Eye Tracking The Real Cost Campaign: Are Susceptible Youth Seeing What We Want Them To See?

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Background

• Adolescence is the most susceptible time for initiating tobacco use.1,2
• The US Food & Drug Administration (FDA) launched The Real Cost national tobacco prevention communication campaign targeting susceptible youth.3
• The source (FDA) of the campaign may impact campaign credibility.
• Using eye-tracking methodology, this study examined: 1) If the FDA source (i.e., logo and text size) on Real Cost video and print ads impacts attention to source, source recall and perceptions of FDA credibility; and 2) Comparison of The Real Cost video compared to print ads on adolescent risk perceptions and believability.

Methods

• Recruited youth ages 15-17 via social media and flyers
• Inclusion criteria: susceptibility to tobacco use3 and no eye problems that impede eye tracker
• Screened 292 youth online; 30 met criteria and completed study
• Varied FDA logo source size (original and large) and message channel (video and print) of Real Cost ads, using 2 x 2 experimental between subjects design
• Youth viewed four ads in each condition and completed self-reported items on ad believability, risk perceptions, and source recall
• Data collected with a Tobii X260 eye-tracker

Results

• Youth were predominately female (70.0%), white (53.3%), and in 11th or 12th grade (70.0%)
• 26% (n=8) had no recorded dwell time or fixations on the FDA source
• Video condition participants had almost three times longer dwell times (p=.023) and nearly 3.5 times more fixations (p=.01) on the source than print condition participants
• Participants viewing print ads had longer dwell times on the larger source compared to the smaller source (p=.02) and more fixations on the larger source (p=.02)
• Youth who correctly recalled FDA as the source had significantly more fixations (p<.01) and longer dwell times on the source (p<.01) compared to youth who did not identify the correct source

Results – Eye Tracking

<table>
<thead>
<tr>
<th>Mode of Advertisement</th>
<th>Dwell Time on FDA Source</th>
<th>Print Original Source</th>
<th>Print Large Source</th>
<th>Video Original Source</th>
<th>Video Large Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print Original Source</td>
<td>0.20</td>
<td>0.15</td>
<td>0.12</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>Print Large Source</td>
<td></td>
<td>0.08</td>
<td>0.06</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>Video Original Source</td>
<td></td>
<td></td>
<td>0.15</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>Video Large Source</td>
<td></td>
<td></td>
<td>0.12</td>
<td>0.10</td>
<td></td>
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</tbody>
</table>

Figure 1. Dwell Time on FDA Source by Mode of Advertisement

<table>
<thead>
<tr>
<th>Source Size</th>
<th>Dwell Time on FDA Source</th>
<th>Original Size Source</th>
<th>Larger Size Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Size Source</td>
<td>0.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Larger Size Source</td>
<td></td>
<td>0.12</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2. Dwell Time FDA Source by Source Size, Print Ads

<table>
<thead>
<tr>
<th>Mode of Advertisement</th>
<th>Source Recall</th>
<th>Print Ads Source Recall</th>
<th>Video Ads Source Recall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print Original Source</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Print Large Source</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Video Original Source</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Video Large Source</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Figure 3. FDA Source Recall by Mode of Advertisement

Results – Survey Items

• 34% of participants correctly recalled the FDA as the ad source, across all source sizes
• Video condition participants rated the ads more positively (p<.06) and more engaging (p<.01) than print condition participants
• Ad credibility was positively associated with ratings of ad risk perception (rho=0.66, p<0.0001), but not associated with dwell time or the number of ad source fixations
• No significant difference between video and print conditions on harm beliefs, risk perception or worry.

Conclusions

• Video ads appear more effective and engaging than print messaging for susceptible adolescents
• FDA source recall was low, but participants who attended to the message source had significantly higher recall
• FDA source on anti-smoking ads should be more salient if awareness of message source is desired
• Increased ad credibility was associated with higher ratings of ad risk perception, though ad credibility was not associated with message source
• More research is needed on how ad credibility and source can maximally increase measures of risk perception and ad effectiveness

Limitations

• Small sample size and recruitment of participants from one region limits generalizability of findings, but similar sample sizes are reported in other eye tracking studies
• Survey data was self-reported and responses may be influenced by social desirability

References