



Published in final edited form as:

*J Addict Dis.* 2013 ; 32(1): . doi:10.1080/10550887.2012.759859.

## Stimulant Use among African American and Latino MSM social networking users

**Sean D. Young, PhD and Steve Shoptaw, PhD**

Department of Family Medicine, Center for Behavioral and Addiction Medicine, David Geffen School of Medicine, UCLA, Los Angeles, California, USA

### Abstract

High stimulant-using and at-risk HIV populations, such as African American and Latino men who have sex with men (MSM), are increasingly using social networking technologies. However, no known research has explored associations between stimulant use, sexual risk behaviors, and social networking among these populations. Participants were recruited using state-of-the-art computer science methods, which narrowed the sample to 118 (primarily African American and Latino MSM) active Facebook users. Participants completed demographic, Internet/social media usage, and drug use survey items. Participants reported high rates of cocaine and methamphetamine usage (both over 15% within 12 months). Over 80% reported using social networking technologies to meet people and over 30% used them to find sex partners. A multivariate logistic regression showed that: 1) participants using social networks to find sex partners were more likely to have used methamphetamines within 12 months, and 2) those who were more comfortable talking online compared to face-to-face had over 4 times the odds of reported methamphetamine usage and over 6 times the odds of cocaine use within 12 months. Minority MSM who engaged social networks to meet men and find sex partners had high risk for stimulant use. Understanding drug use among minority social networking users will provide insights to incorporate these technologies into drug prevention interventions.

### Keywords

Methamphetamine; Cocaine; African American MSM; Latino MSM; social networking technologies

---

Methamphetamine and cocaine use in the United States is a growing problem associated with increased health risks, violence, and societal economic costs.<sup>1-3</sup> Recently, both HIV and addiction medicine researchers have been studying the effects of these stimulants. For example, research suggesting a relationship between methamphetamine<sup>4</sup> and cocaine use,<sup>5</sup> and HIV incidence, has been accompanied by work focused on understanding and preventing drug use among high-risk HIV populations, such men who have sex with men (MSM), and African American and Latino populations.<sup>6-8</sup> Researchers in this area have requested innovative ways to identify and reach MSM stimulant users.<sup>5,9</sup>

Internet and social media usage has been rapidly growing, and could be an innovative platform that could be used to identify minority populations of drug users and deliver interventions to them.<sup>9</sup> While some research has focused on stimulant use among minority populations of Internet users, no known research has explored stimulant among social

networking users. Studying stimulant usage among this latter group is especially important because online social networking technologies (in comparison to general Internet usage) are designed specifically for social communication and interactions, allowing for rapid acceptance of social norms and spread of drug use behaviors. These technologies are especially ideal communication platforms for stigmatized populations (such as MSM, and particularly MSM from racial and ethnic minorities) and populations of people engaging in illicit behavior (such as stimulant use) as they can express themselves without face-to-face contact and without releasing true information about their identities.<sup>10</sup>

Social networking technologies, such as [Facebook.com](https://www.facebook.com), have grown particularly quickly among minority populations, such as African American and Latino MSM, making them an important platform to be studied among drug addiction researchers.<sup>11,12</sup> For example, African Americans and English-speaking Latinos are almost 1.5 times more likely to use online social networking sites compared to the general adult population (33% of African Americans, 36% of English-speaking Latinos, and 23% of adults in the general population).<sup>13</sup> This trend is consistent in online video usage, Twitter usage, and usage of location-based technologies, such as [Foursquare.com](https://www.foursquare.com). Individuals from the sexual minority communities (i.e., gay, lesbian, and bisexual individuals) use social networks more often than heterosexual individuals,<sup>14</sup> perhaps as a means to avoid stigma and physical danger that can happen when seeking new intimate or sexual partnerships.

While researchers have begun to study how racial/ethnic and sexual minority populations are using social media, no known research has investigated stimulant drug use among these groups of social media users. Learning whether and how individuals from these minority groups use social media technologies could be useful for targeting interventions that reduce stimulant use and promote health, both physically and sexually.

This analysis looks at data from a unique group of ethnically and racially diverse MSM social networking users and investigates 1) the prevalence of reported stimulant drug use, and 2) associations between social networking usage and stimulant usage.

## METHODS

The UCLA Human Subjects Protection Committee oversaw all activities for this research. These methods were conducted in accordance with current recommendations for HIV prevention research using social media technologies.<sup>15</sup>

### Participants

Potential participants were: males who reported having sex with other men (MSM) in the past 12 months, 18 years of age or older, African American or Latino, and current Facebook users. Over a period of 4 months, 122 participants were recruited online (from [Facebook.com](https://www.facebook.com) and [Craigslist.com](https://www.craigslist.com)), from physical venues frequented by African American and Latino MSM (e.g., Los Angeles Gay and Lesbian Center), and from direct referrals from study participants.

Participants recruited online were recruited using paid targeted banner ads on Facebook, setting up a fan page on Facebook with information describing the study, and through posts in the personal and advertisements section of Craigslist.

Fliers placed in physical venues frequented by African American and Latino MSM described the project and provided a contact email address and a web link for participants to receive enrollment information.

Interested potential participants visited the study website where they answered a series of questions to determine eligibility. A Facebook Connect application was created and used to verify that participants were current Facebook users. A small number of non-African American or non-Latino participants were allowed to participate. Participants were paid \$30 in gift cards to complete a survey.

Using a system of matching email addresses, birthdates, and Internet addresses, we determined that four participants completed multiple surveys. Their second responses were dropped, leaving 118 eligible participants.

A 96-item baseline survey included a collection of items from previous research on drug addiction and HIV prevention, as well as a number of novel items related to use of social networking technologies. Items focused on demographics (14 items; age, gender, race/ethnicity, income, and education); Internet and social media usage (22 items) including comfort using Internet and social media to talk about health behaviors; sexual health and drug behaviors (34 items). For example, Internet and social media usage items focused on the amount of time spent using the Internet and social media and the methods of using and comfort using these technologies, such as “Are you more comfortable talking to people online than face-to-face?,” and “How much time do you spend on social networking sites?” and “When did you join Facebook?” (5 choices, from less than 3 months ago to over 2 years ago). Alcohol and drug use items asked about use of various drugs and alcohol in the past year or 3 months, such as “On average, how many alcoholic drinks do you have each week?”

## ANALYSIS

Chi-square tests were used to assess demographic differences between racial and ethnic groups. Descriptive statistics (crosstabs) were used to display the number of participants and percentage of the sample who used alcohol, drugs, and social media, both overall (Table 2) and by race and education (Table 3). A multivariate logistical regression was used to determine the relationship between social media usage and self-reported drug use. Amount of time spent on social networking and length of time having a Facebook account were added to the regression as control variables (as the correlation between these items was low (.2), both were added as control variables).

## RESULTS

Demographic results are displayed in Table 1. We found overall demographic differences in education, birthplace, and age. Over 40% of the sample had at least a college education. The average age of participants was just under 32 years of age. Over 17% of participants reported being bisexual.

Table 2 shows participants' use of alcohol, drug, and social media usage. Over 17% of respondents reported having at least 8 alcoholic drinks per week. The majority of participants admitted using marijuana within the past year, with almost 50% also reporting use of the drug within the past 3 months. Within the past year, over 15% of participants reported use of methamphetamines and/or cocaine. Within the past 3 months, over 5% of participants reported having used methamphetamines, cocaine, and/or non-prescription sedatives. Almost 80% of participants reported using social media to meet other people, and over 30% of participants reported using the technology for finding sex partners.

Respondents who reported use of illicit stimulants were highly educated, with more than 50% of users of cocaine and of methamphetamine completing a two-year degree after high

school. Racial and ethnic groups reported approximately proportional use of methamphetamine and cocaine (Table 3).

Table 4 displays the results of a multivariate logistic regression evaluating the relationship between methamphetamine and cocaine usage and social media usage, controlling for age, race, education, and the amount of time since setting up a Facebook account. Compared to those who did not, participants who reported using social networking technologies to find sex partners were more likely to report methamphetamine use within the past year. Participants who were more comfortable talking to people online compared to face-to-face had over 4 times the odds of using methamphetamines and over 6 times the odds of using cocaine within the past year.

## DISCUSSION

Results from this sample of racially and ethnically diverse MSM social media users suggest, that among these populations, 1) people are engaging in high rates of stimulant drug use, 2) using social networking technologies to seek sex partners is associated with increased reported methamphetamine usage in the past year, and 3) being more comfortable talking to people online compared to face-to-face is associated with increased likelihood of engaging in methamphetamine and cocaine use, controlling for age, race, education, and duration of having been a Facebook user.

While researchers have recently studied minority populations of Internet users in areas such as general Internet use, social media usage, and the relationship between Internet use and HIV, no known research has explored stimulant drug use within minority populations of social media users. This study finds a relationship between a) stimulant use and sex seeking on social media sites, and b) stimulant use and comfort talking to people online. Because of the relationship between stimulant use and HIV infection,<sup>4,5</sup> these findings provide evidence that MSM who seek sex partners on social networking sites likely encounter increased risk for HIV.<sup>16-18</sup>

The present findings support recent research suggesting that African American MSM are engaging in increasingly high rates of methamphetamine use.<sup>19,20</sup> For example, Wohl et al. found lifetime methamphetamine rates of 35% among Black MSM from Los Angeles.<sup>21</sup> Another study found almost half (49%) of Black MSM who were “club drug users” had used methamphetamines in the prior 4 months.<sup>22</sup> The present results support those findings, as over 27% of the methamphetamine users in the sample were African American MSM (and over 15% of all African Americans in the sample were methamphetamine users). This finding might be additionally understood both by the rates of higher education among African Americans in the sample (as over 50% of African American participants had completed an Associate’s degree, bachelors, or graduate degree), and by research suggesting that African American social media users are still a qualitatively different group than non-social media-using African Americans.<sup>23</sup>

There are a number of limitations to the present results. First, participant drug use was measured by self-report from an online survey rather than by measuring actual behavior. While drug use researchers have successfully conducted online surveys, this is a valid limitation that exists in (both online and offline) studies that use self-report measures. Future research can build upon the present findings by both improving self-report items within drug use research, as well as studying the relationship between Internet use and more objective measures of stimulant use. Next, one may question why use of social networking technologies for recruitment did not lead to a larger sample, as Internet studies often have large participant samples. In comparison to those studies, this study used a state-of-the-art

computer science method that required participants to verify they were current Facebook users before they could complete the survey. Although this method reduced the number of participants who completed surveys, we believe it has been an innovative step in improving data quality, as “duplicate respondents” is a serious issue impacting data quality in Internet studies. Future research can help to determine additional innovative methods of validating that participant responses to online surveys are unique. Finally, it is possible that the highly educated rates of African Americans in this sample and are not representative of African American MSM.<sup>23</sup> However, understanding the psychology and behavior of participants in this sample will help to address their high rates of drug use. Further, because of the growing use of social networking technologies among minorities, studying associations between social media and stimulant use could help to inform future research on minority populations of social media users.

## CONCLUSION

The present findings suggest that ethnically and racially diverse MSM who use social media technologies are engaging in high rates of drug use, and that social media behaviors are associated with stimulant use. As online social networks continue to grow and spread ideas and behaviors, it becomes increasingly important to understand the psychology of stimulant users and how they use these technologies. Research in this area can both inform our understanding of stimulant-using populations and help to provide insights into how to use technologies for targeting interventions to reduce drug use.

## Acknowledgments

The authors wish to thank Harkiran Gil, Navkiran Gil, Justin Thomas, Greg Szekeres, and Thomas Coates on this study.

The authors wish to thank the National Institutes of Mental Health (NIMH) for their funding of this research (Young, K01MH090884) as well as UCLA CHIPTS and the UCLA AIDS Institute for seed grant funding.

## References

1. Office of Applied Studies SAaMHSAS. , editor. National Survey on Drug Use and Health. Methamphetamine Use, Abuse, and Dependence: 2002, 2003, and 2004. 2005.
2. Abuse NIoD. , editor. U.S. Department of Health and Human Services- National Institutes of Health. Drug use among racial/ethnic minorities. 2003.
3. Wilson, RW.; Kolander, CA. Drug Abuse Prevention: a School and Community Partnership. Sudbury. Sudbury, MA: Jones and Bartlett; 2011.
4. Plankey MW, Ostrow DG, Stall R, et al. The Relationship Between Methamphetamine and Popper Use and Risk of HIV Seroconversion in the Multicenter AIDS Cohort Study. JAIDS Journal of Acquired Immune Deficiency Syndromes. 2007; 45(1):85–92.10.1097/QAI.1090b1013e3180417c3180499
5. Ostrow DG, Plankey MW, Cox C, et al. Specific Sex-Drug Combinations Contribute to the Majority of Recent HIV Seroconversions Among MSM in the MACS. JAIDS Journal of Acquired Immune Deficiency Syndromes. 2009; 51(3):349–355.
6. Centers for Disease Control and Prevention. Methamphetamine use and risk for HIV/AIDS. 2007
7. Ibanez GE, Purcell DW, Stall R, Parsons JT, Gomez CA. Sexual risk, substance use, and psychological distress in HIV-positive gay and bisexual men who inject drugs. AIDS. 2005; 19(Suppl 1):S49–S55. [PubMed: 15838194]
8. Irwin TW, Morgenstern J. Drug-Use Patterns Among Men Who Have Sex with Men Presenting for Alcohol Treatment: Differences in Ethnic and Sexual Identity. Journal of Urban Health. 2005; 82(1):i127–133. [PubMed: 15738312]

9. Hirshfield S, Remien RH, Walavalkar I, C MA. Crystal Methamphetamine Use Predicts Incident STD Infection Among Men Who Have Sex With Men Recruited Online: A Nested Case-Control Study. *J Med Internet Res*. 2004; 6(4):e41. [PubMed: 15631965]
10. Jaganath D, Gill HK, Cohen AC, Young SD. Harnessing Online Peer Education (HOPE): integrating C-POL and social media to train peer leaders in HIV prevention. *AIDS Care*. 2011:7. In-press.
11. Smith, A. Mobile Access 2010. Pew Internet and American Life Project. 2010. <http://www.pewinternet.org/Reports/2010/Mobile-Access-2010.aspx>. Accessed October 20, 2011
12. Smith, A. Technology trends among people of color. In: Project PIAL. , editor. Commentary: Race and Ethnicity, Digital Divide. Vol. 2010.
13. Smith, A. Who's on what: Social media trends among communities of color; Paper presented at: Race and Ethnicity: Social Networking; California Immunization Coalition. 2011.
14. Harris Interactive. Gays, Lesbians and Bisexuals Lead in Usage of Online Social Networks. 2007. [http://www.witeckcombs.com/news/releases/20070102\\_socialnetworks.pdf](http://www.witeckcombs.com/news/releases/20070102_socialnetworks.pdf). Accessed October 24, 2008
15. Young S. Recommended Guidelines on Using Social Networking Technologies for HIV Prevention Research. *Aids and Behavior*. 2012; 16(7):1743–1745. [PubMed: 22821067]
16. Rice E, Monro W, Barman-Adhikari A, Young SD. Internet Use, Social Networking, and HIV/AIDS Risk for Homeless Adolescents. *Journal of Adolescent Health*. 2010; 47(6):610–613. [PubMed: 21094441]
17. Young, SD.; Jordan, A. The influence of Facebook pictures on college students' sexual health behaviors. In: Fogg, B., editor. *The Psychology of Facebook*. Stanford in press;
18. Young SD, Rice E. Online Social Networking Technologies and HIV Knowledge, Sexual Risk Behaviors, and Testing for Sexually Transmitted Infections. *AIDS and Behavior*. 2011; 15(2):253–260. [PubMed: 20848305]
19. Shoptaw S. Methamphetamine use in urban gay and bisexual populations. *Topics in HIV Medicine*. 2006; 14:84–87. [PubMed: 16835463]
20. Shoptaw S, Reback CJ, Peck JA, et al. Behavioral treatment approaches for methamphetamine dependence and HIV-related sexual risk behaviors among urban gay and bisexual men. *Drug and Alcohol Dependence*. 2005; 78:125–134. [PubMed: 15845315]
21. Wohl AR, Frye DM, Johnson DF. Demographic characteristics and sexual behaviors associated with methamphetamine use among MSM and Non-MSM diagnosed with AIDS in Los Angeles County. *Aids and Behavior*. 2007; 12(5):705–712. [PubMed: 17968649]
22. Halkitis PN, Jerome RC. A comparative analysis of methamphetamine use: black gay and bisexual men in relation to men of other races. *Addict Behav*. 2008; 33(1):83–93. Epub 2007 Aug 2008. [PubMed: 17825996]
23. Fox, S.; Livingston, G. Hispanics with lower levels of education and English proficiency remain largely disconnected from the internet. Project PIAL. , editor. 2007.

**Table 1**  
Demographic characteristics of men who have sex with men (MSM) who have an online social networking profile, Los Angeles, CA, 2011

	African American (n = 33)	Latino (n = 71)	Other (n= 14)	Chi Square	Total Sample
Participant population (%)	28	60.2	11.9		100
Highest Education*					
Less than HS	3	4.2	0		3.4
HS	36.4	31	16.7		30.5
GED	0	7	0		5.1
Associates	12.1	28.2	16.7		22
Bachelors	24.2	23.9	50.1		27.1
Graduate School	24.2	5.6	16.7	26.5	11.9
Birthplace**					
Northern USA	21.2	15.5	0		15.3
Southern USA	15.2	8.5	8.3		10.2
Eastern USA	15.2	0	16.7		5.9
Western USA	48.4	69	66.9		62.7
Latin America/Caribbean	0	7	8.3		5.1
Other	0	0	0	77.71	
Self-Described Sexual Orientation					
Homosexual	54.55	87.32	75.1		76.3
Bisexual	39.4	7	16.8		17.8
Heterosexual	0	1.4	0		0.9
Questioning	0	1.4	0		0.9
Don't know	0	1.4	0		0.9
Refuse to Answer	6.1	1.4	8.2	22.24	3.4
Current Marital Status					
Single	84.9	81.7	75.2		82.2
Married	0	4.2	0		2.5
Partnered	6	9.9	16.6		9.3
Divorced	9.1	2.8	8.2		5.1
Other	0	1.4	0	6.22	0.9

	African American (n = 33)	Latino (n = 71)	Other (n = 14)	Chi Square	Total Sample
Age (mean, SD)**	33.8, 9.6	29.5, 6.4	40.7, 10.5	8.2	31.8

F-statistic

\* Significant at the  $p < .05$  level  
 \*\* Significant at the  $p < .01$  level



**Table 2**

Drug, alcohol, and social media usage, Los Angeles, CA, 2011

	n	%
How many alcoholic drinks/week?		
0-3	47	54.7
4-7	24	27.9
8+	15	17.4
Which of the following drugs have you taken (past year)?		
Marijuana	66	56.0
Methamphetamine	18	15.3
Crack	2	1.7
Powder cocaine (coke)	20	17
Non-prescription opiates	7	5.9
Non-prescription sedatives	13	11
Which of the following drugs have you taken (past 3 months)?		
Marijuana	53	47.3
Methamphetamine	10	8.9
Crack	1	0.89
Powder cocaine (coke)	11	9.8
Non-prescription opiates	5	4.5
Non-prescription sedatives	8	7.1
Have you used social media for:		
Meeting people	79	70.5
Finding sex partners	39	34.8

**Table 3**

Methamphetamine and Cocaine use by education, race, and social media use, Los Angeles, CA, 2011

	Meth use < 1 year (n, %)	Cocaine use < 1 year (n, %)
Education		
Less than HS	0 (0)	0 (0)
HS	4 (22.2)	6 (30)
GED	3 (16.7)	1 (5)
Associates	5 (27.8)	3 (15)
Bachelors	2 (11.1)	8 (40)
Graduate School	4 (22.2)	2 (10)
Race		
Latino	11 (61.1)	8 (50)
African American	5 (27.8)	4 (25)
Other	2 (11.1)	4 (25)
Used social media for finding sex partners	11 (61.1)	12 (60)
More comfortable talking to people online than face-to-face	4 (22.2)	4 (20)

**Table 4**  
Multivariate logistical regression of Methamphetamine and Cocaine use, Los Angeles, CA, 2011

	Methamphetamine use, < 1 year		Cocaine use, < 1 year	
	OR (SE)	CI	OR (SE)	CI
Age	1.1 (.23)	.71, 1.67	1.0 (.04)	.93, 1.08
Education	1.1 (.04)	.99, 1.1	1.2 (.26)	.82, 1.9
Race (Latino)				
African American	.8 (.60)	.19, 3.45	.56 (.39)	.14, 2.2
Other	.24 (.28)	.02, 2.51	1.5 (1.4)	.20, 8.4
Use social networks for:				
Meeting people	1.3 (.21)	.99, 1.84	0.91 (.08)	.75, 1.08
Finding sex partners	1.1 (.08)*	1.0, 1.84	1.02 (.07)	.89, 1.16
Amount of time on social networks	.8 (.18)	.5, 1.22	1.3 (.33)	.79, 2.14
Facebook User (amount of time)	2.1 (.85)	.91, 4.6	2.2 (1.1)	.87, 5.7
More comfortable talking to people online than face-to-face	4.5 (3.2)*	1.10, 18.14	6.16 (4.3)**	1.58, 24.09

\* = Significant at the  $p < .05$  level

\*\* = Significant at the  $p < .01$  level