Attitudes to tobacco and e-cigarettes, e-cig ads and ASMs
Rationale

• E-cigarettes present a lower-harm nicotine delivery system, but this perception is not strong amongst the public
• There are some remaining concerns that e-cigarette advertising may ‘re-normalize’ tobacco products
• The effects of attitudes towards e-cigarettes on the efficacy of anti-smoking messages (ASMs) is unknown
Key questions

• What are the effects of viewing e-cig ads and ASMs on attitudes?

• What are the effects of e-cig attitudes on ASMs?
Pilot studies

- Two pilot studies to identify effective e-cig ads and ASMs
- Presented one of 15 ads / ASMs
- Pre/post measures of healthiness, social desirability and social acceptability.
- Post measures of persuasiveness
Pilot Study 1: E-cigarette ads

• 964 participants (pre-screening) recruited via Crowdflower
• 115 smokers, 410 non-smokers, 100 vapers, 145 dual users (final $n = 770$)
• 18-65 years of age ($M = 36$, $SD = 11.7$)
• 55% female
### Headline results: E-cig attitudes

<table>
<thead>
<tr>
<th>Group</th>
<th>Health</th>
<th>Socially acceptable</th>
<th>Desirability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smokers</td>
<td>Increase</td>
<td>No change</td>
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<tr>
<td>Non-smokers</td>
<td>Increase</td>
<td>Decrease</td>
<td>Increase</td>
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<tr>
<td>Vapers</td>
<td>No change</td>
<td>No change</td>
<td>No change</td>
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<tr>
<td>Dual users</td>
<td>Increase</td>
<td>No change</td>
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# Headline results: Tobacco attitudes

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</table>
Pilot 1 summary

- E-cig adverts ‘do their job’ of increasing desirability of e-cig products amongst non smokers and dual users
- Generally make e-cigs appear more healthy, but little effect on social acceptability (decrease for non-smokers)
- Had little effect on health perceptions of tobacco (floor effects!)
- Decreased desirability of tobacco amongst smokers and vapers, and social acceptability amongst non-tobacco users
Pilot Study 2: Anti-smoking messages

- 990 pre-screened participants
- 225 smokers, 65 vapers, 526 non-smokers and 92 dual users (total 908)
- Same measures as e-cig pilot
Pilot 2: Headline results

- **E-cigs** viewed as less healthy, desirable and socially acceptable post-advert

- **Tobacco** products viewed as less healthy, desirable and socially acceptable over time

- Changes over time consistent between groups
Laboratory studies
Main Study 1: E-cig ads

- Smokers (n = 48), non-smokers (n=57), e-cigarette smokers (n=16), dual users (n=3) and an ex-smoker (n=1). (total n = 125)
- Mean age = 21.12 years (SD=5), 59.8% female
Study design

- **Session 1**: Demographics, Baseline measures
- **2 days**
- **Session 2**: Advert Time 2 measures
- **7 days**
- **Session 3**: Time 3 measures

Become what you want to be
E-cigarette ad selected

**SO SATISFYING
YOU WON’T BELIEVE IT’S NOT SMOKE.**

**SMOKE FREE
ODOR FREE
GUilt FREE**

**V2 CIGS ELECTRONIC CIGARETTES**

**SEE WHY**

**SO SATISFYING
YOU WON’T BELIEVE TEETH FEEL SO CLEAN**

**STAIN FREE
ODOR FREE
GERM FREE**

**V2 BRUSH ELECTRONIC TOOTHBRUSH**

**SEE WHY**

Become what you want to be
Hayes ‘Process’ Model, controlling for T1 Tobacco – comparing smokers vs. non-smokers (Group)

Seeing an ad, being a non-smoker and having positive e-cig attitudes linked to lower T2 attitudes towards tobacco (controlling for T1)

The three way interaction between advert condition, group and T1 e-cig attitudes was significant

A decrease in tobacco attitudes was shown in tobacco attitudes ONLY for smokers who had low e-cig attitudes CIs\([-1.32, .12]\).
Study 2:

• Same idea with Anti-Smoking Messages
• 8 ex-smokers, 36 non-smokers, 41 tobacco smokers, 36 e-cigarette smokers, 2 other nicotine product user (total n = 123)
• Mean age = 39.28 years (SD = 11.70), 65.6% female
It is difficult to travel on TFL if you have a disability. For Brandon, it caused temporal arthritis, which had an effect on his self-confidence. You can get help and advice. For free help, call 1-800-TFL-TRAVEL.
Study design

Session 1
Demographics
Baseline measures
ASM
Time 2 measures

7 days

Session 3
Time 3 measures
Results:

• Same Process model undertaken comparing smokers to non-smokers, smokers to vapers and vapers to non-smokers
• No effects observed.....
Pulling it all together: E-cigarette adverts

• We observed only very limited evidence of effects of e-cigarette ads which would suggest they that promote positive attitudes towards tobacco products (exception! dual users health perceptions)

• We observed many more positive effects suggesting e-cigarette ads may make tobacco products less desirable
Pulling it all together: Anti-smoking messages

• The pilot study showed ASMs decrease attitudes towards tobacco products (as planned)
• May also have unintended effect of decreasing attractiveness of e-cigs (problem for smokers, dual users?)
• Effect not replicated in smaller lab study
The research team

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- Lancashire NHS research department

Thanks and questions?