Evaluation Results of Interactive Computerized HIV-Prevention Interventions

2008 sex::tech conference

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• 1,039,000 to 1,185,000 persons living with HIV infection in the U.S.
• 24-27% undiagnosed and unaware of their HIV infection
• 40,000 new infections annually
• HIV remains a leading cause of death among persons 25 to 44 years old, particularly among Black and Hispanics
Advantages of programs utilizing computers:

• Computers are accessible to disadvantaged populations (CDC, 2003, US Dept. of Commerce, 2004)

• Youth in particular enjoy and are easily engaged by computer interventions (Paperny, 1997)

• The delivery of educational material via computer can be far more effective than traditional methods of instruction (Soe, et al., 2005; Thompson et al., 1996).

• About 92% of kids enrolled in K-12 used a computer either at school or home (CDC, 2003), regardless of gender or race/ethnicity.
Project LIGHT

- 14 – 18 years of age
- Assent
- Parental Consent
- Excluded if highly disruptive or unadvised by teacher/staff

Based on NIMH Multisite Intervention
Sample

- 133 students
- \( M = 16 \) years of age
- 78% report female guardian
- 38% report male guardian
- 16.0 years average age
- 55% Male
- 52% arrested in lifetime
- Recent substance use:
  - 68% used alcohol, 51% marijuana,
  - 23% other drugs
- Ethnicity
  - Black 49%
  - Latino 47%
  - Other 5%
<table>
<thead>
<tr>
<th>Small group</th>
<th>Computer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase perceived risk by facilitator showing statistics</td>
<td>Statistics</td>
</tr>
<tr>
<td>Increase skills by facilitator demonstrating correct condom use</td>
<td>Condom</td>
</tr>
<tr>
<td>Increase skills in identifying antecedents of risk behavior by facilitator telling a story and participants pick out triggers.</td>
<td>Triggers instruction Triggers identification</td>
</tr>
<tr>
<td>Increase assertive communication skills by discussing unwritten rules</td>
<td>Unwritten rules</td>
</tr>
</tbody>
</table>
## Acceptability

### Intervention Attendance

<table>
<thead>
<tr>
<th>Sessions</th>
<th>Computer</th>
<th>Small group</th>
</tr>
</thead>
<tbody>
<tr>
<td>All complete</td>
<td>33</td>
<td>3</td>
</tr>
<tr>
<td>None complete</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Some complete</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>47</td>
<td>41</td>
</tr>
</tbody>
</table>
Outcome Sexual Behavior*

% Had Sex

Baseline 3-month

Control
Computer
Small Group

(Lightfoot, et al., 2007)
Outcome: Sexual Behavior*
Outcome: Sexual Behavior

% Unprotected Sex

Baseline 3-month

Control
Computer
Small Group
Street Smart Maintenance

• 14 – 24 years of age
• Recruited from shelters and drop-in centers
• Informed Consent
Sample

- 468 runaway/homeless youth
- $M = 19$ years of age
- $M$ education = 11$^{th}$ grade
- Ethnicity
  - 33% African American
  - 20% Latino
  - 16% White
  - 31% Mixed or Other
- 31% Female
Street Smart

www.staystreetsmart.com
Outcome: Substance Use

Mean number of days using marijuana

- No website
- Website
- Control

Interview month

0 3 6 9 12 15 18 21 24 27 30 33 36 39
Outcome: Substance Use

Mean number of days using hard drugs

- No website
- Website
- Control

Interview month
Conclusions

• Get rid of small group interventions?
• Trade offs: 70% vs. 30% reduction in behavior
• Use the strengths of computers
• Other technology & technology-based venues
Acknowledgements

• National Institute of Mental Health
• National Institute of Drug Abuse
• Universitywide AIDS Research Program
• Research Team
• Agencies, schools, providers
• Youth willing to share their lives