



# How Technology Reduces the Risk Taking of Homeless Youth

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# Homeless Youth: Risk and Service Needs



- 36,000+ in Los Angeles each year (Rice et al., 2013)
- 8000+ each night (LAHSA, 2013)
- HIV prevalence up to 11.5%
- Many barriers to housing and health services
- Risk behaviors consistently linked to network ties



# Adolescents and Social Media

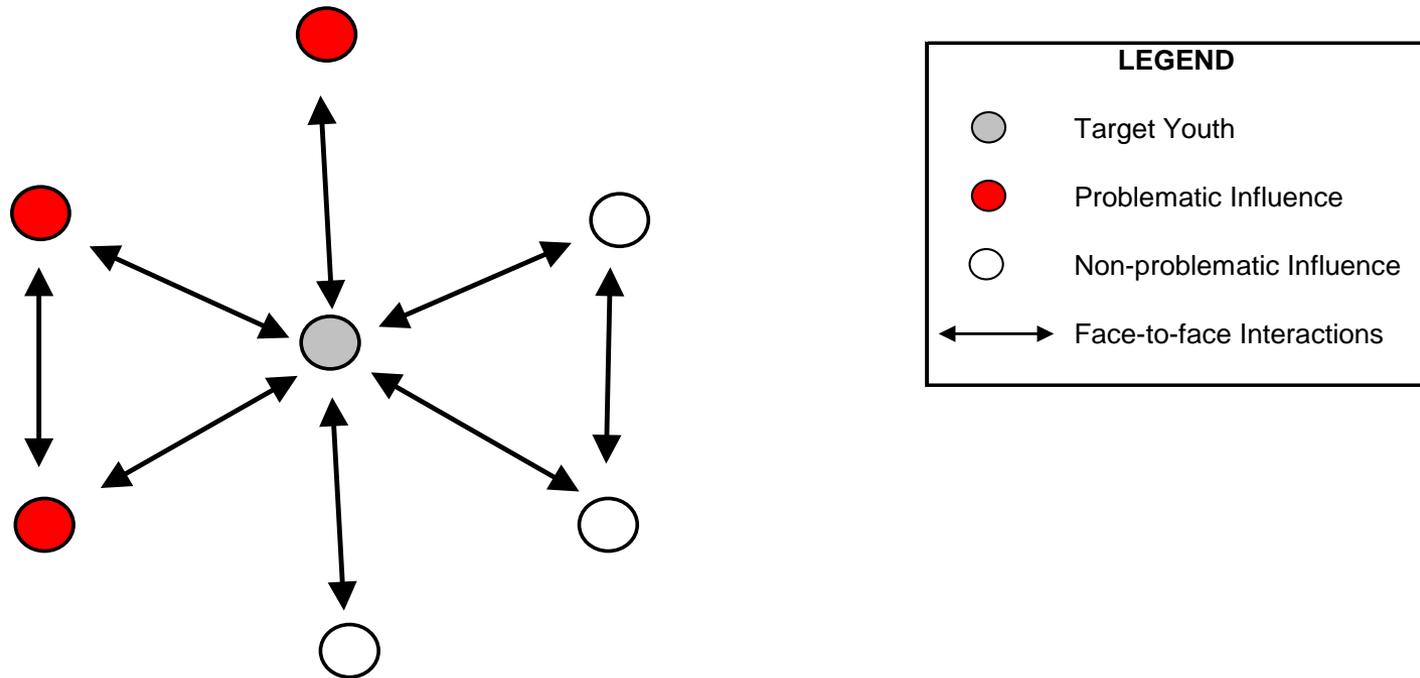


**Social media may be crucial to homeless youth because it opens opportunities for them to reach out to influences beyond street life.**

- Internet use among housed adolescents is nearly ubiquitous. (Livingstone, 2008; Livingstone & Brake, 2010)
- The role of the internet among at-risk adolescents (such as runaway and homeless youth) has however been less forthcoming and needs further investigation ((Mitchell et al., 2007; Ybarra & Mitchell, 2005).



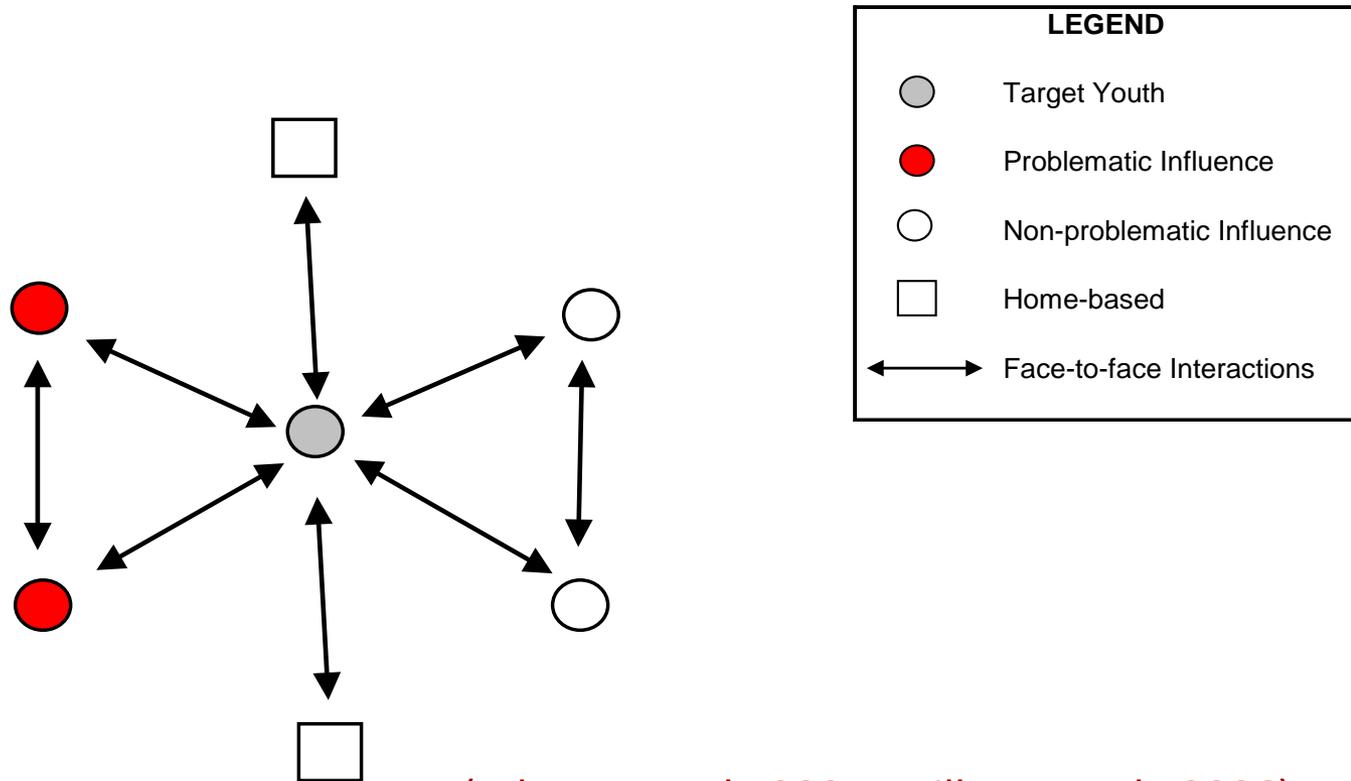
# The standard story: street ties are a source of problematic influences.



**More risk taking peers, more HIV risk**

(e.g. Kipke et al., 1997; Whitbeck et al., 1999; Tyler et al., 2000; Rice et al., 2005)

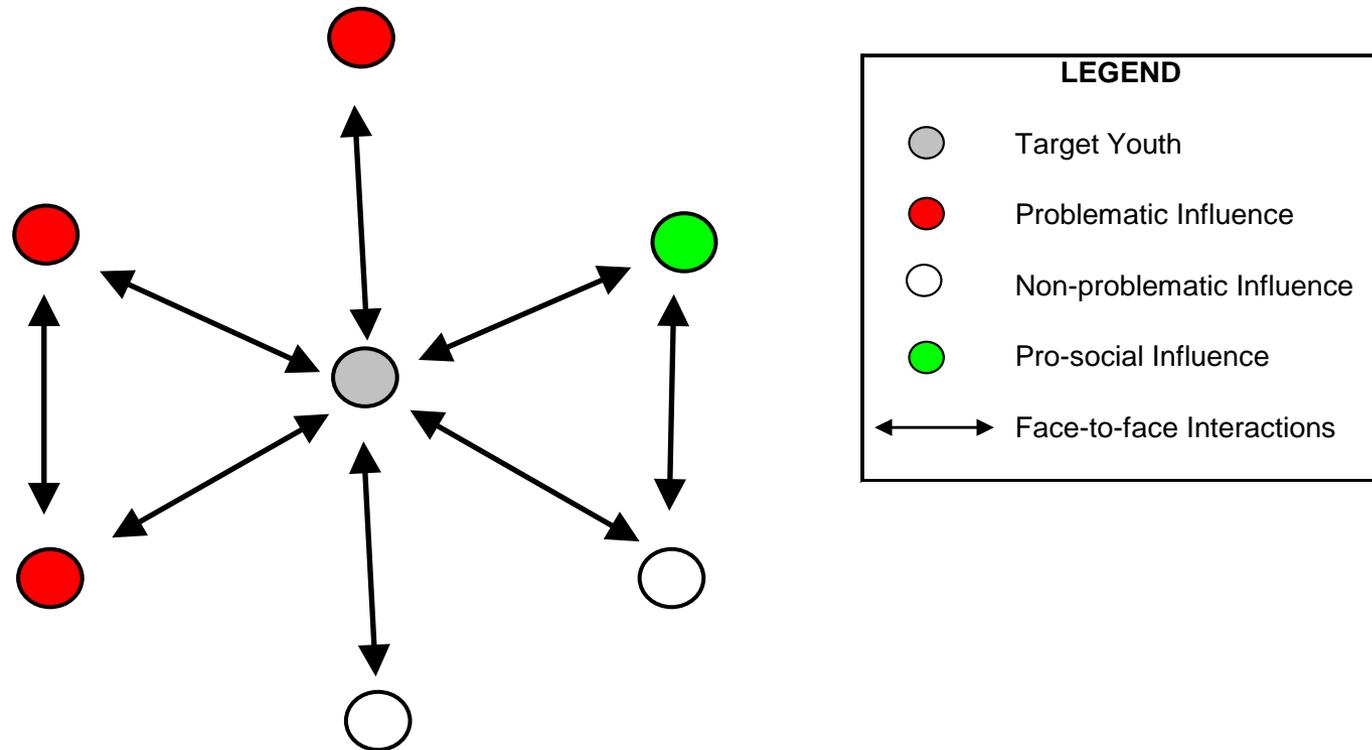
# Home-based ties exist



(Johnson et al., 2005; Milburn et al., 2006)



# Pro-social peers exist and reduce drug-taking risk.

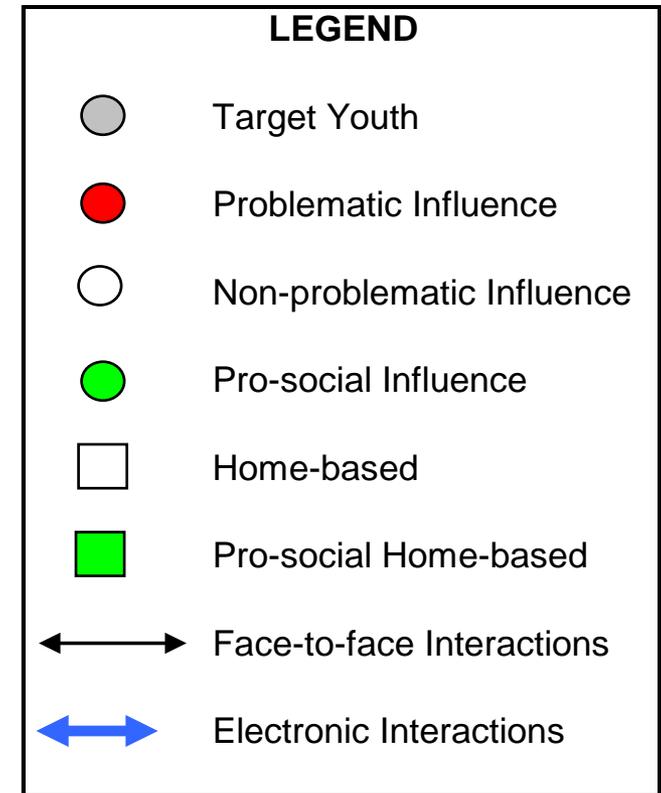
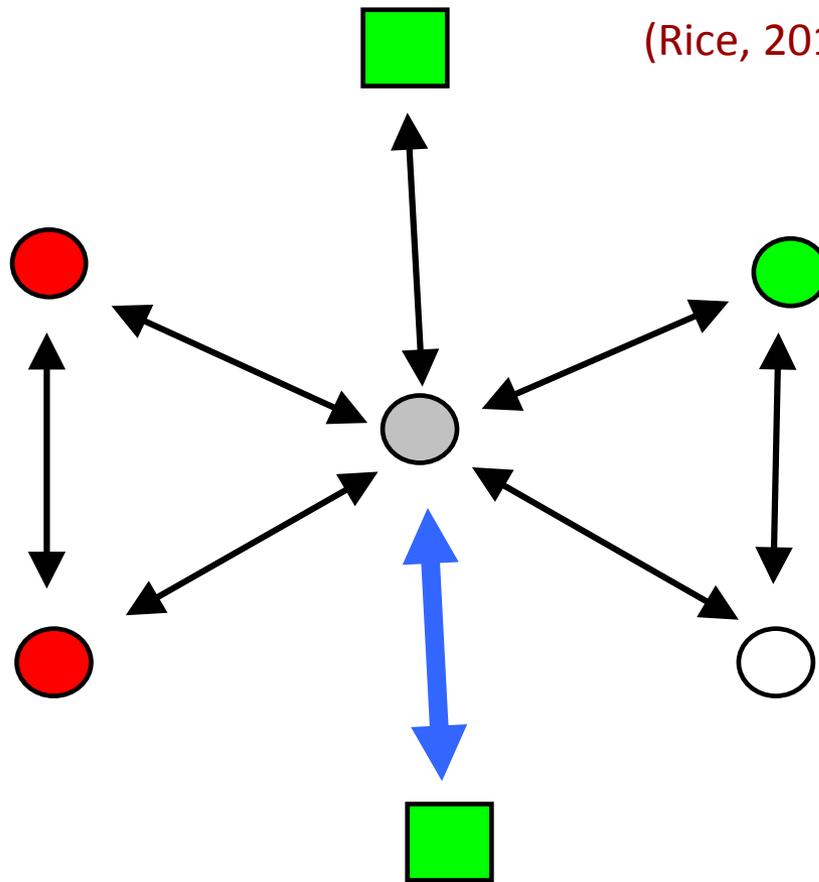


**More friends who are in school or get along with family, less HIV risk**  
(Rice et al., 2007; 2008; Tyler, 2008)

# Social Networking to Pro-Social Peers



(Rice, 2010; Rice et al., 2010; Young & Rice, 2011)





## Main Questions

How many youth use the internet and social media?

How often do homeless youth use the internet?

Where/how do they get internet access?

Who are they connecting to online?

What effect does connecting have on their HIV/AIDS risk-taking, if any?



Study 1 and Study 2 both use the same data:

May 2009 – Technology Use Survey

N= 201

Convenience sample at a drop in agency

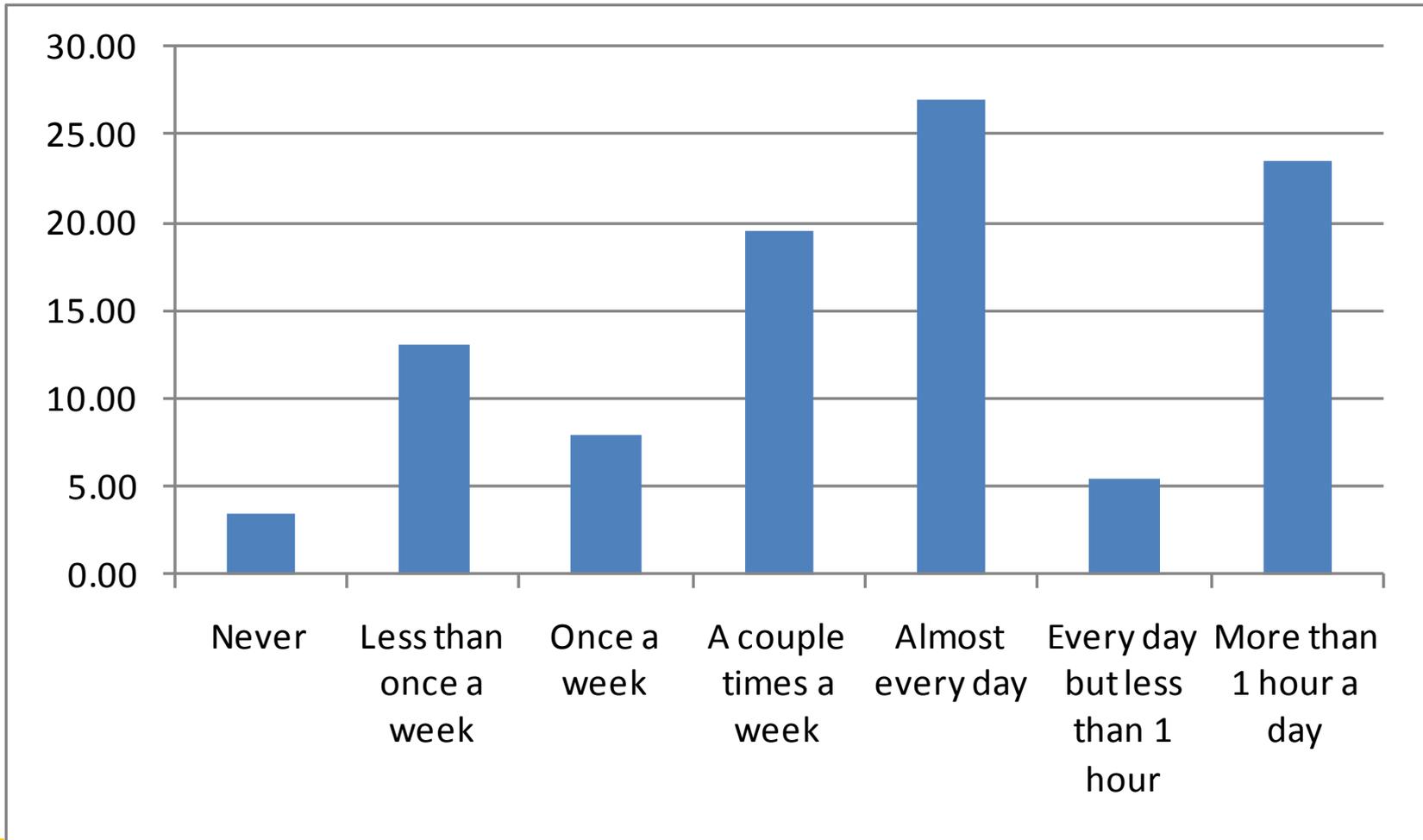
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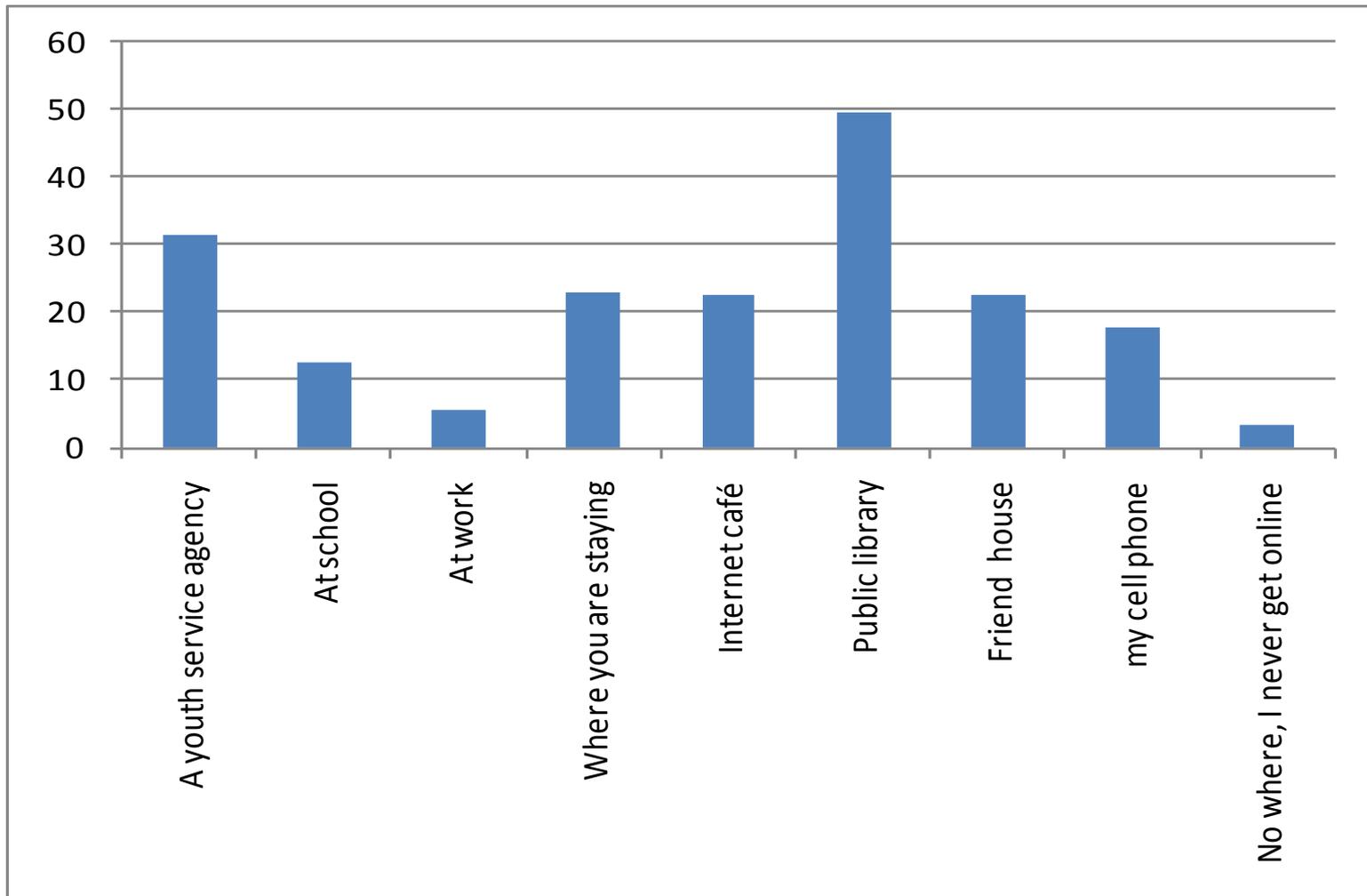
<b>Sample Characteristics</b>	<b>n</b>	<b>%</b>
<b>Race</b>		
African American	69	34.33
Latino	24	11.94
White	49	24.38
Asian American	5	2.49
Pacific Islander	1	0.5
Native American	4	1.99
Mixed Race	36	17.91
Other/Non-Identified	13	6.47
<b>Gender</b>		
Male	133	66.17
Female	62	30.85
Transgender	6	3.01
<b>Sexual Orientation</b>		
Gay/Lesbian	26	12.94
Bisexual	30	14.93
Heterosexual	137	68.16
Unsure	8	3.98



## How often do youth get online?

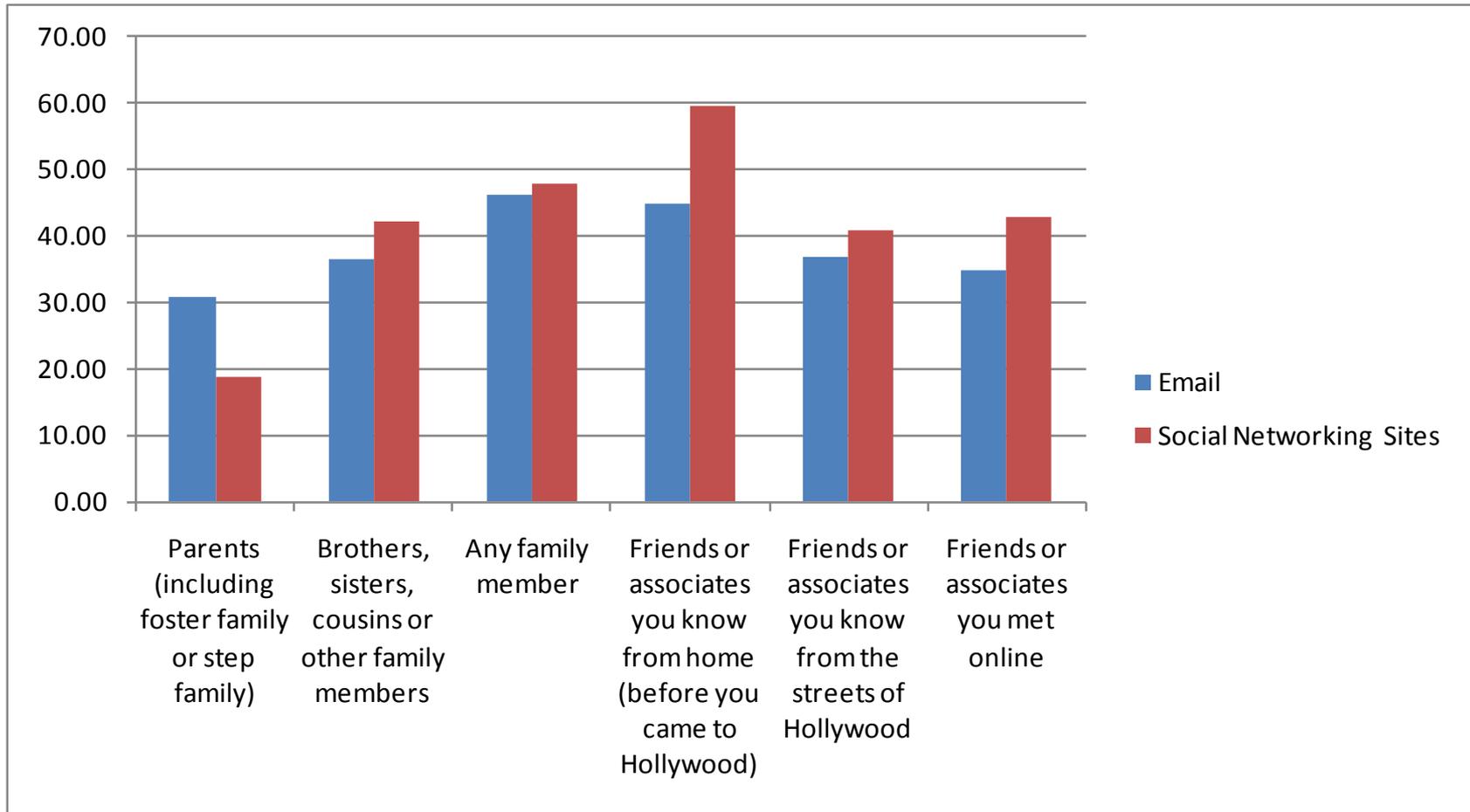


## Where are youth gaining internet access?





## Who do youth connect with online?





## **HIV/AIDS Risk Behaviors**

	<b>n</b>	<b>%</b>
<b>Online Partner Seeking (yes=1)</b>	<b>51</b>	<b>25.37</b>
Lots of people have used the internet to find someone to have sex with. Have you ever used the internet to find someone to have sex with?		
<b>Exchange Sex (yes=1)</b>	<b>18</b>	<b>8.96</b>
In the last three months have you exchanged for sex money, drugs, a place to stay, food or meals, or anything else?		
<b>Recent HIV Test (yes=1)</b>	<b>114</b>	<b>56.72</b>
Have you been tested for HIV/AIDS in the past 6 months?		



Multivariate Logistic Regression Models for Homeless Youth (n=201), Los Angeles CA 2009.

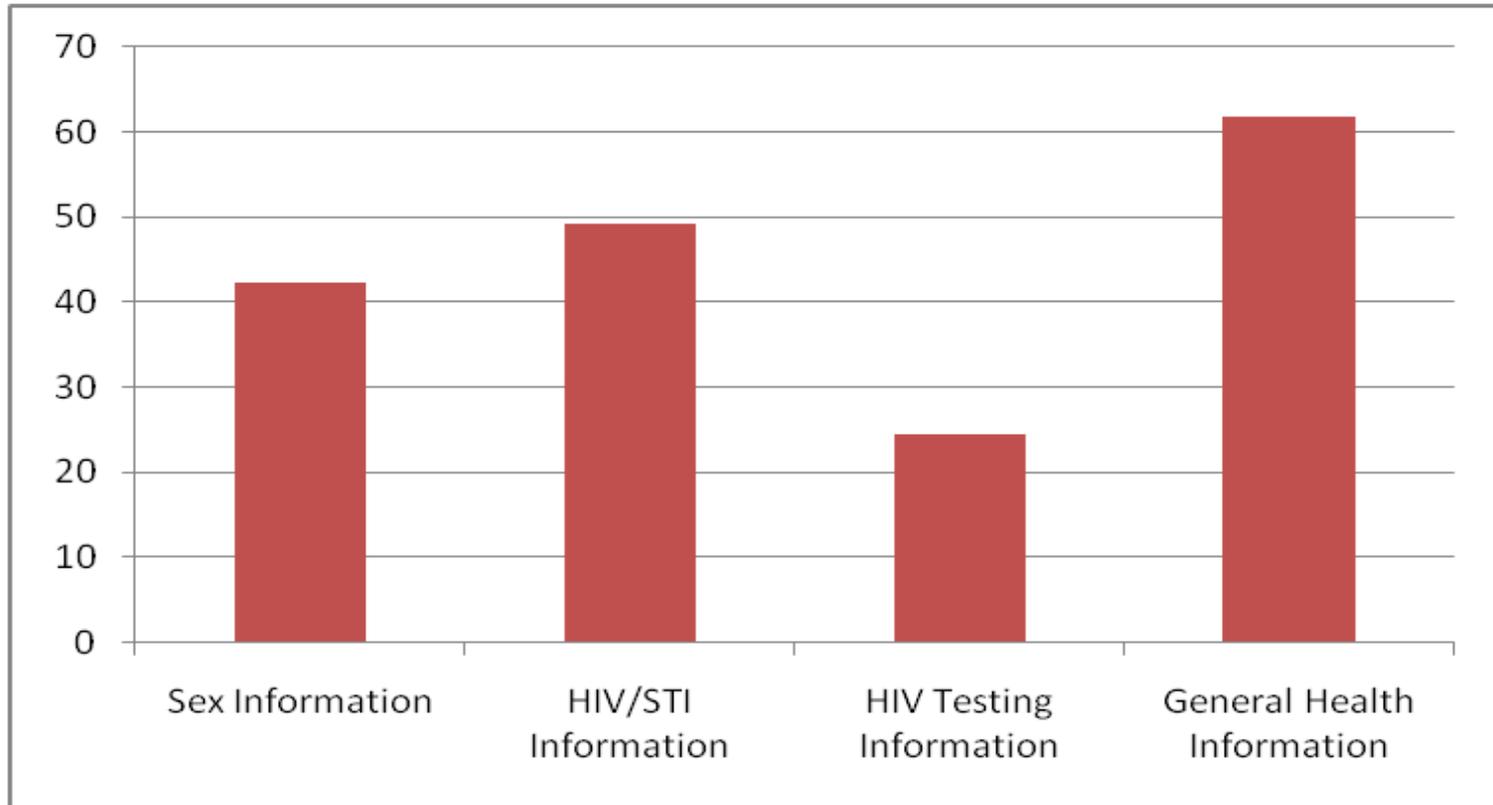
	Model 1		Model 2		Model 3	
	Online Partner Seeking		Exchange Sex		Recent HIV Test	
	O.R.	95% Conf Int	O.R.	95% Conf Int	O.R.	95% Conf Int
Exchanged Sex	18.06	( 4.89 , 66.8 )				
Time Spent Online (b)	1.31	( 1.04 , 1.66 )				
Online Networking with:						
Street Peers			4.70	( 1.36 , 16.30 )		
Any Family			0.32	( 0.10 , 0.99 )	2.50	( 1.32 , 4.75 )
Home-Based Peers					2.02	( 1.01 , 4.02 )

\* = p<.05, \*\* = p<.01, \*\*\* = p<.001

note: adjusted for age, race, gender, sexual orientation, time homeless, and shelter situation

**Rice, Monro, Milburn, Barman-Adhikari, Young 2010**

**Rice & Barman-Adhikari, 2013**





<u>Predisposing Characteristics</u>	<u>HIV/STI Information</u>		
	O.R.	C.I.	
<u>Demographics</u>			
Male	0.41	(0.11	1.44)
GLBT	0.32	(0.07	1.40)
Interaction: Male*GLBT	10.22	(1.46	71.47)
Race (contrast = White)			
Latino	0.94	(0.19	4.53)
African American	1.76	(0.52	5.91)
Mixed Race	1.94	(0.50	7.54)
Other Race	2.37	(0.52	10.9)
<u>Enabling Resources</u>			
<u>Internet Access</u>			
Daily Internet User	1.09	(0.42	2.7)
Personal Internet Access	3.90	(1.52	9.9)
<u>Social Network Ties (Antecedent Structure)</u>			
Parents	3.94	(1.54	10.07)
Home-Based Peers	0.46	(0.16	1.30)
Online Peers	1.94	(0.79	4.78)
Street-Based Peers	0.47	0.17	1.31
<u>Content of Interactions</u>			
Receive Health Forwards	3.79	(1.36	10.55)
Talk About Sex Online	1.41	(0.50	3.97)

**Barman-Adhikari & Rice, 2011**



<u>Predisposing Characteristics</u>	HIV Testing Info		
	O.R.	C.I.	
<u>Demographics</u>			
Male	0.35	(0.12	1.04)
GLBT	0.86	(0.25	2.91)
Interaction: Male*GLBT	3.50	(0.69	17.8)
Race (contrast = White)			
Latino	0.41	(0.12	1.39)
African American	0.56	(0.21	1.50)
Mixed Race	0.27	(0.08	0.84)
Other Race	0.62	(0.17	2.28)
<u>Enabling Resources</u>			
<u>Internet Access</u>			
Daily Internet User	1.53	(0.69	3.40)
Personal Internet Access	1.59	(0.70	3.61)
<u>Social Network Ties (Antecedent Structure)</u>			
Parents	1.14	(0.52	2.49)
Home-Based Peers	0.49	(0.20	1.19)
Online Peers	1.83	(0.85	3.96)
Street-Based Peers	1.04	(0.46	2.38)
<u>Content of Interactions</u>			
Receive Health Forwards	2.43	(1.04	5.72)
Talk About Sex Online	2.43	(1.03	5.77)

- Implications: Basic recommendations, social networking HIV prevention interventions, social media for transient youth.





## Social Networking Interventions of Homeless Youth:

- Popular Opinion Leader models are not the only social network paradigm. Works for pro-social populations, but may not here.
  - Connecting street youth to other street youth may encourage “deviancy training” – too many high-risk youth in interventions together can lead to negative intervention outcomes.
  
- Future HIV Prevention Interventions
  - Should focus on helping youth connect to pro-social networks.
  - Social media allow youth to reach out beyond street life, this is where our intervention models should be focused.



Some basic recommendations:

- Homeless youth need more internet access. Agencies should invest money and staff time in computer labs.
  - They are connecting to pro-social networks and these connections encourage healthy behaviors.
  - Health information and other job and housing seeking going on.
  - YouTube never hurt anyone either.
  
- Internet access should be monitored.
  - Youth who are engaging in exchange sex are using the internet to find partners online.
  - Facilitated computer labs can be opportunities for harm reduction.

## Transient Youth and Social Media:



- Besides traditional methods, the internet could emerge as a complementary avenue through which interventions can be delivered.
- In addition, it is not only very cost effective, but also efficient in reaching a much larger audience than most traditional programs.
- **Internet could be utilized as a means of building contact with these youth and positive adults, family reconnection: STRIVE 2.0**



## Study Limitations:

- Non-probability sampling-not generalizable.
- Data are cross-sectional, we cannot draw any causal explanations.
- Data lacked sufficient detail about the online interactions that these youth were engaging in, future research could remediate this situation.
- Data was self-reported.

# Relevant citations from my team's work



1. Rice, E., & Barman-Adhikari, A. (2013). "Internet and Social Media Use as a Resource among Homeless Youth" *Journal of Computer Mediated Communication*. DOI: 10.1111/jcc4.12038
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