideals may lead to increased risk for acquisition or transmission of HIV through risky sexual behaviors, they did not specifically focus on Black MSMW.

Another contextual factor, homophobia, supports hypermasculinity in that it has been used as a strategy of domination in the United States and within the Black community to define who is and who is not “a man” (Ward, 2005). The need to exhibit a masculine public persona, social pressures to establish a family, and pressures to conform to social and sexual norms may lead to internalized homophobia as well as strategies to seek male partners that are associated with high-risk sex practices and partners (Miller et al., 2005). Masculine gender norms in the social environments in which many Black men inhabit, including family and religious networks, may prohibit expressions of non-heterosexual identities and behaviors (Millett, 2005; Stokes et al., 1996, 1997). Black MSMW have been found to be less likely than MSMW of other racial or ethnic groups to disclose their same-sex behavior (Millett, 2005). Furthermore, studies have found that non-disclosure of same-sex behavior to female partners has been linked to increasing HIV and STI rates among female partners of Black MSMW (Montgomery et al., 2003). The present study contributes to the existing literature on the influence of contextual factors on sexual behaviors that may contribute to increased risk for HIV acquisition or transmission among MSMW and their male and female partners. We hypothesized that MSMW who have higher levels of hypermasculine ideals have higher numbers of male and female partners in the past 3 months. Based on the importance of masculine gender norms among Black men, we also hypothesized that the impact of hypermasculine ideals on number of sex partners would be greater among Black MSMW than among White MSMW.

Methods

Participants

The data were collected as part of a formative research study with Black and White men who have sex with men and women (MSMW) designed to test the feasibility of respondent-driven sampling and develop strategies for recruiting bisexually-active men for research, HIV testing, and prevention services, as well as to inform the content of HIV prevention messages and interventions. The study was sponsored by the Centers for Disease Control and Prevention (CDC). Men were enrolled in the study from December 2007 through June 2008. To be eligible, participants had to be male, 18 years of age or older, identify as Black or White, reside in the Philadelphia metropolitan area, be proficient in English, and report sex (oral sex, vaginal or anal intercourse) with at least one female and at least one male in the past 12 months. Men who were HIV-negative, HIV-positive, or of unknown serostatus were

eligible to enroll.

237 Black MSMW and 109 White MSMW were recruited in Philadelphia, PA to participate in a quantitative survey and HIV testing. Of the 346 MSMW enrolled in the study, 63 men (55 Black and 8 White) who reported being HIV-positive were excluded from this analysis. Previous research has shown that individuals reduce their HIV risk behaviors once they know they are HIV-positive. Since the outcome of this study is sexual risk behavior, men who know they are HIV-positive would skew the results of our analysis. 182 Black men and 101 White men reported having never tested, being HIV-negative, or not knowing their status. This subgroup of 283 MSMW were the focus of the present analysis.

Respondent-driven sampling (RDS), a form of chain-referral sampling (Heckathorn, 1997, 2002) was used to recruit participants for the quantitative survey and HIV testing. RDS has been used in past studies to reach persons from hidden or hard-to-reach populations who cannot always be reached through venue-based sampling, random-digit dialing, or by sending recruitment staff into the field. RDS has been used effectively to recruit representative samples of injection drug users, ecstasy users, and Latino gay men (Heckathorn, Semaan, Broadhead & Hughes, 2002; Ramirez-Valles, Heckathorn, Vazquez, Diaz, & Campbell, 2005; Wang et al., 2005). As part of the RDS sampling procedure, an initial set of target population members (called “seed”) who met study eligibility criteria were selected. Seeds participated in the study protocol and were encouraged to recruit other eligible individuals from their social networks to participate in the study. Men recruited by the seeds were then asked to recruit the next wave of persons, with the process continuing until the target sample size was achieved. Each participant who agreed to become a study recruiter was given referral coupons to distribute to others. Each coupon provided basic information of the study procedures, study phone number, and the study location. In addition, each study coupon contained a unique serial number (used to link the recruiter to his recruit). Recruiters were given a limited number of coupons to prevent any single individual from dominating the recruitment process.

Procedure

Study enrollment began through the selection of an initial set of participants, or seeds. Selection of seeds occurred both prior to the onset of quantitative data collection and during the data collection period. Initial seeds from each racial group were identified in consultation with the study collaborators at community-based organizations where data collection was to take place. In addition, the study’s Community Advisory Board members assisted in recruiting seeds from their personal networks. Demographic data from participants was monitored during the course of enrollment to check on the diversity of the sample in terms of racial group, income and employment. Monitoring of demographic data revealed that enrollment of White men into the study was proceeding at a much slower pace than that of Black men. Additional White seeds were then recruited through targeted outreach methods on Internet websites, in chat rooms, and on the street.

Men who received a study coupon enrolled in the study by calling the study site to confirm their eligibility and schedule an appointment at one of two community-based organizations

that are accessible by public transportation. All study candidates had to present a valid study coupon before enrolling. After screening for eligibility and obtaining written consent, participants completed a survey on a laptop computer. The first half of the survey was administered by a trained interviewer and the second half, which contained sensitive questions about drug use and sexual behavior, was self-administered using audio computer-assisted self-interview (ACASI). The interview took 30-60 minutes to complete. A unique numeric identification code that did not contain any personal identifiers was generated for each participant.

Upon completion of the survey, all participants received an HIV test from a trained counselor/tester at the CBO. Men who identified themselves as HIV-positive received a confirmatory test through Western blot assay. All other participants received a rapid HIV test. Participants who tested preliminarily positive on the rapid test provided blood for confirmatory testing. These men were asked to return in 2 weeks for the confirmatory results. All participants received both pre- and post-test counseling. Those with confirmed HIV infection received additional counseling and were directly referred to medical care and other services.

Measures

Sexual risk. The dependent variables in our analysis include number of male and female sex partners in the past 3 months. Participants were asked, “How many male sex partners have you had in the past 3 months? Include only men with whom you had oral or anal sex, with or without a condom, and with or without ejaculation.” and “How many female sex partners have you had in the past 3 months? Include only women with whom you had oral, vaginal or anal sex, with or without a condom, and with or without ejaculation.” The range of number of male partners in the past 3 months for the whole sample was 0 to 30, and the range of numbers for female partners in the past 3 months was 0 to 90. Since very few participants reported partners above 20, and to eliminate outliers that would skew the mean, we truncated the number of partners at 20 male and 20 female partners in the past 3 months. To assess sex trade, two questions were combined to indicate whether men had engaged in sex trade. Participants were asked “In the past 3 months did you give money, drugs, food, a place to stay (shelter) or other things of value in exchange for sex with another man? ” and “In the past 3 months did you receive money, drugs, food, a place to stay (shelter) or other things of value in exchange for sex with another man?” Participants who said “yes” to either or both questions are counted as having engaged in sex trade. Three measures of unprotected sex are included in analysis: insertive unprotected anal intercourse with a man in the past 3 months (insertive UAI), receptive unprotected anal intercourse with a man in the past 3 months (receptive UAI), and unprotected vaginal or anal sex with a woman in the past 3 months (UVA). To compute these variables, participants who had this type of partner and indicated having sex without a condom at least one time in the past 3 months for each of these types of behaviors had engaged in insertive UAI, receptive UAI or UVA, respectively.

Descriptive measures. Demographic variables were measured with standard response formats. To assess living situation, participants were asked to identify the different types of places they lived in the past 12 months and where they currently live. Men who reported that

they had lived on the street or in a park, car, abandoned house, shelter or mission in the past 12 months were considered to be homeless or unstably housed in that time period. Sexual identity was measured with the question “Do you think of yourself as heterosexual or straight, homosexual or gay, bisexual, unsure/questioning, or other?” Men who identified as unsure/questioning or other were combined for analysis.

Contextual factors. To measure hypermasculinity ideals, we adapted the Hypermasculinity Posturing subscale of *The Multicultural Masculinity Ideology Scale* developed by Doss & Hopkins (1998). This 13-item scale had a high reliability for our sample ($\alpha = .843$). Sample items from this scale included: “A guy should prove his masculinity by having sex with a lot of people.”; “To be a guy, you’ve got to be tough.”; “A guy should always have a woman he is dating.”; and “The best way a man can care for his family is to get the highest paying job he can.” A higher score on the scale from 1-4 equals a higher level of hypermasculinity ideals. Other contextual factors were included in analyses because they have been discussed in the literature as being important aspects of Black masculinity. Internalized homophobia was measured using an 8-item scale adapted from the *Nungesser Homosexual Attitudes Inventory* and a scale developed by the HIV Center for Clinical and Behavioral Studies. This scale also had a high reliability for our sample and a higher score from 1-4 equals greater internalized homophobia ($\alpha = .774$). Sample items from this scale included: “A gay/bisexual man can have just as fulfilling a life as a straight man.”; “I feel stress and conflict within myself over having sex with men.”; “I am confident that my desire for men does not make me inferior.”; and “I sometimes feel guilty because I have sex with men.” To assess whether participants had ever been married to a female and whether participants had children, men were asked: “Have you ever been married to a female?” and “How many children do you have, whether they are living with you or not?” Finally, our indicator of disclosure of same-sex behavior included the question: “Generally, how important is it for you to keep your sexual relationships with men secret?”, to which men responded “very important”, “somewhat important”, “a little important”, or “not important at all.” For this analysis, men who said “a little” or “somewhat” important were combined.

Statistical Analysis

Descriptive analyses were conducted using chi-square and t-tests to describe the sample and to test for differences between Black and White MSMW regarding demographic, contextual, HIV status, and sexual risk characteristics. Separate analyses were then conducted for Black and White MSMW, in which unadjusted bivariate correlates of our dependent variables and of the hypermasculinity ideals scale were explored. Variables included in multivariate models included those that were found to be statistically correlated with the dependent variables or hypermasculinity ($p < .05$) in unadjusted bivariate analyses, or those that were important to control for, such as age and indicators of socioeconomic status. Separate multivariate linear regression models were used for Black and White MSMW to assess the impact of hypermasculinity ideals in each racial group on number of male partners in the past 3 months and number of female partners in the past 3 months, while adjusting for age, annual income, homelessness or unstable housing in the past 12 months, sex trade, and internalized homophobia.

Results

Sample

As expected, the majority of the sample was non-gay-identified, with 68% identifying as bisexual, 14% as heterosexual or straight, 12% as questioning or other, and only 5% identifying as homosexual or gay. Overall, the sample was socioeconomically disadvantaged. One-third of the sample reported an annual income less than \$5,000, and only 22% reported an annual income \$20,000 or higher. The majority was unemployed (70%), and four out of ten men (43%) had been homeless or unstably housed in the past 12 months. One-quarter (25%) had less than a high school education, half (49%) had a high school diploma or GED, and one-quarter (26%) had some college or higher. Nearly two-thirds (63%) of the sample had been in jail in their lifetime. The mean hypermasculinity ideals score, on a scale from 1-4, was 2.16 (range=1-3.77) and the mean internalized homophobia score on a scale from 1-4, was 2.21 (range=1-4). Thirty-four percent of the sample had ever been married, and 57% had children. Nearly half (46%) of men felt it was “very important” for them to keep their MSM behavior a secret. The mean number of male sex partners reported was 3.42 and the mean number of female sex partners was 4.09. One-third (33%) reported insertive unprotected anal sex with a man in the past 3 months and 19% reported receptive unprotected anal sex in the past 3 months. Half (55%) reported unprotected vaginal or anal sex with a female in the past 3 months.

Important differences were observed between Black and White MSMW on several variables (Table 1). Black MSMW in our study scored significantly higher on both the hypermasculinity ideals and internalized homophobia scales, were more likely to say it was “very important” to keep their MSM behavior secret, to have ever been married to a female, and to have children compared to White MSMW. Black MSMW in the sample were significantly older than White MSMW, were more likely to report lower annual incomes, more likely to have less than a high school education, more likely to have been homeless or unstably housed in the past 12 months, and were more likely to have ever been in jail. Black men had a significantly higher number of female sex partners in the past 3 months and were more likely to report engaging in sex trade in the past 3 months. No racial differences were observed in the mean number of male sex partners in the past 3 months, insertive or receptive UAI with a man, or unprotected sex with a female in the past 3 months. No significant difference was observed in sexual identity, however a borderline significant trend was observed where a higher proportion of Black MSMW identified as heterosexual or straight and a lower proportion identified as bisexual compared to White MSMW.

Table 1. Demographics, Contextual Factors, HIV Status, and Risk Characteristics Comparison of Black and White MSMW: Philadelphia, 2007-2008 (N=283)

	Black, No. (%) (n=182)	White, No. (%) (n=101)	<i>p</i>
Demographics			
Age			<.001
18-29	11 (6.0)	34 (33.7)	
30-44	61 (33.5)	41 (40.6)	
45+	110 (60.4)	26 (25.7)	
Income			.001
<\$5,000	59 (32.4)	38 (38.0)	
\$5,000-\$9,999	46 (25.3)	19 (19.0)	
\$10,000-\$19,999	47 (25.8)	10 (10.0)	
\$20,000+	30 (16.5)	33 (33.0)	
Educational attainment			.047
<HS	51 (28.0)	19 (18.8)	
HS/GED	92 (50.5)	48 (47.5)	
Some college or more	39 (21.4)	34 (33.7)	
Current employment	48 (26.4)	28 (27.7)	.962
Full/part-time	129 (70.9)	70 (69.3)	
Unemployed	5 (2.7)	3 (3.0)	
Student/retired			
Homeless or unstably housed, past 12 months	88 (48.4)	34 (33.7)	.011
Ever been in jail	125 (68.7)	53 (52.5)	.005
Sexual identity			.053
Homosexual or Gay	11 (6.1)	4 (4.0)	
Heterosexual or Straight	32 (17.7)	8 (7.9)	
Bisexual	114 (63.0)	79 (78.2)	
Questioning/other	24 (13.3)	10 (9.9)	
Contextual factors			
Mean hypermasculinity scale score**	2.24 (range=1.00-3.77)	2.03 (range=1.00-3.36)	.001
Mean internalized homophobia scale score***	2.26 (range=1.00-4.00)	2.12 (range=1.00-3.00)	.035
Importance of keeping sex with men secret			.020

Not at all important	42 (23.1)	19 (18.8)	
A little/somewhat important	48 (26.4)	43 (42.6)	
Very important	92 (50.5)	39 (38.6)	
Ever married (to a female)	72 (39.6)	24 (23.8)	.005
Have children	124 (68.1)	36 (35.6)	<.001
HIV status			
Self-reported HIV status			.563
Never tested/don't know/refused*	27 (14.8)	15 (14.9)	
HIV-negative	155 (85.2)	86 (85.1)	
Risk characteristics			
Mean number of male sex partners, past 3 months	3.5 (range=0-20)	3.2 (range=0-20)	.563
Mean number of female sex partners, past 3 months	4.6 (range=0-20)	3.1 (range=0-20)	.013
Insertive UAI with male past 3 months † (n= 260)	65 (39.4)	28 (29.5)	.077
Receptive UAI with male past 3 months † (n=260)	32 (19.6)	22 (22.7)	.332
Unprotected vaginal or anal sex with female † past 3 months (n=249)	100 (66.2)	54 (56.8)	.088
Traded sex with a male past 3 months	82 (45.1)	33 (32.7)	.028

*19 Black and 15 White MSMW had never taken an HIV test; 6 Black MSMW had never gotten an HIV test result; 2 Black MSMW refused to answer

**Hypermasculinity measured with a 13-item scale that is scored on a range from 1-4, where a higher score equals higher levels of hypermasculinity ideals.

***Internalized homophobia measured with an 8-item scale that is scored on a range from 1-4 where a higher score equals higher levels of internalized homophobia.

†Includes only those participants who had that type of partner in the past 3 months.

Correlates of number of partners

We conducted one-way ANOVAs to detect statistically significant bivariate associations between numbers of male and female partners in the past 3 months and demographic, contextual, HIV status and risk characteristics. Separate analyses were conducted for Black and White samples. White MSMW who had ever being in jail had a higher mean number of

female partners in the past 3 months (means: 3.8 vs. 2.3; $p=.036$) compared to White men who had never been in jail. Another significant relationship ($p=.03$) was that Black MSMW who identified as heterosexual had a significantly higher number of female partners (mean=6.9) compared to Black men who identified as bisexual (mean=3.8), gay (mean=4.2), or questioning/other (mean=5.3). For White MSMW, engaging in high risk sexual behaviors were associated with higher numbers of male and female partners. White MSMW who had engaged in sex trade in the past 3 months had a significantly higher mean number of male partners in that time period compared to men who had not engaged in sex trade (means: 4.9 vs. 2.4; $p=.002$). White MSMW who had insertive UAI with a man in the past 3 months had a significantly higher mean number of female partners in the past 3 months (means: 4.1 vs. 2.3; $p=.015$). White MSMW who had receptive UAI with a man in the past 3 months had a significantly higher mean number of male partners (means: 4.6 vs. 2.6; $p=.037$) and a significantly higher mean number of female partners (means: 4.4 vs. 2.5; $p=.02$). Finally, White MSMW who had unprotected vaginal or anal sex with a woman in the past 3 months had a significantly higher mean number of male partners (means: 4.2 vs. 2.0; $p=.007$) and a significantly higher mean number of female partners (means: 3.7 vs. 2.2; $p=.028$).

Correlates of hypermasculinity

We conducted one-way ANOVAs and correlations to detect statistically significant bivariate associations between hypermasculinity ideals and demographic, contextual, HIV status and risk characteristics. Separate analyses were conducted for Black and White men in order to examine how hypermasculinity may operate differently for Black men compared to White men. Among Black men, hypermasculinity ideals were significantly and positively correlated with internalized homophobia (correlation=.169; $p=.028$) and number of male (correlation=.239; $p<.001$) and female (correlation=.303; $p<.001$) sex partners in the past 3 months. In other words, unadjusted bivariate analysis suggested that among Black MSMW, being more hypermasculine was associated with greater internalized homophobia and higher numbers of male and female sex partners. In addition, Black MSMW who had never tested for HIV, were unaware of their HIV status or refused to disclose their HIV status were significantly more hypermasculine compared to HIV-negative Black MSMW (means: 2.3 vs. 2.1; $p=.032$).

Among White MSMW, those who reported being homeless or unstably housed had a significantly more hypermasculine compared to those who had never been homeless (2.22 vs. 1.93; $p=.005$). White MSMW who felt it was “not at all important” to keep same-sex sexual behavior secret were more hypermasculine compared to men who felt it was “very important” to keep same-sex sexual behavior secret (2.11 vs. 1.75; $p=.023$). Similar to Black MSMW in the sample, a higher hypermasculinity ideals score among White MSMW was associated with greater internalized homophobia (correlation=.520; $p<.001$) and a higher number of female sex partners in the past 3 months (correlation=.309; $p=.002$). However, hypermasculinity ideals were not correlated with number of male sex partners in the past 3 months for White MSMW in the sample. Hypermasculinity was not correlated with other variables, including age, income, education, marriage to a female, having children, sexual identity, unprotected receptive or insertive anal sex with a man in the past 3 months or unprotected vaginal or anal sex with a woman in the past 3 months.

Multivariate predictors of number of partners

Table 2 shows the results of 4 multivariate linear regression models examining the impact of hypermasculinity ideals on 1) number of male sex partners in the past 3 months among Black MSMW; 2) number of male sex partners in the past 3 months among White MSMW; 3) number of female sex partners in the past 3 months among Black MSMW; and 4) number of female sex partners in the past 3 months among White MSMW, controlling for internalized homophobia, age, income, and sex trade. Each of the variables included in the final regression models was associated with hypermasculinity or one of the risk behavior outcomes, or were important factors to consider contextually (i.e., age and income). Some factors, including unprotected sex with men and women and ever being in jail, that were significant in bivariate analyses were not included in final regression models because multivariate analyses revealed that they were unrelated to our outcome variables when controlling for other factors and they had no effect on the regressions. All four of the final regression models included the same variables.

Controlling for other covariates, a higher score on the hypermasculinity ideals scale (i.e., being more hypermasculine) was significantly associated with a higher number of male partners in the past 3 months among Black MSMW. For every unit increase in the hypermasculinity ideals score, number of male partners increased by 2.178. A higher score on the hypermasculinity ideals scale was also significantly associated with a higher number of female partners in the past 3 months among both Black and White MSMW. For Black MSMW, every unit increase on the hypermasculinity ideals scale was associated with a 3.343 increase in the number of female partners. For White MSMW, every unit increase on the hypermasculinity ideals scale was associated with a 2.319 increase in the number of female partners in the past 3 months. These results indicate that for Black MSMW, hypermasculinity ideals have a greater impact on the number of female partners than on the number of male partners with whom men had sex in the past 3 months. Furthermore, hypermasculinity ideals appeared to have a greater impact on the number of female partners for Black MSMW compared to White MSMW. Hypermasculinity was the only predictor of number of sexual partners in the past 3 months for Black MSMW. However, among White MSMW, predictors of a higher number of male sex partners in the past 3 months were engaging in sex trade in the past 3 months and having an annual income less than \$5,000. Annual income less than \$5,000 was also predictive of a higher number of female sex partners in the past 3 months among White MSMW. Number of sexual partners in the past 3 months was not associated with Black or White MSMW's age, homelessness in the past 12 months, or levels of internalized homophobia in adjusted multivariate analyses.

Table 2. Correlates of the number of male and female sex partners in the past 3 months (Linear Regression)

Variable	Male partners past 3 months		Female partners past 3 months	
	Black MSMW	White MSMW	Black MSMW	White MSMW
Age	-.003	-.006	-.004	.007
Annual income < \$5,000±	.654	1.921*	.775	2.060**
Homeless or unstably housed past 12 months	-.844	-1.174	-.668	-1.013
Sex trade with a man past 3 months	.884	2.381**	1.027	1.374
Hypermasculinity ideals	2.178**	.977	3.343***	2.319**
Internalized homophobia	.328	-.116	.934	-.726
R ²	.077	.163	.112	.200

*p<.05; **p<.01; ***p<.001

± Reference group includes men who reported incomes \$5,000 and higher.

Discussion

The present study examined a sample of 283 urban behaviorally-bisexual Black and White men who self-reported being HIV-negative or who did not know their HIV status and who were recruited through respondent driven sampling. Substantial proportions of the sample were low-income, unemployed, and had a recent history of homelessness or unstable housing. This study sample includes men who may be at high risk for the acquisition or transmission of HIV in that many had a history of incarceration, had recently engaged in sex trade or had had recent unprotected sex with both male and female sexual partners. This study allowed us to compare Black MSMW to White MSMW to examine how contextual factors such as hypermasculinity and internalized homophobia differentially impact sexual risk for HIV through multiple partnered sex. There were several important sociodemographic differences between Black and White MSMW. Black MSMW were older, lower income, were more likely to have been homeless or unstably housed in the past 12 months and to have been in jail. Comparing Black and White MSMW on contextual factors included in our analyses, Black MSMW in our study were more hypermasculine, had a higher level of internalized homophobia, were more likely to say it was “very important” to keep their MSM behavior secret, to have ever been married to a female, and to have children compared to White MSMW.

The present study supports our hypothesis that hypermasculinity ideals contribute to higher numbers of sexual partners in the past 3 months. Having multiple partners has been well established as a factor that increases one’s risk for HIV acquisition or transmission. In addition, our findings support our hypothesis that the impact of hypermasculinity ideals on higher numbers of sexual partners is greater for Black MSMW than for White MSMW.

While hypermasculinity ideals were significantly associated with higher numbers of male partners in the past 3 months for Black MSMW, we did not find the same association for White MSMW. Furthermore, while hypermasculinity ideals were significantly associated with higher numbers of female partners in the past 3 months for both racial groups, the impact was greater for Black MSMW. As researchers have asserted, historical racism and reduced opportunities for economically and politically-focused confirmation of masculinity have resulted in Black men being socialized to affirm their manhood through the quest for sexual prowess, including sex with multiple partners, particularly female partners (Malebranche et al., 2009; Wolf, 2003; Ward, 2005). Although Black masculinity literature also points to more secrecy around same-sex behavior, the avoidance of condoms, the importance of marriage to a woman, and having children, the only statistically significant relationship we found in our analyses related to these variables was that Black MSMW were significantly more likely to have engaged in insertive unprotected anal sex with a man in the past 3 months compared to White MSMW.

Among Black MSMW, hypermasculinity ideals had a greater impact on the number of female sex partners than on the number of male sex partners. Black masculinity literature discusses the importance of maintaining sexual relationships with women in order to offer protection from homophobia as well as to assert one's masculinity within the Black community (Mays et al., 2004; Operario et al., 2008). Furthermore, as noted above, having sex with multiple female partners has been found in qualitative research to be encouraged among African American men who are socialized to view relationships with women as a conquest where it is important to have sex with as many women as possible (Bowleg, 2004; Malebranche et al., 2009).

This study is not without limitations. First, although the RDS method facilitated the recruitment of large numbers of MSMW, it also introduced some possible areas of underrepresentation. The men in our sample were predominantly from lower income groups, with fewer men who were employed full time. The monetary incentives for participation and for recruitment were probably more attractive to men with less income, and those who were not employed had more time to participate and recruit their peers. Second, because the sample may not be representative, the findings reported here should not be generalized to the entire population of Black and White MSMW in Philadelphia. A third limitation is the reliance on self-report to assess the prevalence of HIV risk behaviors. However, ACASI was used to collect this information in order to lessen underreporting due to social desirability. Our conclusions are also limited because we did not differentiate the different types of partners men had in our analyses, including partners with whom men were in committed relationships and partners with whom they had more casual relationships. As we know, type of partner (main vs. non-main, for example) has implications for HIV risk.

As far as we know, this is the first study to examine the impact of masculinity on sexual risk behaviors among White MSMW. Furthermore, few quantitative studies have examined the influence of masculine ideals on sexual risk for HIV among Black MSMW. Our findings have important implications for HIV prevention for both MSMW and their male and female partners, particularly Black women. Black women account for the majority of new HIV infections and AIDS cases among women in the United States (CDC, 2009a; CDC, 2008a)

and the primary source of infection among women is sex with a man (CDC, 2006). Although the extent to which these infections stem from MSMW or from men who have sex with women (MSW) is unknown, recent studies suggest that Black women are at risk for HIV infection from Black MSMW (Lauby et al., 2008). Our findings that hypermasculine ideals were associated with increased numbers of both male and female partners among Black MSMW suggest that HIV prevention interventions should address hypermasculinity ideals in an effort to reduce HIV risk through a reduction in multiple partnered sex. Our findings suggest that this contextual factor is a significant contributor to sexual risk for HIV for both men and women. Furthermore, our findings indicate that additional research is needed to explore hypermasculine ideals among White MSMW. Although we found that hypermasculine ideals had a greater impact on the number of sexual partners among Black MSMW, our findings indicate that hypermasculine ideals are important to consider in HIV prevention for White MSMW, particularly those who may be lower income and socioeconomically disadvantaged such as those in our study.

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18. Extent of Clinical Activities Initiated and Completed. Items 18(A) and 18(B) should be completed for all research projects. If the project was restricted to secondary analysis of clinical data or data analysis of clinical research, then responses to 18(A) and 18(B) should be “No.”

18(A) Did you initiate a study that involved the testing of treatment, prevention or diagnostic procedures on human subjects?

_____ Yes
_____x___ No

18(B) Did you complete a study that involved the testing of treatment, prevention or diagnostic procedures on human subjects?

_____ Yes
_____x___ No

If “Yes” to either 18(A) or 18(B), items 18(C) – (F) must also be completed. (Do NOT complete 18(C-F) if 18(A) and 18(B) are both “No.”)

18(C) How many hospital and health care professionals were involved in the research project?

_____ Number of hospital and health care professionals involved in the research project

18(D) How many subjects were included in the study compared to targeted goals?

_____ Number of subjects originally targeted to be included in the study
_____ Number of subjects enrolled in the study

Note: Studies that fall dramatically short on recruitment are encouraged to provide the details of their recruitment efforts in Item 17, Progress in Achieving Research Goals, Objectives and Aims. For example, the number of eligible

subjects approached, the number that refused to participate and the reasons for refusal. Without this information it is difficult to discern whether eligibility criteria were too restrictive or the study simply did not appeal to subjects.

18(E) How many subjects were enrolled in the study by gender, ethnicity and race?

Gender:

Males
 Females
 Unknown

Ethnicity:

Latinos or Hispanics
 Not Latinos or Hispanics
 Unknown

Race:

American Indian or Alaska Native
 Asian
 Blacks or African American
 Native Hawaiian or Other Pacific Islander
 White
 Other, specify: _____
 Unknown

18(F) Where was the research study conducted? (List the county where the research study was conducted. If the treatment, prevention and diagnostic tests were offered in more than one county, list all of the counties where the research study was conducted.)

19. Human Embryonic Stem Cell Research. Item 19(A) should be completed for all research projects. If the research project involved human embryonic stem cells, items 19(B) and 19(C) must also be completed.

19(A) Did this project involve, in any capacity, human embryonic stem cells?

Yes
 No

19(B) Were these stem cell lines NIH-approved lines that were derived outside of Pennsylvania?

Yes
 No

19(C) Please describe how this project involved human embryonic stem cells:

Articles Submitted to Peer-Reviewed Publications.

20(A) Identify all publications that resulted from the research performed during the funding period and that have been submitted to peer-reviewed publications. Do not list journal abstracts or presentations at professional meetings; abstract and meeting presentations should be listed at the end of item 17. **Include only those publications that acknowledge the Pennsylvania Department of Health as a funding source** (as required in the grant agreement). List the title of the journal article, the authors, the name of the peer-reviewed publication, the month and year when it was submitted, and the status of publication (submitted for publication, accepted for publication or published.). Submit an electronic copy of each publication, listed in the table, in a PDF version 5.0.5 format, 1,200 dpi. Filenames for each publication should include the number of the research project, the last name of the PI, the number of the publication and an abbreviated research project title. For example, if you submit two publications for PI Smith for the “Cognition and MRI in Older Adults” research project (Project 1), and two publications for PI Zhang for the “Lung Cancer” research project (Project 3), the filenames should be:

- Project 1 – Smith – Publication 1 – Cognition and MRI
- Project 1 – Smith – Publication 2 – Cognition and MRI
- Project 3 – Zhang – Publication 1 – Lung Cancer
- Project 3 – Zhang – Publication 2 – Lung Cancer

If the publication is not available electronically, provide 5 paper copies of the publication.

Note: The grant agreement requires that recipients acknowledge the Pennsylvania Department of Health funding in all publications. Please ensure that all publications listed acknowledge the Department of Health funding. If a publication does not acknowledge the funding from the Commonwealth, do not list the publication.

Title of Journal Article:	Authors:	Name of Peer-reviewed Publication:	Month and Year Submitted:	Publication Status (check appropriate box below):
1.				<input type="checkbox"/> Submitted <input type="checkbox"/> Accepted <input type="checkbox"/> Published
2.				<input type="checkbox"/> Submitted <input type="checkbox"/> Accepted <input type="checkbox"/> Published
3.				<input type="checkbox"/> Submitted <input type="checkbox"/> Accepted <input type="checkbox"/> Published

20(B) Based on this project, are you planning to submit articles to peer-reviewed publications in the future?

Yes No

If yes, please describe your plans:

As part of this Final Report, a draft manuscript has been submitted. Over the next two months, this draft will be reviewed and revised by the coauthors of the manuscript. The resulting final draft will be submitted to a peer-reviewed journal for publication.

20. Changes in Outcome, Impact and Effectiveness Attributable to the Research Project.

Describe the outcome, impact, and effectiveness of the research project by summarizing its impact on the incidence of disease, death from disease, stage of disease at time of diagnosis, or other relevant measures of outcome, impact or effectiveness of the research project. If there were no changes, insert “None”; do not use “Not applicable.” Responses must be single-spaced below, and no smaller than 12-point type. DO NOT DELETE THESE INSTRUCTIONS. There is no limit to the length of your response.

While the HIV epidemic in the United States has severely impacted all men who have sex with men (MSM), the highest HIV rates are among Black MSM. Black MSM are more likely than other MSM to identify as bisexual and report sex with women and are less likely to disclose their same-sex behavior. Social norms around gender roles and masculinity, particularly in Black communities, may preclude some men from disclosing same-sex behaviors. Few studies have focused specifically on Black MSMW. The few studies that have compared Black MSMW and MSM have highlighted unique sexual health issues of this population and suggested that there is a need for HIV prevention interventions that consider more culturally and contextually specific approaches to work with Black MSMW. The potential impact of this project is that it will further our understanding of the impact of contextually specific factors such as hypermasculinity ideals on sexual behaviors known to increase risk for HIV infection and transmission. Examining data collected from Black and White MSMW will help to identify racial differences in the association between masculinity ideals and HIV risk. The findings from this project will promote the development of more effective, culturally tailored HIV interventions and prevention messages for MSMW.

21. Major Discoveries, New Drugs, and New Approaches for Prevention Diagnosis and Treatment. Describe major discoveries, new drugs, and new approaches for prevention, diagnosis and treatment that are attributable to the completed research project. If there were no major discoveries, drugs or approaches, insert “None”; do not use “Not applicable.” Responses must be single-spaced below, and no smaller than 12-point type. DO NOT DELETE THESE INSTRUCTIONS. There is no limit to the length of your response.

None

22. Inventions, Patents and Commercial Development Opportunities.

23(A) Were any inventions, which may be patentable or otherwise protectable under Title 35 of the United States Code, conceived or first actually reduced to practice in the performance of work under this health research grant? Yes _____ No X

If “Yes” to 23(A), complete items a – g below for each invention. (Do NOT complete items a - g if 23(A) is “No.”)

- a. Title of Invention:
- b. Name of Inventor(s):
- c. Technical Description of Invention (describe nature, purpose, operation and physical, chemical, biological or electrical characteristics of the invention):
- d. Was a patent filed for the invention conceived or first actually reduced to practice in the performance of work under this health research grant?
Yes _____ No _____

If yes, indicate date patent was filed:

- e. Was a patent issued for the invention conceived or first actually reduced to practice in the performance of work under this health research grant?
Yes _____ No _____
If yes, indicate number of patent, title and date issued:
Patent number:
Title of patent:
Date issued:

- f. Were any licenses granted for the patent obtained as a result of work performed under this health research grant? Yes _____ No _____

If yes, how many licenses were granted? _____

- g. Were any commercial development activities taken to develop the invention into a commercial product or service for manufacture or sale? Yes ___ No ___

If yes, describe the commercial development activities:

23(B) Based on the results of this project, are you planning to file for any licenses or patents, or undertake any commercial development opportunities in the future?

Yes _____ No X

If yes, please describe your plans:

24. Key Investigator Qualifications. Briefly describe the education, research interests and experience and professional commitments of the Principal Investigator and all other key investigators. In place of narrative you may insert the NIH biosketch form here; however, please limit each biosketch to 1-2 pages. *For Nonformula grants only – include information for only those key investigators whose biosketches were not included in the original grant application.*

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME LaPollo, Archana	POSITION TITLE Senior Research Associate		
eRA COMMONS USER NAME (credential, e.g., agency login)			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	MM/YY	FIELD OF STUDY
Rutgers University, Rutgers College, New Brunswick, NJ	B.A.	05/96	French, Political Science
Boston University School of Public Health, Boston, MA	MPH	05/99	Social and Behavioral Sciences

A. Personal Statement

The overall purpose of this project is to increase the current understanding of how contextual factors such as ideals of masculinity may contribute to HIV risk among Black and White men who have sex with men and women (MSMW). This project will utilize existing data gathered from 346 Black and White MSMW in Philadelphia to examine the relationship between masculinity ideals and sexual behaviors that may increase risk for HIV infection or transmission among MSMW and their partners. This project will examine the differential impact of masculinity ideals for Black and White men and examine how other factors such as internalized homophobia and history of marriage may moderate the impact of masculinity ideals on HIV risk. These findings will help guide HIV prevention messages for these populations. Currently a Senior Research Associate at Public Health Management Corporation (PHMC), my primary area of research is HIV prevention, including qualitative and quantitative research and evaluation activities with underserved, vulnerable populations at high risk for acquisition or transmission of HIV, including Black, Latino, and South Asian women, and racial and ethnic minority men who have sex with men (MSM), men who have sex with men and women (MSMW), and adolescents. Through my work at PHMC as a Senior Research Associate and Evaluator for several research and program evaluation studies and my work as a Project Coordinator and Intern at Boston University School of Public Health, I have gained extensive experience with research design, development of quantitative survey instruments and qualitative in-depth interview and focus group guides, survey administration through paper-and-pencil and ACASI, qualitative data collection through in-depth interviews and focus groups, and qualitative and quantitative data analysis. Currently, I am the Lead Evaluator for a CSAT-funded trauma-informed, gender-based program in Philadelphia that enrolls substance-involved minority women in pretreatment services. In addition, I have worked as part of a research team to analyze and

disseminate both qualitative and quantitative data collected through focus groups, in-depth interviews, and quantitative surveys for several federally- and city-funded studies focused on HIV risk and prevention among ethnic and minority MSM and MSMW. I have gained experience using data analysis software, including SPSS for quantitative data, and MaxQDA for qualitative data. I have extensive experience using different sampling strategies, including venue-based and respondent-driven sampling (RDS). Finally, I have ten years of experience hiring, training, and supervising teams of survey administrators, survey coders and data entry staff.

B. Positions and Honors

Positions and Employment

- | | |
|-------------|---|
| 1999 - | Senior Research Associate, Philadelphia Health Management Corporation, Philadelphia, PA |
| 1998 - 1999 | Project Coordinator, Boston University School Of Public Health, Boston, MA |
| 1998 - 1999 | Intern, Boston University School Of Public Health, Boston, MA |

Other Experience and Professional Memberships

- | | |
|--------|--|
| 1997 | Hotline Worker, Hyacinth Aids Foundation, Plainfield, NJ |
| 2000 - | Member, American Public Health Association |

C. Peer-reviewed Publications

1. Lauby, J.L., **LaPollo, A.B.**, Herbst, J.H., Painter, T.M., Batson, H., Pierre, A., Milnamow, M. (2010). "Preventing AIDS through Live Movement and Sound (PALMS): Efficacy of a theater-based HIV prevention intervention delivered to high-risk male adolescents in juvenile justice settings." *AIDS Education and Prevention*, 22(5): 402-416.
2. Han, C-S, Lauby, J., Bond, L., **LaPollo, A.B.** and Rutledge, S. E. (2010) "'Magic Johnson doesn't worry about how to pay for medicine: experiences of black men who have sex with men living with HIV". *Culture, Health & Sexuality*, iFirst: 1-13.
3. Bond, L., Wheeler, D.P., Millett, G.A., **LaPollo, A.B.**, Carson, L.F., & Liau, A. (2009). "Black men who have sex with men and the down low: The association of DL identity with HIV risk behavior." *American Journal of Public Health*, 99(S1): S92-S95.
4. Lauby, J.L., Millett, G.A., **LaPollo, A.B.**, Bond, L., Murrill, C. and Marks, G. (2008). "A Comparison of Sexual Risk Behaviors of HIV-Positive, HIV-Negative, and Serostatus-Unknown Black Men Who Have Sex With Men and Women, Philadelphia And New York City." *Archives of Sexual Behavior*, 37(5): 708-719.