Online Soap Operas, Virtual Clubs, and Hundreds of Text Messages: Innovations in eHealth Approaches to HIV Prevention

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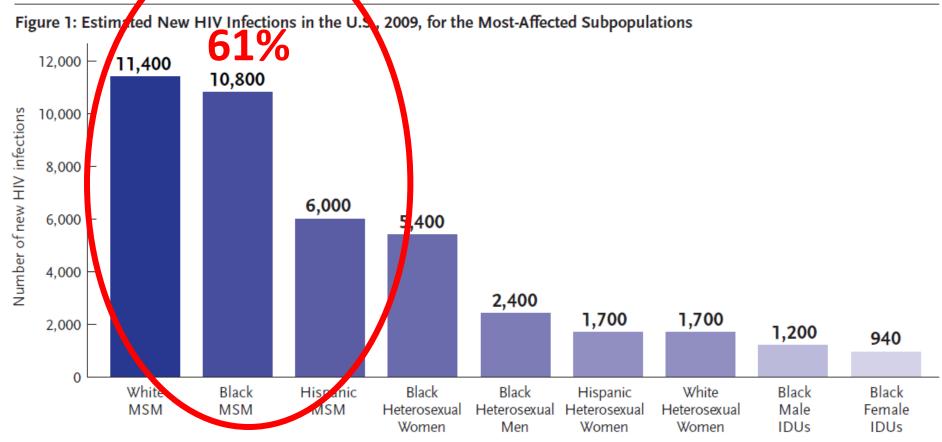


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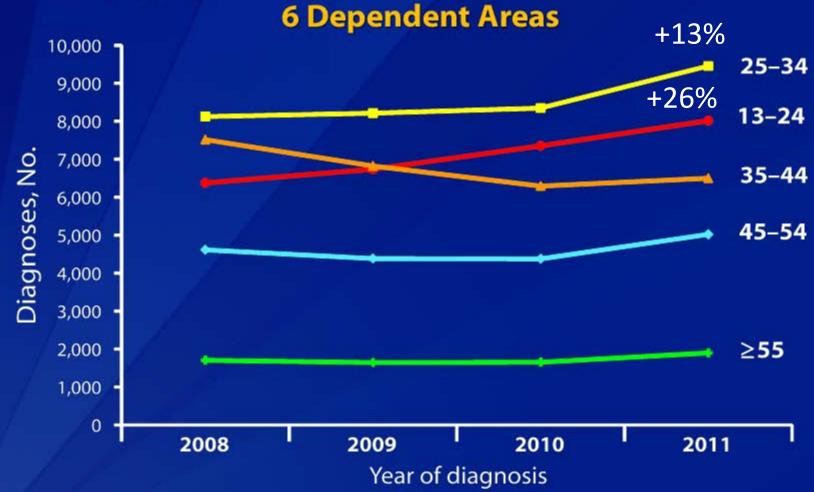


US HIV/AIDS Epidemiology



^{*}The term men who have sex with men is used in CDC surveillance systems because it indicates the behaviors that transmit HIV infection, rather than how individuals self-identify in terms of their sexuality.

Diagnoses of HIV Infection among Men Who Have Sex with Men, by Age Group, 2008–2011—United States and



Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays and missing transmission category, but not for incomplete reporting. Data on men who have sex with men do not include men with HIV infection attributed to male-to-male sexual contact and injection drug use.



Why use the internet or mobile technology to reach young gay and bisexual men?



Early prevention:

In 1998, a large (N = 6,872) online survey found that the majority of LGBT youth were "coming out" online before doing so in the "real" world (!OutProud!).

Unique prevention:

Reach youth directly with messages and education not possible in traditional settings due to policies (e.g., "no promo homo").

Quick overview of three interventions









R34MH079714:

Internet-Based HIV/STI Prevention for Young MSM Receiving HIV Testing

- Purpose: Develop and pilot test an online HIV/STI prevention program for YMSM that recently tested HIV negative?
 - > Why target this group?
 - Prevalence
 - Lack of prevention programs
 - Testing is an under-utilized opportunity for prevention
 - Accessing a diverse sample
 - High Internet access and acceptability of sexual content and health information
- Development process
 - Qualitative interviews with diverse YMSM
 - Co-creation of content with diverse YMSM
 - Constant feedback from community-based testing staff
 - Focus on important contexts with health behavior change principals embedded within these contexts.







Sample

- 102 YMSM ages 18-24 (M = 21). 75% racial/ethnic minorities.
- Recruited by clinic staff upon receiving an HIV negative test result.

Design

- Followed to 3-months post-intervention
- Compared to an active HIV knowledge control arm

Outcomes

- Very high acceptability ratings. "This is the future of gay sex ed."
- Most completed it at home. Most often in private settings.
- No adverse events.
- Both arms showed increase in HIV knowledge
- KIU! arm had 44% lower rate of unprotected anal sex at 3-months relative to control arm (p < .05).
- Trends for relative decreases in condom errors an failures

Mustanski et al., (In Press). AIDS & Behavior



1R01DA035145: Efficacy of Internet-based HIV Prevention











Co-I: Sullivan

- RCT in Chicago, New York, and Atlanta
- 1 year of follow-up data. N = 750
- Self-report and STI (urethral and rectal mail-based testing) outcomes.
 - Secondary outcomes of reduced unprotected sex after drug use, condom errors, and repeat testing
- Funded NIDA R01, with a NIDA supplement and CDC support to add rectal STIs



Guy2Guy



- **1R01MH096660-01A1 (Mustanski/Ybarra)** Harnessing the power of text messaging to invigorate AMSM HIV preventive behavior
- Text message-based HIV prevention program for gay/bisexual adolescent males (ages 14-18).
 - Will receive 5-7 text messages every day for 6 weeks.
 - Access to Text Buddy to practice content and gain support
 - G2Genie to ask questions
- Developed through online focus groups (completed), a Youth Advisory Council, and Beta testing.
- Once intervention is developed we will perform a pilot RCT to establish feasibility, acceptability, and preliminary evidence of efficacy.

Cell phone use

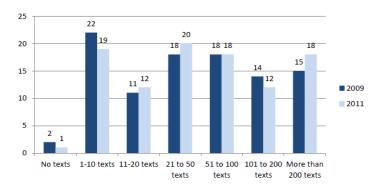


Teen Gadget Ownership

	The percent of all teens ages 12-17 who own each of the following devices	Survey month/year
Cell phone	78	Sept. 2012
Smartphone	37	Sept. 2012
Desktop or laptop computer	80	Sept. 2012
Tablet	23	Sept. 2012

Sources: Pew Research Center's Internet & American Life Project Teens and Privacy Management Survey, July 26-September 30, 2012. N=802 teens ages 12-17. Margin of error is +/- 4.5 percentage points for results based on all teens.

How many texts do teens send and receive on an average day? % of teen cell owners who text



Source: The Pew Research Center's Internet & American Life Project, April 19 - July 14, 2011 Teen Survey. n=799 teens 12-17 and a parent or guardian. Interviews were conducted in English and Spanish, by landline and cell

Median among 14-17 year olds in 2011 = 100



Pew Internet & American Life Project Pew Research Center



Online sexual health education for LGBT youth

- Funded by Scholars award from the William T Grant Foundation.
- Informed by our mixed methods research on <u>sexual</u> <u>health</u> of LGBT youth.
 - Sexual health is more than just the absence of disease, but also includes sexual self-acceptance, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. (WHO, 2004).
 - Designed for LGBT youth currently in a same-sex relationship, but delivered to individuals.
- See some content at the QSE page on www.impactprogram.org



Module 1: Understanding Sexual Orientation and Self-Acceptance



Press play to watch a diverse group of people talk about their sexual identity in the Dyke March Diaries. When the video is done playing, rate the video and click Next to continue.

is website is for health education purposes only and is not meant to be a substitute for care from a health profession.



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Module 1: Quiz

Which of the following is true regarding transgender people?

- All transgender people identify as men or women
- It's okay to use any pronoun when talking to a transgender person
- Gender is not always binary and people have many different gender identities
- In order to be transgender you must have a sex change operation

What did people say was great about the LGBT community?

- It's like a second family
- Friends can be supportive when biological family isn't
- People within the community are generally likeable and accepting
- All of the above

What would be a good way to start a conversation in coming out to your parents?

- "I think I might be falling in love with a man"
- Yell "Mom, I'm gay!" and run out of the room
- "I'm sexually attracted to men"
- In the middle of a fight say "I'm gay and there's nothing you can do about it!"

What would be a good way to start a conversation in coming out to your parents?

- "I think I might be falling in love with a woman"
- Yell "Mom, I'm gay!" and run out of the room
- "I'm sexually attracted to women"
- In the middle of a fight say "I'm gay and there's nothing you can do about it!"

What is a good tip for coming out to your parents?

- Practice coming out with a trusted friend
- Focus on the sex aspect of being LGBT
- Do not plan what you will say beforehand
- Do not worry about the consequences of coming out

What are some things people like about the LGBT community?

- Being part of the community is like an extension of your family
- The connection to a support network
- It's fun
- All of the above

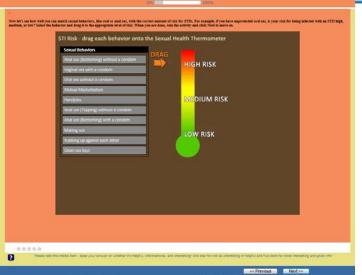


Module 2: Sex Ed: Sexual anatomy, sexual pleasure, and STIs



- Why do we have sex?
- What makes sex feel good? How do you avoid painful and unhealthy sex?
- Female anatomy
- Male anatomy
- What is sex?
 - Manual, Oral, Vaginal, Anal







Module 3:

Dating and relationships: Forming and maintaining healthy relationships, communication and problem solving, sexual agreements, violence.



This survey is currently not active. You will not be able to save your responses.





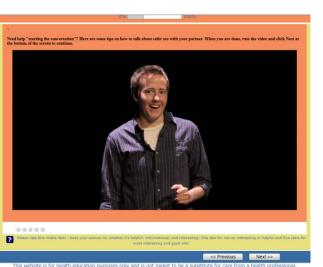


To watch clip, go to

http://www.youtube.com/watch?feature=player_embedded&v=Kq5us8Za_-4



Module 4: Safer Sex: preventing STIs and HIV, contraception and pregnancy, HIV/STI testing









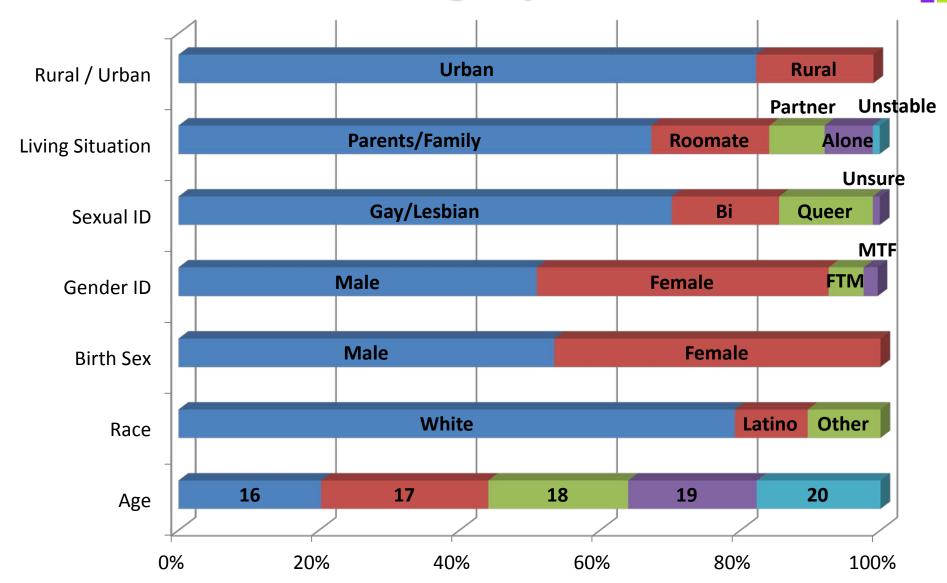


Evaluation



- Method: pre-post with 2 week follow-up
- Eligibility criteria
 - Identify as LGBTQ, between the ages of 16-20, and currently in a relationship
- Recruitment
 - Facebook ads, Trevor Space, and organizations sharing our ads through social media (i.e., Twitter and Facebook).

Demographics



Mustanski et al., In Press Journal of Sex Research

Intervention Evaluation: Star Ratings

Participants were asked to rate each of the pages in QSE from 1 (not-sointeresting or helpful) to 5 (most interesting and good info)





Mean = 4.20

Ave time = 1 hour 48 minutes



Olease This media item - base your answer on whether it's helpful, informational, and interesting! One star for not-so-interesting or helpful and five stars for most interesting and good info!



Intervention effects



Sexual Orientation

- Connectedness to community (d = .09, p< .01)
- Coming out self-efficacy (d = .1, p < .01)
- Internalized homophobia (d = .06, p < .05)

Sex Education

- Sexual functioning (d = .27, p < .001)
- HIV Knowledge (d = .21, p < .001)
- STI Knowledge (d = .34, p < .001)
- Transmission risk behaviors (d = .28, p < .001)

Safer Sex

- Contraceptives methods knowledge (d = .39, p< .001)
- Sexual assertiveness (d = .11, p < .001)

Dating and Relationships

- Justification of violence (d = .05, p < .05)
- Sexual agreement self-efficacy, NS
- Communication skills (d = .08, p < .05)

Amount of time spent completing the intervention (F(16,115)=3.46, p<.001, η 2=.33) as well as the average content rating (F(16,115)=1.75, p<.05, η 2 =.20) had significant positive effects on the pretest-posttest change scores.

Qualitative Findings: Likes

Loved the communication advice as well as the sexual advice and the fact that it was not all aimed at scare tactics and anti-STD information

I liked the extensive information that includes information differing so much from the standard of what is drilled into our heads in public school sex education classes, and especially liked the way sexual health information was tied in with relationship health and emotional health.

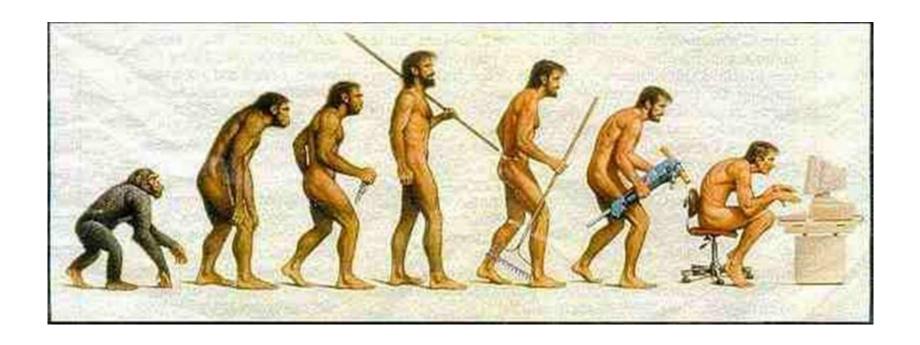
That it was clear and informative and even brought me closer to my boyfriend after having some talks with him

I liked that this program allowed me to learn about things that I haven't been able to learn about elsewhere. It made me *aware of testing centers and how to protect myself*. It made me feel like I was in charge of myself and my health. It also helped to open up doors to healthy communication, which, I've been having problems with in my relationships.



Closing comments

Evolution of online LGBT research



1999:

"Oh my god, how cool.
An online study of gay people!"

2014:

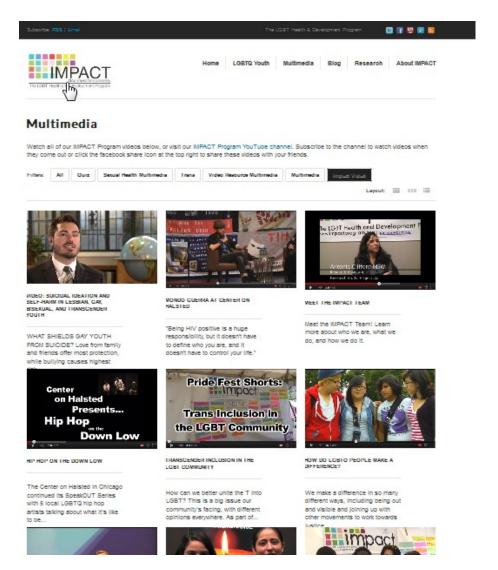
"OMG, not another invitation to do an online study of LGBTQQIAP people!"

To do innovative online health research you need a sandbox





Impactprogram.org as a sandbox



Thank you funders and project staff!

Question? Brian@northwestern.edu

















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