ISRCTN18215632 https://doi.org/10.1186/ISRCTN18215632

The impact of e-cigarette shop displays on children

Submission date
03/12/2020

Recruitment status
No longer recruiting

Registration date
22/12/2020

Overall study status
Completed

Last Edited
22/08/2022

Condition category
Other

[X] Prospectively registered
[X] Protocol
[X] Statistical analysis plan
[X] Results
[X] Individual participant data

Plain English summary of protocol

Background and study aims
Shop displays of tobacco (such as cigarettes) are linked to increased smoking, as well as the likelihood of smoking in the future, among children. Many countries have banned shops from displaying tobacco openly to the public. Tobacco has to be stored in units behind a screen instead. There has not been a similar ban on displaying e-cigarettes openly in shops. E-cigarettes are often placed next to the tobacco storage units. This study aims to understand whether seeing these open displays of e-cigarettes might be linked to a higher likelihood of smoking in the future among children.

Who can participate?
Children aged 13-17 years old will be invited to take part, via their parents.

What does the study involve?
Participants in the online study will be asked to look at 12 pictures from inside shops. They will be shown 1 of 4 possible sets of pictures, at random, which included either:
1. 9 pictures of e-cigarettes that are easy to see (lots of options with colourful packaging) and 3 other pictures (for example, of stationery)
2. 9 pictures of e-cigarettes that are not easy to see (only a few options) and 3 other pictures
3. 3 pictures of e-cigarettes that are easy to see and 9 other pictures
4. 3 pictures of e-cigarettes that are not easy to see and 9 other pictures

They will then be asked some questions about their interest in different products, including snack foods, energy and sugary drinks, cigarettes and e-cigarettes. The task should take 10 minutes. The images are from a range of supermarkets and corner shops in England and seeing these pictures is not expected to have any risks as children are likely to visit these places as part of their everyday lives.

What are the possible benefits and risks of participating?
None

Where is the study run from?
University of Bristol (UK)

When is the study starting and how long is it expected to run for?
January 2020 to January 2021

Who is funding the study?
Collaborative Award in Science from the Wellcome Trust (Behaviour Change by Design: 206853/Z/17/Z) (UK)

Who is the main contact?
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Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
102302

Study information

Scientific Title
The impact of e-cigarette retail displays on smoking susceptibility in children: an experimental study

Study objectives
Children's susceptibility to tobacco smoking is increased by exposure to high visibility e-cigarette retail displays.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 17/07/2020, School of Psychological Science Research Ethics Committee (School of Psychological Science, 12a Priory Road, Bristol BS8 1TU, UK; +44 (0)117 928 9000; nathan.street@bristol.ac.uk), ref: 260320102302

Primary study design
Interventional

Study design
2x2 between-subjects design randomized experimental study

Study type(s)
Prevention

Health condition(s) or problem(s) studied
Smoking susceptibility among children

Interventions
Participants will take part in an online experiment, which will use a 2x2 between-subjects design, with two factors:
1. E-cigarette retail display visibility (high vs low)
2. Proportion of e-cigarette images (75% vs 25%)

Participants will be randomised to one of four groups (n=250 per group) as outlined below, using an algorithm within the Qualtrics online survey platform. Each group will comprise 12 images of retail displays, including either e-cigarettes or unrelated (control) products such as stationery. E-cigarette images will be based on a recent naturalistic observational study of e-cigarette displays in England.

Group 1 will be shown 9 images of high visibility e-cigarette displays and 3 images of control products. Group 2 will be shown 3 images of high visibility e-cigarette displays and 9 images of control products. Group 3 will be shown 9 images of low visibility e-cigarette displays and 3 images of control products. Group 4 will be shown 3 images of low visibility e-cigarette displays and 9 images of control products.

Participants will view the 12 images according to their group and then answer a series of questions, including free then cued recall of items from the images, smoking and vaping susceptibility, perceptions of smoking and vaping harm, previous smoking and vaping experience, demographics, as well as filler questions. The task will take approximately 10 minutes to complete.

Intervention Type
Behavioural

Primary outcome(s)
1. Smoking susceptibility will be assessed among never smokers only measured using an established questionnaire with three questions: "Do you think that you will try a cigarette soon?"; and "If one of your best friends were to offer you a cigarette, would you smoke it?"; "Do you think you will be smoking cigarettes 1 year from now?" (the responses to each given either a grade of 0 or 1, where a total score of 0 to 3 is possible, with 0 being not susceptible and ≥1 being susceptible) measured after exposure to the retail display images

Key secondary outcome(s)
1. Vaping susceptibility will be assessed among never vapers only measured using a questionnaire adapted from the smoking susceptibility measure with three questions: "Do you think that you will try an e-cigarette (vape) soon?"; and "If one of your best friends were to offer you an e-cigarette (vape), would you smoke it?"; "Do you think you will be using e-cigarettes (vaping) 1 year from now?" (the responses to each given either a grade of 0 or 1, where a total score of 0 to 3 is possible, with 0 being not susceptible and ≥1 being susceptible) measured after exposure to the retail display images
2. Perception of harm of tobacco smoking will be assessed using a question adapted for vaping harms: “How dangerous do you think it is to smoke one or two cigarettes occasionally?” (rated on a five-point scale, where a score of 1 is not very dangerous and score of 5 is very dangerous) measured after exposure to the retail display images

Completion date
25/01/2021

Eligibility

Key inclusion criteria
1. Aged between 13 and 17 years

Participant type(s)
Healthy volunteer

Healthy volunteers allowed
No

Age group
Child

Lower age limit
13 Years

Upper age limit
17 Years

Sex
All

Total final enrolment
1470

Key exclusion criteria
Does not meet inclusion criteria

Date of first enrolment
22/12/2020

Date of final enrolment
25/01/2021

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
University of Bristol
12a Priory Road
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Sponsor information

Organisation
University of Bristol

ROR
https://ror.org/0524sp257

Funder(s)

Funder type
Charity

Funder Name
Wellcome Trust

Alternative Name(s)
Wellcome, WT

Funding Body Type
Private sector organisation

Funding Body Subtype
Trusts, charities, foundations (both public and private)

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan
Anonymous study data may be shared with collaborators for the purposes of analysis and results interpretation under appropriate collaboration agreements. At the end of the study, electronic study data (including finalised datasheet) will be transferred to a designated University of Bristol Research Data Storage Facility for long-term archiving. Study data will be kept for a minimum of 20 years. At the appropriate time, the datasheet will be locked and made open using the University of Bristol Research Data Repository and/or Open Science Framework (https://data.bris.ac.uk/data/)

IPD sharing plan summary
Stored in publicly available repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		13/04/2022	22/08/2022	Yes	No
Protocol article		18/11/2020	22/08/2022	Yes	No
Dataset		22/04/2022	22/08/2022	No	No
Statistical Analysis Plan		12/02/2021	22/08/2022	No	No