

# Perceptions of harm and intentions to use e-cigarettes after viewing different e-cigarette health messages

|                                        |                                                   |                                                                                                              |
|----------------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Submission date</b><br>17/10/2018   | <b>Recruitment status</b><br>No longer recruiting | <input checked="" type="checkbox"/> Prospectively registered<br><input checked="" type="checkbox"/> Protocol |
| <b>Registration date</b><br>23/10/2018 | <b>Overall study status</b><br>Completed          | <input type="checkbox"/> Statistical analysis plan<br><input checked="" type="checkbox"/> Results            |
| <b>Last Edited</b><br>15/07/2020       | <b>Condition category</b><br>Other                | <input type="checkbox"/> Individual participant data                                                         |

## Plain English summary of protocol

### Background and study aims

Article 20 of the EU Tobacco Products Directive (EU-TPD) states that e-cigarette packets and refill products must carry a health warning of either 'This product contains nicotine which is a highly addictive substance', or 'This product contains nicotine which is a highly addictive substance. It is not recommended for use by non-smokers'.

Given the reduced risks associated with e-cigarettes, UK health and policy makers recommend that smokers who are unwilling or unable to quit should be encouraged to switch to e-cigarettes. However, in recent years, public misperceptions of harm associated with e-cigarettes use have increased, with only 13% of survey respondents in the UK correctly believing that e-cigarettes are considerably less harmful than tobacco smoking.

The purpose of this online experiment is to investigate the potential effects of the EU-TPD health warning labels on e-cigarette products versus a newly generated comparative health message statement on smokers' and non-smokers' perceptions of harm and intentions to use e-cigarettes. Additional aims of this study are to measure the effects on smokers' intentions to quit and use e-cigarettes in quit attempts. Lastly, the potential benefits of providing a comparative harm message either in addition to the TPD warning or as a stand-alone message will be explored.

### Who can participate?

Adults in the UK who are not current e-cigarette users or ex-smokers

### What does the study involves?

This is an online experiment and should take approximately 10 minutes to complete.

After reading the study information and agreeing to take part, participants will be asked to provide some information about themselves and their smoking habits and e-cigarettes use. They will then be asked some questions about how harmful, addictive and acceptable e-cigarettes are and their intentions to use them in the future. This will be followed by viewing several e-cigarette package images which may include either written statements warning about nicotine addictiveness, written statements about health or no written statements at all. Participants will then be asked questions about the images, the written messages and some more questions

about their perceptions of e-cigarettes and intentions to use. Finally, participants will be presented with an on-screen debriefing letter explaining the full aims of the study and providing NHS links with useful advice on ways to quit and supporting materials including further information about e-cigarettes.

What are the possible benefits and risks of participating?

Participants will be awarded with points, which they will receive after completing the survey. The number of points can be redeemed in cash or vouchers (i.e. Amazon). Respondents can redeem their cash after cumulating 150 points or more (equating to £15).

The panel recruitment agency MRFGR, a Division of AGENTC Ltd will be responsible for the recruitment and payment of participants. Participants are awarded with points which they receive after completing the survey.

There are no known risks to participants taking part in this study. However, it is possible that the exposure of the images of e-cigarettes may induce an interest in non-smokers/never e-cigarette users to use an e-cigarette. To mitigate against this risk, participants will be fully debriefed about the relative risks of e-cigarettes and warned that these products are not recommended for non-smokers.

Where is the study run from?

London South Bank University (UK)

When is the study starting and how long is it being run for?

Who is funding the study?

Cancer Research UK (UK)

Who is the main contact:

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## Contact information

### Type(s)

Scientific

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## **Additional identifiers**

**Protocol serial number**

CRUK Grant Number: 25855; Open Science Framework: [osf.io/ta4vx](https://osf.io/ta4vx)

# Study information

## Scientific Title

The effects of the European e-cigarette health warnings and comparative health messages on non-smokers' and smokers' risk perceptions and behavioural intentions

## Study objectives

This Cancer Research UK (CRUK) funded study will investigate the effects of the TPD e-cigarette health warnings and a comparative harm message on smokers' and non-smokers' perceptions of harm, addictiveness and social acceptability of e-cigarettes. Additional aims are to evidence the potential effects of the TPD warnings, as they are implemented, on smokers' intentions to purchase and use e-cigarettes in future quit attempts. Lastly, the potential benefits of providing a comparative harm message either in addition to the TPD warning or as a stand-alone message will be explored.

### Hypothesis 1:

Participants exposed to the TPD health warning will rate e-cigarettes as more harmful and addictive compared to those exposed to the TPD warning combined with a comparative message (TPD+) the comparative health message (COMP) alone and the no message control condition

### Hypothesis 2:

For participants exposed to the TPD health warnings, post-exposure scores on intentions to purchase and use e-cigarettes will decrease compared to those exposed to the COMP alone, the TPD+ messages, or no message (control)

### Hypothesis 3:

TPD health warnings will decrease quit intentions in smokers and the comparative health message (COMP and TPD+ conditions) will attenuate this effect

For hypotheses 1 and 2 we will explore differences between smokers and non-smokers.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

London South Bank University Ethics Committee, 04/07/2018, reference SAS1815

## Primary study design

Interventional

## Study design

Interventional randomised controlled trial

## Study type(s)

Other

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

Smoking-related behaviours

## **Interventions**

Block randomisation will be used for allocation of conditions and demographic variables (including smoking status) will be stratified so that the sample of smokers is representative of the target population in line with ONS data. Each participant will be assigned to one of the six conditions to obtain equal group sizes using IBM SPSS. Participants will be exposed to one of six stimuli displayed on screen for a standardised period of 30 seconds. Message statements will be displayed on e-cigarette package images as per the current EU-TPD warning labels on e-cigarette products. Warning label stimuli are:

1. TPD1: TPD health warning as per currently implemented in the UK. "This product contains nicotine which is a highly addictive substance"
2. TPD2: TPD longer health warning as currently implemented in many EU countries: "This product contains nicotine which is a highly addictive substance. It is not recommended for non-smokers"
3. COMP: Comparative health message as generated in the pilot study (using the same parameters used for the TPD warning labels; font, font colour, size and placement on the pack)
4. TPD1+: The TPD health warning (TPD1) in combination with the comparative message (using the same parameters above)
5. TPD2+: The TPD longer health warning (TPD2) in combination with the comparative message (using the same parameters as above).
6. No message: A no message condition using the same e-cigarette packages

There will be no follow-up period and the study experiment will take approximately 10 minutes.

## **Intervention Type**

Behavioural

## **Primary outcome(s)**

Smokers' and non-smokers' perceptions of e-cigarettes associated with:

1. Harm
2. Addictiveness
3. Social acceptability
4. Effectiveness
5. Intention to purchase
6. Intention to use e-cigarettes

This will be assessed at the baseline and at the end of the intervention (after exposure to messages) using a 7-point Likert rating scale with the anchors "Extremely" to "Not at all"

## **Key secondary outcome(s)**

N/A

## **Completion date**

31/01/2019

## **Eligibility**

### **Key inclusion criteria**

1. Aged 18 or over
2. Resident in the UK
3. Fluent in English

### **Participant type(s)**

All

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

All

**Total final enrolment**

2495

**Key exclusion criteria**

1. Current e-cigarette users (including dual users, those who smoke tobacco cigarettes and use e-cigarettes)
2. Former smokers

**Date of first enrolment**

12/11/2018

**Date of final enrolment**

31/01/2019

## **Locations**

**Countries of recruitment**

United Kingdom

England

**Study participating centre**

**Centre for Addictive Behaviours Research, London South Bank University**

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## **Sponsor information**

**Organisation**

London South Bank University

**ROR**

<https://ror.org/02vwnat91>

## Funder(s)

**Funder type**

Not defined

**Funder Name**

Cancer Research UK

**Alternative Name(s)**

CR\_UK, Cancer Research UK - London, Cancer Research UK (CRUK), CRUK

**Funding Body Type**

Private sector organisation

**Funding Body Subtype**

Other non-profit organizations

**Location**

United Kingdom

## Results and Publications

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

The study will use a panel agency that is GDPR (General Data Protection Regulations) compliant. All data will be kept in accordance with the study protocol and with GDPR's requirements under password protected networked PCs and any documents on hard copies in locked filing cabinets in a locked office. Once finalised, anonymised data will be deposited on the University's open data repository. The data collected are intended to benefit the general public and to inform policy decision making; we will therefore preserve all data resulting from the study (with the exception of personal data) and make it publically available with as few restrictions as possible. The data will be given a CC-BY license which will require any future users to acknowledge the investigators in any subsequent publications arising from use of the data

**IPD sharing plan summary****Study outputs**

| Output type                     | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|---------------------------------|---------|--------------|------------|----------------|-----------------|
| <a href="#">Results article</a> | results | 01/02/2020   |            | Yes            | No              |

|                                  |          |            |     |    |
|----------------------------------|----------|------------|-----|----|
| <a href="#">Protocol article</a> | protocol | 14/11/2018 | Yes | No |
|----------------------------------|----------|------------|-----|----|