The TRU Impact of Personal Testimonials in a Youth Smoking Prevention Media Campaign

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Agenda

• TRU Campaign Background and Context
• TRU Campaign Ads
• Evaluation Methods
• Results
• Conclusions and Recommendations
CDC Best Practice Recommendation

“An effective state health communication intervention should deliver strategic, culturally appropriate, and high-impact messages in sustained and adequately funded campaigns integrated into the overall state tobacco program effort.” (CDC Best Practices Guide – p. 34)
NC Teen Tobacco Use Prevention and Cessation Initiative

- Four primary components:
  - Teen Initiative: 2003
  - TRU Media Campaign: 2004
  - Quitline: 2005
  - Colleges Initiatives: 2006
- School and community based Teen Initiative grantees
- TRU Campaign and brand integrated into Teen Initiative
The TRU Ads
TRU Evaluation Survey

• Telephone survey of youth ages 11 through 17

• Six survey implementations:
  • Baseline pre-campaign launch in 2004
  • Repeat surveys with baseline cohort in 2004, 2006, and 2007
  • Cross-sectional surveys in 2009 and 2011

• Key outcomes:
  • Tobacco use, knowledge, and behaviors
  • Confirmed ad awareness and ad reactions
  • Brand awareness
  • Susceptibility and sensation seeking
TRU Evaluation Analysis

• Sampling weights and adjustments made to align sample to NC population on key demographic variables
• SAS survey procedures used to account for complex survey design and sampling weights
• Backwards stepwise logistic regression
• Baseline: 637 completes (54.1% rr); f/u 2004: 604 (95% of original cohort)

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>N</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004, baseline</td>
<td>637</td>
<td>54.1%</td>
</tr>
<tr>
<td>2004, follow-up</td>
<td>604</td>
<td>95% (of cohort)</td>
</tr>
<tr>
<td>2011</td>
<td>1,002</td>
<td>52.9%</td>
</tr>
</tbody>
</table>
Results: Ad Awareness

*Change from 2004 significant at p < 0.001
Results: Ad reactions

- **Convincing**: Strongly Agree/Agree
- **Grabbed attention**: Strongly Agree/Agree
- **Gave good reasons not to smoke**: Strongly Agree/Agree
- **Talked to friends about ad**: Strongly Agree/Agree
- **Talked to family about ad**: Strongly Agree/Agree

Legend:
- Blue: Destini
- Red: Justin
- Green: Older TRU
**Results: Brand Awareness**

<table>
<thead>
<tr>
<th></th>
<th>2004 (%)</th>
<th>2011 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco.Reality.Unfiltered.TRU Slogan*</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>TRU Brand†</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>truth® Brand*</td>
<td></td>
<td>70</td>
</tr>
</tbody>
</table>

*Changes significant at p<0.0001
† Not asked in 2004
Results: TRU Brand Awareness Beyond TV

% seeing TRU brand

Places youth have seen TRU brand

facebook Video game websites Other websites Movie theater ads During school or community events Promotional items (e.g. t-shirts)
## Results: TRU Awareness

<table>
<thead>
<tr>
<th>Predictor Variables for Awareness of TRU Ads</th>
<th>Odds Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
</tr>
<tr>
<td>Older Age</td>
<td>1.93</td>
</tr>
<tr>
<td>Anti-tobacco attitudes</td>
<td>0.68</td>
</tr>
<tr>
<td>Would wear gear with anti-tobacco message</td>
<td>1.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Predictor Variables for Awareness of TRU Brand</th>
<th>Odds Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
</tr>
<tr>
<td>Caucasian Race</td>
<td>1.41</td>
</tr>
<tr>
<td>Anti-tobacco attitudes</td>
<td>0.48</td>
</tr>
<tr>
<td>Presence of anti-tobacco organizations</td>
<td>2.41</td>
</tr>
<tr>
<td>TRU ad dose</td>
<td>1.47</td>
</tr>
<tr>
<td>Sensation Seeking Behavior</td>
<td>2.43</td>
</tr>
<tr>
<td>Susceptibility to smoking</td>
<td>1.44</td>
</tr>
</tbody>
</table>
## Results: Susceptibility

<table>
<thead>
<tr>
<th>Predictor Variables for Susceptibility to Smoking</th>
<th>Odds Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
</tr>
<tr>
<td>Positive attitudes towards smoking</td>
<td>2.22</td>
</tr>
<tr>
<td>Positive attitudes towards tobacco industry</td>
<td>1.88</td>
</tr>
<tr>
<td>See actors on TV &amp; movies using tobacco</td>
<td>1.41</td>
</tr>
<tr>
<td>Sensation Seeking Behavior</td>
<td>2.41</td>
</tr>
</tbody>
</table>
Youth Tobacco Use in NC

<table>
<thead>
<tr>
<th>Year</th>
<th>High School Smoking Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>31.6%</td>
</tr>
<tr>
<td>2001</td>
<td>27.8%</td>
</tr>
<tr>
<td>2003</td>
<td>27.3%</td>
</tr>
<tr>
<td>2005</td>
<td>20.3%</td>
</tr>
<tr>
<td>2007</td>
<td>19.0%</td>
</tr>
<tr>
<td>2009</td>
<td>16.7%</td>
</tr>
</tbody>
</table>

- 2001: HWTF Created
- 2003: HWTF Teen Initiative
- 2004: TRU Campaign
- 2006: $.30 NC cig tax increase
- 2008: TFS Implemented

YTS Survey Year
Limitations

- Telephone surveys underestimate youth tobacco use
- Cross-sectional design – no causality inferences
- Cannot differentiate impact of TRU campaign and other comprehensive prevention program components
- Real world campaign implementation limits conclusions about ideal timing, duration, and dosing of ads for maximum effectiveness
Conclusions

• Major campaign accomplishments:
  • High campaign awareness
  • Well received by youth
  • Preferentially reaching youth at risk for smoking
• Combined with state, school and community policies, campaign substantially contributed to historically low levels of tobacco use among NC youth
• Well executed media campaigns using theme of serious health consequences can be an effective component of state tobacco prevention efforts
• Future of TRU Campaign uncertain following abolition of NC Health and Wellness Trust Fund
Where does NC TRU fit?

- Findings build on research supporting ads that use:
  - Long term health consequences theme
  - Negative tone
  - High sensation stylistic features (unrelated cuts, strong images)

- Findings provide new data on:
  - Use of media campaign in a tobacco producing state
  - Use of personal testimonials in youth prevention
Questions for Additional Research

• How does using real world state resident story tellers affect message impact?
• Could NC ads be used effectively in other states?
• How will serious health consequences theme perform over time?
• What is relative impact of featuring stories of different smoking related diseases (e.g. COPD vs. lung cancer)?
• How effective are ads featuring youth spokespeople vs. adult vs. a combination
• How often should ads be changed/new ads developed?
• What is the minimum effective ad “dose?”
Recommendations

• Consider use of high sensation, negative tone personal testimonials about the serious health consequences of tobacco use
• Disseminate campaigns through communication venues other than TV
• Work to better utilize youth social networks and increase campaign “chat value”
• Integrate media campaign with other comprehensive prevention activities
• Advocate for sufficient funding
Questions?

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