

# The impact of exposure to e-cigarette adverts on appeal of tobacco smoking in children

<b>Submission date</b> 29/04/2015	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 29/04/2015	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 26/01/2018	<b>Condition category</b> Mental and Behavioural Disorders	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

The availability and use of electronic ("e") cigarettes has risen rapidly in the last three years with an estimated 2.1 million people using e-cigarettes in the UK in 2014 and 15.7 million in the USA in 2013. E-cigarettes have the potential to be both beneficial and harmful. The main potential benefit is that they may help current smokers to stop using tobacco cigarettes. The main potential harm is that they may encourage children to start using tobacco cigarettes through the presentation of glamorous images associated with objects that resemble cigarettes. In this study, we look at whether exposing children to adverts depicting e-cigarettes as glamorous increases the appeal of tobacco smoking, appeal being a predictor of subsequent tobacco use. We also look at whether exposing participants to adverts emphasizing the potential health benefits of e-cigarettes reduces the appeal of tobacco smoking.

### Who can participate?

Young people aged 11-16 from the UK.

### What does the study involve?

Participants are randomly allocated to one of three groups. Those in group one are shown a series of pictures associating e-cigarettes with glamour. Those in group two are shown a series of pictures associating e-cigarettes with potential health benefits and an aid to stop smoking tobacco cigarettes. Those in group 3 are not shown any pictures (control group). All participants are asked to fill in a questionnaire and are asked some questions on their responses to the advertisements and how appealing they find tobacco and e-cigarettes. They also answer some questions about their own experiences with e-cigarettes and tobacco cigarettes.

### What are possible benefits and risks of participating?

The public health community has raised concerns that e-cigarette adverts might influence how appealing children find tobacco, but currently evidence is lacking. The present study will contribute to a better understanding of how children perceive e-cigarette adverts and whether and how these adverts might influence the appeal of tobacco smoking in children. The present study will contribute to evidence that can form the basis for policy aimed at protecting children. We do not envisage the study will result in any anxiety or discomfort.

When is the study starting and how long is it expected to run for?  
May 2015 to July 2015.

Where is the study run from?  
The Behaviour and Health Research Unit at the University of Cambridge in collaboration with ICM Direct.

Who is funding the study?  
Department of Health Policy Research Programme (Policy Research Unit in Behaviour and Health (UK)

Who is the main contact?  
Professor Theresa Marteau

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Prof Theresa Marteau

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## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
N/A

## Study information

**Scientific Title**  
Exposure to e-cigarette adverts and the appeal of tobacco smoking in children: an experimental study

**Study objectives**  
There is growing concern about the marketing of e-cigarettes and in particular the potential for this to attract young children not just to e-cigarettes but also to tobacco smoking. Some e-

cigarette adverts emphasise the glamorous aspects of using these products, and others emphasise their health benefits. Our primary hypothesis is that exposure of children to e-cigarette adverts that emphasise glamour increases the appeal of tobacco. Our secondary hypothesis is that exposure to adverts emphasizing the potential health benefits of e-cigarettes reduces the appeal of tobacco smoking.

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

Cambridge Psychology Research Ethics Committee, 11/12/2014, ref: 014.103

### **Study design**

A between-subjects experimental design in which participants are randomised to one of three groups differing in the exposure to e-cigarette adverts

### **Primary study design**

Interventional

### **Secondary study design**

Randomised controlled trial

### **Study setting(s)**

Home

### **Study type(s)**

Other

### **Participant information sheet**

Not available in web format, please use the contact details to request a patient information sheet

### **Health condition(s) or problem(s) studied**

Tobacco smoking, which causes cancer, chronic obstructive pulmonary disease, stroke and heart disease

### **Interventions**

Exposure to e-cigarette adverts in two of three groups:

1. Exposure to adverts associating e-cigarettes with glamour (e.g., attractive design, socially appealing, high tech)
2. Exposure to adverts associating e-cigarettes with function (e.g., health claims, aid to smoking cessation)
3. Exposure to no adverts (control)

### **Intervention Type**

Behavioural

### **Primary outcome measure**

The primary outcome is appeal towards smoking tobacco cigarettes

### **Secondary outcome measures**

1. Attitudes towards tobacco smoking
2. Susceptibility to tobacco smoking
3. Estimates of smoking rates among young people
4. Appeal of e-cigarettes
5. Attitudes towards e-cigarettes adverts

**Overall study start date**

01/05/2015

**Completion date**

15/12/2015

## Eligibility

**Key inclusion criteria**

The following inclusion criteria are applied:

1. Age: 11-16 years old
2. Gender: Both male and female participants are recruited
3. Location: Participants across the UK are recruited. However, only participants in selected sampling units (Super Output Areas; SOA) can participate, as per our sampling procedure

**Participant type(s)**

Healthy volunteer

**Age group**

Child

**Lower age limit**

11 Years

**Upper age limit**

16 Years

**Sex**

Both

**Target number of participants**

572 participants will be recruited to the study. 429 participants provide 90% power at  $p = .01$  to detect a medium-size difference ( $d = .46$ ) between the "glamour" condition and the control condition, and a similar sized difference (but in the opposite direction) between the "function" condition and the control condition. Given we plan to investigate the effects of e-cigarette marketing on those who have never smoked, we have overpowered the study by 25%, to accommodate the removal of the estimated proportion of children who have smoked cigarettes (22%; HSCIC, 2014) or e-cigarettes (10%, 90% of whom are smokers; HSCIC, 2014).

**Key exclusion criteria**

1. Age: participants aged younger than 11 or older than 16 years old
2. Location: Participants outside the selected UK SOAs

**Date of first enrolment**

01/05/2015

**Date of final enrolment**

13/06/2015

## **Locations**

**Countries of recruitment**

England

United Kingdom

**Study participating centre**

**Behaviour and Health Research Unit**

University of Cambridge

Institute of Public Health

Forvie Site

Cambridge

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CB2 0SR

## **Sponsor information**

**Organisation**

University of Cambridge

**Sponsor details**

Trinity Lane

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England

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**Sponsor type**

University/education

**ROR**

<https://ror.org/013meh722>

## **Funder(s)**

**Funder type**

Government

**Funder Name**

Department of Health Policy Research Programme (PR-UN-0409-10109)

## Results and Publications

**Publication and dissemination plan**

We intend to submit the main results of this study for publication in a high-impact factor journal by 15/12/2015. We will disseminate the results to the public, policy makers and other researchers through targeted social media.

**Intention to publish date**

15/12/2015

**Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not expected to be made available

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	01/07/2017		Yes	No