

Young adults and e-cigarettes: a qualitative exploration of awareness, experience and attitudes



HEALTH AND SOCIAL CARE

**Young adults and e-cigarettes:
A qualitative exploration of
awareness, experience and
attitudes**

**Dawn Griesbach and
Alison Platts
Griesbach & Associates
May 2016**

Contents

EXECUTIVE SUMMARY	1
1 INTRODUCTION	7
Policy context.....	7
E-cigarettes and young people.....	8
Aims of this research	9
2 METHODS	11
Research design and purposive sampling approach	11
Recruitment methods.....	12
Topic guide	13
Conduct of the focus groups	13
Use of quotes in this report and the designation of participants.....	14
3 DESCRIPTION OF THE PARTICIPANTS	15
Sample description	15
About the participants	15
Dual use of cigarettes and e-cigarettes	17
4 YOUNG ADULTS' AWARENESS OF AND ATTITUDES TOWARDS E-CIGARETTES.....	18
Vocabulary.....	18
Recognition of different types of e-cigarettes	19
The use of e-cigarettes in young adults' networks.....	19
Young adults' attitudes to e-cigarettes	20
Young adults' reasons for not trying vaping.....	22
5 YOUNG ADULTS' EXPERIENCES OF USING E-CIGARETTES	23
Young adults' first experience of e-cigarettes.....	23
Regular use of e-cigarettes	26
E-cigarette enthusiasts.....	28
Reasons for giving up vaping	29
6 CESSATION EXPERIENCES AND THE ADDICTIVENESS OF E-CIGARETTES	31
Young adults' experiences of smoking cessation	31
E-cigarettes as smoking cessation aids	31
The addictiveness of e-cigarettes compared to cigarettes.....	33
7 YOUNG ADULTS' VIEWS ABOUT VAPING AS A GATEWAY TO SMOKING	37
Non-smokers taking up vaping.....	37
Views about the possible progression from vaping to smoking.....	38
8 HEALTH AND SAFETY ISSUES	40
Perceptions of the health and safety risks of using e-cigarettes	40
Health and safety incidents	41
Concerns about health and safety risks for children	42
Information and evidence on the health effects of using e-cigarettes	42
Overall attitudes and behaviours linked to health and safety concerns.....	43
9 YOUNG ADULTS AS CONSUMERS OF E-CIGARETTES.....	45
The cost of e-cigarettes.....	45
Purchasing e-cigarettes	47

10 KNOWLEDGE AND INFORMATION	50
What young adults know about e-cigarettes.....	50
What young adults would like to know about e-cigarettes	51
Information sources	52
Trustworthy sources of information	53
Overall views on available information	54
11 REGULATION OF E-CIGARETTES.....	55
General attitudes towards, and awareness of, regulation of e-cigarettes.....	55
Using e-cigarettes in (enclosed) public places	56
Product safety and consumer protection	57
Children and e-cigarettes	57
Taxation.....	58
Advertising.....	58
12 DISCUSSION	59
What young adults know, and want to know, about e-cigarettes	59
What young adults think about e-cigarettes.....	59
Experiences of using e-cigarettes	60
Regulation of e-cigarettes	61
Public health implications of this research.....	61
Limitations of this research	62
Conclusion.....	62
ANNEX: SELF-COMPLETION QUESTIONNAIRE FOR PARTICIPANTS	64

Acknowledgements

This research could not have been accomplished in the timescales available without the individuals and organisations who helped us to recruit the young adults who took part. We would especially wish to thank the following people: Anne Marie Baird, Katie Baxter, Lisa Buck, Francinne Carnegie, Margaret Comrie, Jane Cooper, Kerry Dalgetty, Joan Dewar, Manjeet Gill, Francesca MacLeod, Roddie MacLeod, Anne McGregor and Graeme Stevenson.

We would also like to thank each one of the 99 young adults who took part in the focus groups, and who generously shared their views and experiences with us.

Professor Linda Bauld at Stirling University gave us helpful information in the early stages of this study about the development of e-cigarettes, and later provided input to our research topic guide. Andy Morrison from the New Nicotine Alliance gave us a crash course in e-cigarettes from the perspective of a vaper. Karin Dowell transcribed all of our focus group recordings with her usual good grace, and with great speed and accuracy.

Finally, we are grateful for the support and encouragement we received from Fiona MacDonald at the Scottish Government throughout this study, and for the input of the members of the Scottish Government's research advisory group: Amanda Amos (Edinburgh University), Celia Gardiner (NHS Health Scotland), Colin Lumsdaine (NHS Lothian), Siobhan Mackay (Scottish Government), Alastair MacKinnon (Fast Forward) and Nicola Rennie (Scottish Government).

A note about terminology

Throughout this report, the term 'vaper' refers to a person who uses e-cigarettes and 'vaping' refers to the action of using an e-cigarette.

The term 'smoker-vaper' is also used occasionally in the report to refer to people who were dual users of cigarettes and e-cigarettes.

In general, however, the report refers to 'non-smokers', 'smokers' or 'vapers'. Where these designations are used in Chapters 4-11 (the discussion of the qualitative findings), they refer to, respectively, 'participants in the non-smoking groups', 'participants in the smoking groups' and 'participants in the vaping groups'. In fact, many of the individuals who took part in the smoking and vaping groups were smoker-vapers.

Executive summary

Introduction

1. This report presents findings from qualitative research which investigated young adults' awareness and experiences of, and attitudes towards, e-cigarettes. The study was intended to explore a broad range of issues with young adults, and to address a significant gap in the current evidence base. The research involved a series of focus groups and was carried out between October 2015 and February 2016 in three Scottish cities. This study specifically sought to hear from young adults, aged 16 to 25, who were no longer in school.

2. Surveys in Scotland and elsewhere have shown a strong association between smoking and e-cigarette use, and between smoking and deprivation. Thus, a purposive sample was constructed: participants were recruited on the basis of employment status, smoking and vaping status, and age. The study included smokers, vapers and, to a lesser extent, non-smokers in three socio-demographic groups: (i) in further or higher education; (ii) in employment; and (iii) not in employment, education or training (NEET).

Focus group participants and the generalisability of the findings

3. Thirteen focus groups were carried out – five groups of smokers, five with vapers and three groups of non-smokers. Altogether, 99 young adults (54 men) took part, with a roughly equal number aged 16-19 and 20-25.

4. The study deliberately 'over-recruited' current smokers and vapers, since these groups were most likely to have views on, and experiences of using, e-cigarettes. Smaller numbers of non-smokers and non-vapers were also included to provide a basis for comparison. Thus, just over half (52%) of those who took part were regular smokers and a further 17% were occasional smokers. Most participants (77%) had tried vaping, although less than a quarter of the non-smokers said that they had ever vaped. Forty percent of participants reported that they were current vapers (defined as vaping at least once a week) and 39% of the regular smokers were also current vapers.

5. The purposive sampling approach means that the findings presented here are not typical of the wider population of 16- to 25-year-olds in Scotland (most of whom are non-smokers), and this has to be borne in mind in considering the findings.

Young adults' awareness of and attitudes towards e-cigarettes

6. Participants in this study generally had a high level of awareness of the range of commercially available e-cigarettes. Across all groups, individuals recognised different types of devices when shown images of them; understood that some were disposable and others were refillable and rechargeable; knew that different e-cigarettes produced

variable amounts of vapour; and were aware of the wide range of flavoured liquids available. There appeared to be less awareness of e-cigarettes among individuals in the non-smoking groups.

7. The use of e-cigarettes was common in the family and social networks of the young adults who took part and, when asked why these individuals had taken up vaping, the reason given in most cases was 'to stop smoking'.

8. The focus groups included young people who were positive about e-cigarettes – they welcomed them as an alternative to traditional cigarettes, and in some cases actively enjoyed using them instead of, or as well as, cigarettes. These individuals commented favourably on taste and flavours, convenience, social acceptability, smoke tricks and vaping culture, and health. However, others thought that 'they're like a hobby, not seriously used for quitting'; or that they are 'rubbish' and 'don't work'. The last observation was usually from smokers who had tried an e-cigarette with the expectation that it would help them stop smoking but, for various reasons, the reality of their experience had been somewhat different. For example, these participants listed a number of perceived failures or shortcomings with the devices in terms of the sensory experience offered in comparison to smoking, including that: they do not curb the cravings for tobacco, 'you don't get any good smoke out of them', and 'they are not enjoyable'. There was also a view among some that switching to e-cigarettes was just swapping one addiction for another.

Young adults' experiences of using e-cigarettes

9. The main motivation for participants initially trying an e-cigarette was the desire to quit, or cut down on, smoking, and those who gave this reason generally believed e-cigarettes to be less harmful than tobacco. However, other reasons for trying e-cigarettes were: curiosity; the potential for saving money; convenience; a need for secrecy in 'smoking'; social reasons (because 'lots of people' were using e-cigarettes); or to do 'smoke tricks'. For some individuals, the decision to try an e-cigarette was taken on impulse, without a great deal of thought beforehand.

10. Participants obtained their first e-cigarette from a range of sources. Most commonly, they had bought their own; someone (often a family member) had bought one for them to encourage them to stop smoking; or they had tried a device that belonged to someone else.

11. Participants described both positive and negative experiences of their first e-cigarette. Those who had positive experiences said they liked the taste, which was contrasted with the 'disgusting' taste of tobacco. However, more often, participants said that their first experience of an e-cigarette was unpleasant in several respects: they disliked the taste; the vapour made them cough; they felt a burning or other uncomfortable sensation at the back of their throat; or they felt sick or lightheaded. Vapers frequently said that they did not initially enjoy using e-cigarettes and found the experience too different to smoking but, by persevering and trying different devices and flavours, they found something that suited them.

12. The accounts that young adults gave of the relationship between vaping and smoking in their lives were varied and complex. Dual use was common, and patterns of use appeared to be highly specific to each individual. Some people vaped during the day, but smoked at home (morning and evening); others did the opposite, vaping at home, but smoking elsewhere. Some vaped all week but smoked at the weekend when out with friends; others smoked all month, but vaped at the end of the month when they had little money.

13. The movement back and forth between e-cigarettes and tobacco cigarettes was also common. Some people said they vaped for weeks or months, but then the device broke, or they lost it, or 'forgot about it', and so began smoking again.

14. However, in general, regular vapers reported that they were smoking less – in some cases **much** less – than before they started using e-cigarettes, and that this had led to what they considered to be improvements in their health.

15. The research included a number of vaping 'enthusiasts' (individuals who enjoyed the technical aspects of vaping as much as the perceived health and social benefits), as well as those who had tried vaping but then stopped. The main reasons individuals gave for stopping were that: e-cigarettes were perceived to be an inadequate substitute for tobacco; e-cigarettes tasted unpleasant; or the individual had health and safety concerns about e-cigarettes.

Cessation experiences and views about the addictiveness of e-cigarettes

16. Many participants had attempted to quit smoking in the past and had tried a range of cessation aids (nicotine gum, patches, etc.). However, they were nearly unanimous in the view that these had not worked for them and, in some cases, had significant unpleasant side-effects.

17. Although not everyone who used e-cigarettes did so because they wanted to stop smoking, participants did see e-cigarettes **mainly** as smoking cessation aids. When smokers and vapers were asked what it was about an e-cigarette that helped them to quit smoking (or why vaping **did not** help them to quit smoking), they generally focused on the perceived pleasure (or perceived unpleasantness) of vaping, or on the similarities (or differences) between smoking and vaping. Both these issues often came down to the devices or liquids that participants were using, with less pleasant vaping experiences attributed to poor quality, cheap devices and liquids.

18. There was considerable debate within the groups about whether e-cigarettes themselves were addictive. Some believed they were not as addictive as tobacco cigarettes. Such individuals argued that e-cigarettes are not as 'enjoyable' and did not give the same 'draw' and noted that some liquids have little or no nicotine in them. In contrast, those who believed e-cigarettes were **as** addictive as (or **more** addictive than) tobacco, pointed out that e-cigarettes usually contain nicotine, and people who use them seem to use them constantly and 'don't know when to stop'.

19. Those who used both e-cigarettes and cigarettes often said there were certain circumstances in which 'only a cigarette will do'. These were: (i) when drinking; (ii) during times of stress; and (iii) first thing in the morning. Although not everyone agreed that e-cigarettes were ineffective (or less satisfying) in these circumstances, there appeared to be a shared understanding among smokers and vapers why some people might choose tobacco rather than e-cigarettes in these situations.

Young adults' views about vaping as a gateway to smoking

20. Given the ongoing debate within the public health community about the possible 'gateway' effect of e-cigarettes, focus group participants were asked for their views about the likelihood of people who **don't** smoke taking up vaping and then, from there, progressing to smoking.

21. There were individuals in all the groups who were aware of non-smokers who had taken up vaping, and there was a recurring view that e-cigarettes are made to seem particularly attractive to children because of the flavours and colours. Some of the non-smokers who took part in the research had tried vaping (usually out of curiosity), but all were adamant that they were not interested in vaping in the future.

22. Some participants suggested that for non-smokers, vaping is often 'just a phase', although others thought that the progression from vaping to smoking could happen in certain circumstances (for example, in a pub when the battery had run out of charge), or for certain people (who simply decide that they want to start smoking).

23. Across the groups, the general view was that it was unlikely that non-smokers would take up smoking after having tried an e-cigarette – not only because of the unpleasant taste and higher cost of cigarettes, but also because of the belief that smoking is bad for your health.

Health and safety issues

24. The safety of e-cigarettes was an issue for focus groups participants, and there was a spectrum of views, ranging from those who regarded them as 'safe' to those who saw them as 'dangerous'. The most common view was that they are safer than tobacco cigarettes. However, a perception that e-cigarettes were 'safer than cigarettes, but not entirely safe' was often linked to a lack of information, with participants saying that they were concerned about the health risks as they did not know what was in them. Participants also frequently provided examples, either first or second-hand, of people who had been injured by an e-cigarette or liquid.

25. Some reported that their decisions about whether (and where) to use an e-cigarette had been influenced by their concerns about health and safety. However, for the most part, concerns about health and safety aspects were not a significant factor in overall attitudes and behaviours. Rather, health and safety concerns about tobacco cigarettes were more likely to influence behaviour, encouraging individuals to switch to e-cigarettes despite their concerns about the latter.

26. However, across all groups, there were calls for more information. Participants wanted to know what is in e-cigarettes, how their use affects the body, whether they are more or less harmful than tobacco cigarettes, and what the long-term effects are.

Young adults as consumers of e-cigarettes

27. Cost was an important motivator and a perceived benefit for those who used e-cigarettes regularly, either exclusively or in combination with tobacco cigarettes. Participants were aware of the wide price range of different types of e-cigarettes.

28. Although participants largely agreed that using e-cigarettes was cheaper than smoking tobacco cigarettes (and this was seen as one of their main advantages), not everyone was convinced that the case for saving money was so clear cut. There was a view that potential savings were influenced by the extent to which people vaped. Some suggested that the way in which e-cigarettes may be used 'constantly' had cost implications; others highlighted that better quality devices and liquids involved additional expense.

29. While cost was a factor in encouraging some to switch, it was not, in itself, enough to persuade everyone to stop smoking tobacco cigarettes. Participants generally understood that savings could be achieved over the longer term by switching to e-cigarettes but the up-front costs were a potential barrier, particularly for participants in the younger age groups and those not in employment. Poor experiences of using e-cigarettes were often attributed to the use of cheap devices and cheap liquids. Regular vapers suggested that the quality of the vaping experience was enhanced by using more expensive products.

Knowledge and information

30. Participants had varying levels of knowledge about e-cigarettes, how they work, and the ingredients of e-liquids. Regular vapers appeared to be most knowledgeable although there were also some regular vapers who said they knew nothing about how e-cigarettes worked and some non-vapers who had a basic level of knowledge. Knowledge levels appeared lowest amongst non-smokers who were least likely to have ever used an e-cigarette. Participants often expressed dissatisfaction or frustration with the available information. Smokers and vapers generally wanted more information about two linked issues: (i) the ingredients of e-liquids and (ii) the health (particularly long-term) effects of using e-cigarettes and the effects compared to smoking tobacco.

31. Young adults reported that they mainly got their information from family and friends who used e-cigarettes. More formal sources of information included retailers, the internet, social media and, very occasionally, health agencies and professionals. Participants had mixed experiences and views in relation to these sources, and often expressed misgivings about the reliability or credibility of information obtained from retailers, manufacturers, the internet and social media. When asked specifically what sources they would trust, participants mentioned: doctors and scientists; public sector

organisations (e.g. the NHS, Health Scotland and the government), and organisations such as the World Health Organisation.

Regulation of e-cigarettes

32. This project did not specifically aim to explore the views of young adults on the regulation of e-cigarettes. However, the subject arose spontaneously in a number of early focus groups and so was covered more proactively in later groups.

33. Participants expressed a broad level of support for regulation of e-cigarettes, specifically in relation to product regulation, and sales and advertising. There was a clear view that there should be age-restrictions on the sale of e-cigarettes to deter use by children. There were more mixed views in relation to where vaping should be permitted, although the balance of opinion was in favour of some restrictions. However, not everyone was persuaded that this was necessary on health grounds and some saw indoor use as one of the advantages of vaping over smoking tobacco.

Conclusion

34. This research provides valuable information on young adults' behaviours and attitudes relating to e-cigarettes, a rapidly changing area of interest to policy makers and practitioners in the health field. The findings point to a clear role for the public health community in providing good-quality information while continuing to acknowledge that this is an area of emerging evidence. Furthermore, increased understanding of the experiences and attitudes of young people will be of interest to health promotion policy makers and practitioners who are exploring the role that e-cigarettes might play in encouraging smoking cessation.

1 Introduction

1.1 This is a report of a qualitative research study which explored young adults' awareness of and attitudes to e-cigarettes, and their experiences of using these devices. The research was commissioned by the Scottish Government and involved young adults in Scotland aged 16-25. Data collection for this study took place between December 2015 and February 2016.

Policy context

1.2 In recent years, there has been an increase in the sale, promotion and use of e-cigarettes in the UK. Provisional statistics published by the Office for National Statistics in 2015 indicate that, across Great Britain, there are now an estimated 2.2 million current e-cigarette users – equivalent to 4% of the adult population.¹ In Scotland, the most recent figures from the Scottish Health Survey (2014) indicate that 5% of over-16s are current e-cigarette users and a further 10% of Scottish adults report having *previously* used an e-cigarette.²

1.3 The growth in the sale and use of e-cigarettes comes at a time when the use of conventional tobacco cigarettes among Scottish adults is at its lowest point since 1999 when the Scottish Health Survey started to collect data on smoking, following a gradual decline from 31% in 1999 to 20% in 2014.³ E-cigarette use is strongly associated with smoking, with both current and past use of e-cigarettes much higher among current cigarette smokers than among non-smokers. Only 1% of adults who have *never* smoked report regular e-cigarette use in Scotland.⁴

1.4 Tobacco use has long been identified as a key contributor to poor health in Scotland, and effective tobacco control has been a health improvement priority for successive governments. Legislative action over the past decade has included restricting smoking in public places; raising the legal age for buying tobacco to 18; banning the sale of tobacco from vending machines; and the phased banning of tobacco displays in shops. At the same time, smoking cessation services have been widely available, and ongoing health education campaigns have been targeted at the general population to discourage smoking and encourage quitting.

1.5 The Scottish Government's tobacco control strategy, *Creating a Tobacco-free Generation* (2013), sets out a vision for a tobacco-free Scotland (defined as an adult smoking rate of 5% or lower) by 2034.⁵ This is a challenging target, despite the

¹ Office for National Statistics, *Adult smoking habits in Great Britain: 2014*.

² *Scottish Health Survey, Volume 1, Main Report*.
<http://www.gov.scot/Publications/2015/09/6648/318769>

³ *Scotland's People Annual Report: Results from 2014 Scottish Household Survey*.
<http://www.gov.scot/Publications/2015/08/3720/9>, see Chapter 9 (Health).

⁴ *Scottish Health Survey, Volume 1, Main Report*.
<http://www.gov.scot/Publications/2015/09/6648/318770>

⁵ <http://www.scotland.gov.uk/resource/0041/00417331.pdf>

reductions in prevalence achieved so far. The strategy addresses prevention, protection and cessation, and has an emphasis on tackling health inequalities.

1.6 While the reduction in smoking rates among adults has been encouraging, there has been a particularly dramatic fall among school-aged children. For example, data from SALSUS (the Scottish Schools Adolescent Lifestyle and Substance Use Survey) indicate that, among 15-year-old Scottish schoolchildren, regular smoking has fallen from 29% in 1996 to 9% in 2013.^{6,7} This is the lowest rate of regular smoking among this age group since the survey began in 1982. Similarly, among 13-year-olds, regular smoking has fallen from a peak level of 8% in 1998 to 2% in 2013. During this same period, there has been a corresponding increase in the proportion of Scottish teenagers who report never having tried a cigarette. However, the latest findings from the Scottish Household Survey indicate that smoking rates among young adults are still relatively high (19% of males and 17% of females in the 16-24 age group in 2014) which suggests that the transition to becoming a smoker in Scotland is happening at a slightly later age than in the past.

1.7 Evidence is beginning to emerge that the use of e-cigarettes can help adults quit smoking tobacco. However, there are concerns about the potential for use of e-cigarettes by children and young people. Debates tend to focus on two main issues: first, that e-cigarette use could act as a gateway to tobacco use for young people; and second, that their use and promotion could undermine the success of government initiatives and legislation in de-normalising cigarette smoking over the last decade.⁸

1.8 Given these concerns, and following a widespread public and stakeholder consultation, the Health (Tobacco, Nicotine etc. and Care) (Scotland) Bill was introduced to the Scottish Parliament on 5 June 2015.⁹ The Bill, which was passed by the Parliament on 3 March 2016, includes several measures intended to prevent access to e-cigarettes by children and young people under the age of 18, bringing them into line with other age-restricted goods like tobacco and alcohol. It also requires that sellers of e-cigarettes be centrally registered and introduces a number of restrictions on the marketing of the products.

E-cigarettes and young people

1.9 A review recently carried out by Professor Linda Bauld and colleagues found that, in four representative surveys carried out among UK teenagers in a 12-month period from 2013 to 2014, a significant proportion had tried e-cigarettes at least once – 8% in one survey across Great Britain, and 12% in a representative UK-wide survey

⁶ http://www.isdscotland.org/Health-Topics/Public-Health/Publications/2014-11-25/SALSUS_2013_Smoking_Report.pdf

⁷ C Johnston (2016) *Tobacco use among adolescents in Scotland: Profile and trends*. Scottish Government: <http://www.gov.scot/Publications/2016/02/3737>

⁸ An international literature review carried out for Public Health England found no evidence that non-smoking children who tried e-cigarettes were more likely to then try tobacco. However, this was because of a lack of available longitudinal data. See Bauld et al (2014), *E-cigarette uptake and marketing*. Public Health England.

⁹ <http://www.scottish.parliament.uk/parliamentarybusiness/Bills/89934.aspx>

and national surveys in Wales and Scotland.¹⁰ However, the proportion who regularly used e-cigarettes (defined as more than once a month) was still very low (ranging from 0.4% in Scotland to 2% in the UK), and regular use was almost entirely confined to young people who also smoked tobacco. The findings of this review are consistent with those of a Scottish Government commissioned survey conducted in late 2014 among secondary school pupils, aged 11-18.¹¹ This survey found that 16% of the sample had used an e-cigarette, but most of these (81%) had tried it only once or twice. Regular use (at least once a month) was reported by 3% of the sample. The 2013 SALSUS survey showed the strong association between e-cigarette use and smoking among teenagers, with 11% of regular smokers and 6% of occasional smokers reporting using e-cigarettes at least once month.

1.10 The Scottish Government's 2014 study found that curiosity was the main reason for first use, sometimes motivated by seeing a friend or family member using an e-cigarette. This differs from the main reason given by adults for using e-cigarettes, which is to reduce or quit smoking. This same survey found high levels of uncertainty about e-cigarettes among Scottish teenagers, due in part to a lack of reliable publicly available information.

1.11 These findings, taken together, suggest that some young people are experimenting with e-cigarettes, and that smokers are most likely to be regular users, but only very small numbers of young non-smokers are currently using these products on a regular basis. However, more research is needed to understand what the influences are that encourage or discourage their use among young people.

Aims of this research

1.12 Much of what we now know about young people's use of e-cigarettes is based on survey findings, and most of these surveys have focused on children and adolescents in school. At the time of this study, in Scotland, there had been little qualitative research carried out among adolescents and no published research with young adults in relation to their views on e-cigarettes.¹² This is a significant gap in the

¹⁰ L Bauld, AM MacKintosh, A Ford & A McNeill (2015) "E-cigarette uptake amongst UK youth: Experimentation, but little or no regular use in nonsmokers." *Nicotine and Tobacco Research*, 1-2, doi:10.1093/ntr/ntv132.

¹¹ *Young People and E-Cigarettes in Scotland: A Survey of Secondary School Pupils*, September 2015. See: <http://www.gov.scot/Resource/0048/00486068.pdf>

¹² At the time of writing this report, two other qualitative research projects were underway in Scotland. The first is jointly funded by the UK Medical Research Council; Chest, Heart and Stroke Scotland; Fresh North-East; and Tobacco Free Futures and carried out by Shona Hilton and colleagues at Glasgow University, with 14-17 year olds. One paper from this research had been published and a second was under review at PLOS ONE: H Weishaar, F Trevisan, S Hilton (2016) "Maybe they should regulate them quite strictly until they know the true dangers": A focus group study exploring UK adolescents' views on e-cigarette regulation. *Addiction*, doi: 10.1111/add.13377; S Hilton, F Trevisan, H Sweeting, H Weishaar, V Katikireddi: E-cigarettes, a Safer Alternative for Teenagers? A UK Focus Group Study of Teenagers' Views: under review PLOS ONE. The second, funded by Cancer Research UK, is being carried out by Professor Amanda Amos and colleagues at Edinburgh University. This study is with 16- to 25-year olds and will conclude by the end of 2016.

evidence particularly since (as noted above) the transition to smoking is generally taking place in the 16-25 year age group. Work in this area is necessary to inform government policy on the regulation of e-cigarettes and public health interventions among young adults.

1.13 The aim of this study was to gather evidence, through primary research, from young adults aged 16-25 in Scotland about their awareness and experiences of using e-cigarettes and their attitudes towards these devices. Given the strong association between smoking and e-cigarette use, the focus of the research was mainly on **smokers** and **vapers** in three socio-demographic groups: (i) those who were in further or higher education; (ii) those who were in employment; and (iii) those who were not in employment, education or training (NEET). Specifically, the research sought to hear from young adults who were *no longer in school*. Non-smokers were also included in the research, but to a lesser extent.

1.14 The research sought to explore:

- The place of e-cigarettes in the lives of young adults (for example, their own use of, or experimentation with e-cigarettes including the reasons for this, and their interest in trying e-cigarettes in the future)
- What young adults know about these products (for example, in relation to affordability, accessibility, quality, safety, different types of products, and why they are used and by whom)
- Young adults' information and support needs (including where they currently get their information about e-cigarettes, and the levels of trust that they have in relation to these information sources).

2 Methods

2.1 This chapter sets out details of the research methodology used in this study. It includes information about the approach to sampling, the recruitment methods, details of the topic guide, and the conduct of the focus groups. At the end of this chapter, we also discuss our use of quotes in this report.

Research design and purposive sampling approach

2.2 A qualitative research design was used to conduct this study. Specifically, 13 focus groups were undertaken with young adults aged 16-25 in three Scottish cities. The rationale for using focus groups was that they allow participants to discuss topics in a spontaneous and naturalistic way, while also enabling them to interact with each other. It was thought that young people, in particular, would find this method less intimidating than one-to-one interviews and would feel less pressure to provide what they may think are 'socially acceptable' answers given that they would be among their peers. The use of focus groups also enabled the study to involve a relatively large number of young people within the time constraints available.

2.3 The aim of qualitative research is to obtain an in-depth understanding of a particular issue from the perspective of the people being studied. Statistical inference and the 'representativeness' of the findings are not the aim. Rather, the intention is to gather information which can be generalised to groups who have similar characteristics to those who took part in the research. In order to do this, care must be taken in creating the sample.

2.4 The approach to sampling in this study was intended to ensure that the young adults who took part in the research reflected a number of population characteristics that are key to understanding the issue of e-cigarette use in this group. In particular, the approach took into account what is known about: (i) the prevalence and nature of cigarette and e-cigarette use among young people; and (ii) the relationship between tobacco smoking and deprivation.

2.5 As set out in the previous section, recent survey findings have shown that a relatively high proportion of young people have experimented with e-cigarettes, although *regular* use is mainly restricted to current smokers. At the same time, smoking is strongly linked to deprivation, with the highest smoking rates among those living in the poorest communities.

2.6 Age was also an important factor. As stated above, the transition to smoking largely takes place within the 16-25 age group, and so, this study sought to include sufficient numbers of young adults from across this age group to cover potentially different views and experiences which may be associated with age and life stage.

2.7 Therefore, a **purposive sample** was constructed based on: (i) participants' employment status (i.e. in education / employed / unemployed), (ii) their smoking / vaping status (i.e. smoker / vaper / non-smoker), and (iii) their age.

2.8 Unemployed people were specifically included in the study as a way of capturing the views of people affected by deprivation. The overall sample was biased towards smokers and current vapers, as these groups were expected to have a more in-depth knowledge about and personal experience of using e-cigarettes.

2.9 Altogether, thirteen (13) focus groups were carried out, involving a total of 99 young adults. (Details of the achieved sample are in the next chapter.) There were five groups with vapers, five with smokers and three groups with non-smokers. Seven of the groups comprised young adults aged 16-21, and six comprised those aged 19-25.¹³ Six of the groups were with young adults in employment, five were with unemployed young adults and two were with students in college (further education).

Recruitment methods

2.10 Young adults were recruited through a range of organisations in three Scottish cities: Glasgow, Edinburgh and Dundee. The aim was to recruit around eight individuals, and an equal number of males and females, in each focus group. Contacts with education and workplace organisations were facilitated by individuals in health promotion departments and Healthy Working Lives teams in NHS Boards.

2.11 There were some initial difficulties in recruiting groups of vapers – particularly among the younger age range (16-21s) and among those who were unemployed. A large number of young people's support services were contacted to request assistance with recruitment, but service managers reported that vaping among these groups was rare – mainly, they said, because young adults in these groups could not afford to buy e-cigarettes. (This is a finding in itself and the cost of e-cigarettes is discussed further in Chapter 9.)

2.12 Notwithstanding this, the focus groups were eventually recruited through:

- A third sector employability service for young people (two focus groups)
- A third sector health promotion service for young people (two focus groups)
- A further education college (two groups with students and one group with staff)
- Two large private sector organisations employing young adults in call centres or apprenticeships (four focus groups)

2.13 In addition, two focus groups (one with older unemployed vapers and one with older employed smokers) were arranged with assistance from a professional focus group recruiter.

2.14 Each recruiting organisation was given a short information sheet about the project to provide to potential participants, and a detailed set of inclusion criteria for focus group participation. For example: they were asked to gather a group of smokers, aged 16-21, in employment; or vapers, aged 19-25, who were unemployed.

¹³ One of the older groups also included 18-year-olds. Four of the younger groups comprised those aged just 16-19.

Each recruiting organisation was given £15 for each participant they recruited as an acknowledgement of the time and effort recruiters spent in assisting the research. Focus group participants were given £30 in cash to thank them for their time.

Topic guide

2.15 The topic guide was developed in consultation with the Scottish Government and the Research Advisory Group established for this project. Topics included:

- Knowledge about e-cigarettes
- Experience of using e-cigarettes and the reasons for doing so
- The types of e-cigarettes used and the contexts in which they are used
- General perceptions of e-cigarettes, including views about a possible 'gateway' effect
- Perceptions of the safety and quality of e-cigarettes
- Perceptions of price / affordability / accessibility of e-cigarettes
- Information and support needs

2.16 Each discussion was tailored to the group; so, for example, there was less detailed discussion with non-smokers about their experience of using e-cigarettes since the non-smokers all had little, if any, such experience.

Conduct of the focus groups

2.17 All focus group participants were asked to complete a one-page anonymous questionnaire (included in the Annex) at the start of the discussion. This included questions about their sex, age, employment status, vaping status ('Have you ever vaped?' and 'Do you currently vape – i.e. use an e-cigarette at least once a week?'), and smoking status. In relation to the last question, it was left open to the individual to define him/herself as a smoker, non-smoker, occasional smoker, or former smoker – no specific criteria were given to participants to distinguish between smoking and occasional smoking. Participants who identified themselves as smokers, occasional smokers or former smokers were asked how old they were when they started smoking.

2.18 Each focus group lasted between 40 and 60 minutes. Focus groups with non-smokers tended to be shorter than those with smokers or vapers.

2.19 Part of the discussion involved showing participants photographs of a range of e-cigarette devices and liquids and asking them whether they had ever seen these before. Included among the photographs was a disposable e-cigarette device which has been developed for use in prisons and was not commercially available, so it would probably never have been seen by most people. This photo was included to gauge the level of awareness among participants about specific types of devices.

Use of quotes in this report and the designation of participants

2.20 Quotes from focus group participants are used throughout this report. Each quote includes a reference which contains the following information:

- The focus group ID (FG1, FG2, etc.)
- The sex of the speaker (male, female)
- Which target group the speaker was part of (e.g. smoking group, under 21, in further education; or non-smoking group, aged 19-25, in employment)

2.21 As will be seen in the following chapter, many of the individuals who took part in the smoking and vaping focus groups were, in fact, dual users of cigarettes and e-cigarettes (smoker-vapers). Other participants moved back and forth between smoking and vaping.

2.22 Thus, although there are references throughout the report to ‘smokers’ or ‘vapers’, strictly speaking where these designations are used in Chapters 4-11 (the discussion of the qualitative findings), they refer to ‘participants in the smoking groups’ and ‘participants in the vaping groups’, respectively. While some in the non-smoking groups also had previous experience of trying vaping, there were no current vapers in these groups. There were, however, some people in the vaping groups who defined themselves as non-smokers or former smokers. These individuals are simply referred to as vapers.

3 Description of the participants

3.1 This chapter provides information about the young adults who took part in the research. It is important to emphasise that the findings discussed here are *not* representative of the wider population of 16- to 25-year-olds in Scotland due to the purposive sampling approach used in the study. (See again Chapter 2.)

Sample description

3.2 Table 3.1 provides details about the sample achieved in the 13 focus groups. Altogether 99 young adults aged 16-25 took part in the research. The sample included a slightly higher proportion of males (55%) than females (45%).

Table 3.1: Sample description

Target groups		Location (ID)	M (n)	F (n)	Total (n)
Vapers (5 groups)					
Under 21s	In employment	Glasgow (FG6)	3	2	5
	NEET / living in an area of high deprivation	Dundee (FG10)	4	1	5
18-23s	In further / higher education	Dundee (FG3)	6	3	9
19-25s	In employment	Glasgow (FG11)	4	5	9
	NEET / living in an area of high deprivation	Edinburgh (FG7)	4	1	5
Smokers (5 groups)					
Under 21s	In further / higher education	Dundee (FG2)	4	4	8
	NEET / living in an area of high deprivation	Edinburgh (FG4)	4	6	10
	NEET / living in an area of high deprivation	Dundee (FG9)	2	7	9
19-25s	In employment	Glasgow (FG5)	6	3	9
	In employment	Edinburgh (FG8)	4	3	7
Non-smokers (3 groups)					
Under 21s	NEET / living in an area of high deprivation	Edinburgh (FG1)	4	2	6
	In employment	Dundee (FG13)	2	5	7
19-25s	In employment	Glasgow (FG12)	7	3	10
Total (n)			54	45	99
Total (%)			55%	45%	100%

About the participants

3.3 **Age of participants.** Table 3.2 provides details of the age profile of the sample. Approximately half the sample was aged 16-19 (54%), and half aged 20-25 (46%).

Table 3.2: Age of participants

Age	n	%
16	15	15%
17	16	16%
18	11	11%
19	11	11%
20	8	8%
21	5	5%
22	3	3%
23	5	5%
24	14	14%
25	11	11%
Total	99	100%

* Percentages do not total 100% due to rounding.

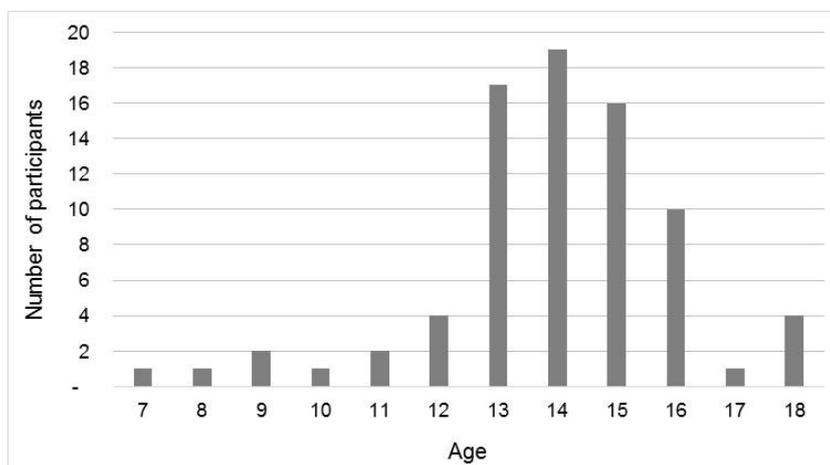
3.4 **Smoking status of participants.** Table 3.3 sets out the self-reported smoking status of participants. Just over half (52%) of those who took part in the study were regular smokers and a further 17% were occasional smokers.

Table 3.3: Smoking status of participants

Smoking status	n	%
Non-smoker	22	22%
Former smoker	9	9%
Smoker	51	52%
Occasional smoker	17	17%
Total	99	100%

3.5 **Age of first smoking.** Among those who were current or former smokers (n=77), age of first smoking ranged from 7 to 18, with most (n=19) having started at age 14 (Figure 3.1). Two-thirds of the sample (n=52, 68%) commenced smoking between the ages of 13 and 15, while a fifth (n=15, 19%) only began smoking at age 16 or later.

Figure 3.1: Age of first smoking



3.6 **Experience of vaping.** Most of the participants (77%) reported that they had tried vaping. However, among non-smokers, less than a quarter (23%) had ever vaped. (Table 3.4.)

Table 3.4: Number and proportion who had ever vaped, by smoking status

Ever vaped?	Yes		No		Total	
	n	%	n	%	n	%
Smoking status						
Non-smoker	5	23%	17	77%	22	100%
Former smoker	9	100%	0	0%	9	100%
Smoker	46	90%	5	10%	51	100%
Occasional smoker	16	94%	1	6%	17	100%
Total	76	77%	23	23%	99	100%

3.7 **Current vaping status.** In addition, 40% of the participants overall reported being **current** vapers – defined as vaping at least once a week (Table 3.5). Non-smokers and current smokers were least likely to be current vapers, while occasional smokers and former smokers were most likely to be current vapers.

Table 3.5: Number and proportion who were current vapers, by smoking status

Current vaper?	Yes		No		Total	
	n	%	n	%	n	%
Smoking status						
Non-smoker	2	9%	20	91%	22	100%
Former smoker	5	56%	4	44%	9	100%
Smoker	20	39%	31	61%	51	100%
Occasional smoker	13	76%	4	24%	17	100%
Total	40	40%	59	60%	99	100%

Dual use of cigarettes and e-cigarettes

3.8 Table 3.5 shows that 39% of regular smokers in this study were also current vapers. Furthermore, most of the current vapers reported being either regular or occasional smokers: half were regular smokers, and a third said they smoked occasionally. These findings suggest that there is likely to be a large degree of overlap in the views and experiences discussed by participants in the vaping and smoking groups. The vaping groups were not solely groups of vapers, but largely consisted of smoker-vapers; this was also true of the smoking groups, but to a lesser extent.

3.9 Again, note that the figures shown in this section are not representative of the wider population of 16- to 25-year-olds and so do not correspond to the prevalence figures discussed in Chapter 1. In particular, the purposive sampling approach used in this study was specifically designed to target current vapers and smokers.

4 Young adults' awareness of and attitudes towards e-cigarettes

4.1 This section presents findings in relation to young adults' awareness of e-cigarettes. Further details about the specific knowledge that young adults had about e-cigarettes will be presented in Chapter 10.

Vocabulary

4.2 At the beginning of each focus group, the young adults were asked what words they use to refer to: (a) an e-cigarette and (b) the action of using an e-cigarette. While the term 'e-cigarette' was recognised and understood by everyone, other words were often used. Those mentioned most often, across all groups, were:

- Vapour
- Vape
- Vapouriser
- E-cig

4.3 Some groups also identified a wider range of terms, including:

- Fake fag (or electric fag or fake cigarette)
- A pen (or e-pen or smoking pen)
- A crack pipe (or pipe)
- A sonic screwdriver

4.4 Participants also sometimes referred to 'box mods', 'shishas' or specific brand names in later discussions, although no one offered these terms when asked at the beginning of the discussion. One group of vapers pointed out that the shops they buy e-cigarettes from seem to make a distinction between 'vapes' and 'e-cigarettes', which they suggested was related to the branding of the devices.

4.5 Words used by young adults to refer to the action of using an e-cigarette included:

- Vaping (having a vape)
- Smoking (having a smoke)
- Blowing (or smoking) some air
- Blowing 'O's / doing smoke tricks¹⁴

¹⁴ There are a wide range of terms used to describe the various smoke tricks that can be performed using a box mod or other vapour-producing device.

Recognition of different types of e-cigarettes

4.6 Participants were asked about their awareness of e-cigarettes. They were shown pictures of different devices as a prompt to discussion.

4.7 In general, the participants had a high level of awareness of the different types of e-cigarettes commercially available. Individuals across all groups were able to discuss the differences between types of e-cigarettes, understood that some were disposable and others were refillable and rechargeable; and that different e-cigarettes produced variable amounts of 'smoke' (or vapour). Participants also were aware that there is a very wide range of flavoured liquids available and that some liquids were intended to mimic the taste of a cigarette, while others tasted nothing at all like a cigarette (e.g. strawberry, watermelon, bubble gum, etc.), and that the liquids contained varying levels of nicotine. Individuals in the groups often commented that the pen-style e-cigarettes were the most popular.

4.8 There appeared to be slightly **less** awareness of e-cigarettes among individuals in the non-smoking groups. For example, one non-smoker said that she recognised what a box mod was, but was not sure that she had ever seen someone using one. Another said that he had seen people using box mods, but was uncertain of how they were different from pen-style e-cigarettes. Others said they were unaware that different liquids contained different levels of nicotine.

4.9 With few exceptions, when participants were shown a photograph of the device that is not commercially available, they commented that they had never seen an e-cigarette like it before.¹⁵ Those (few) who thought they had seen this device simply believed it was a variation of a pen-style e-cigarette.

The use of e-cigarettes in young adults' networks

4.10 The use of e-cigarettes was common in the family and social networks of the young adults who took part in this research. All the participants knew someone who currently (or had previously) used an e-cigarette – including parents, grandparents, aunts / uncles, brothers / sisters, partners, friends or colleagues. This may partly be a reflection of smoking rates in the socio-economic groups these young people were from. When asked why these individuals had taken up vaping, focus group participants nearly always said: 'to stop smoking'.

4.11 Many could describe the types of devices used by individuals in their family and social networks, and were aware that some people had successfully used e-cigarettes to stop smoking, some had not entirely quit but had managed to reduce their smoking, and still others 'went back to fags' because the e-cigarette 'didn't work', or because e-cigarettes 'just weren't the same'.

¹⁵ As discussed in Chapter 2, this device was designed to be safe for use in prisons and was not commercially available.

Young adults' attitudes to e-cigarettes

4.12 Focus group participants were not explicitly asked to talk about their attitudes to e-cigarettes. Rather their attitudes were explored as part of wider discussions regarding their awareness of and knowledge about e-cigarettes. The most common attitudes expressed by young adults are discussed below. These issues generally arose spontaneously, rather than because they were specifically asked about.

E-cigarettes are cool / some people think e-cigarettes are cool

4.13 There were differing views about the extent to which e-cigarettes were considered to be 'cool', and some young adults voiced the opinion that, while **some** people their age might think they were cool, they themselves did not think that. All three of the non-smoker groups spontaneously raised the issue of the perceived 'coolness' of e-cigarettes as an explanation for why some people their age (and younger) were trying them. However, these non-smokers, themselves, did not see e-cigarettes as cool.

'Because they think they're cool, when they're really not! They need to grow up! Either smoke or just quit. I don't see the difference, just because they've got like strawberry flavours, it's not any better.' (FG1, Female, non-smoker, aged 16-19, unemployed)

'I think there's a bit of it that... some of them will be addicted and it'll be a better way of getting nicotine or whatever for them, and then there's the fashionable aspect of it, where people are doing it because it's trendy, and that's why there's all these shops everywhere, and they're making it trendy and the adverts are making it trendy, so it'll be a little bit of, like, the people who are facilitating their nicotine, they're maybe wanting to try and go about it in a more healthy way, but then there are people that are just like, "Oh that's pure cool".' (FG12, Female, non-smoking group, aged 19-25, in employment)

4.14 The smoking groups also often raised the issue of 'coolness'. Some had the impression that 'wee kids think that vaping is cool', and some stated that they had initially tried an e-cigarette because 'it looked cool'.

4.15 The vaping groups, on the other hand, did not generally talk about the 'coolness' of e-cigarettes. Only one individual – an unemployed young man, aged 16-19 – reported being motivated to take up vaping (after he had already successfully quit smoking) 'because it's cool', and this young man had gone on to become a vaping enthusiast (see Chapter 5 for a discussion of 'vaping enthusiasts'). Another young man commented that he was aware of non-smoking friends buying e-cigarettes; but his view was that this was 'a dumb thing for people to do.'

They're like a hobby – not seriously used for quitting

4.16 The view that e-cigarette use is like a hobby and that e-cigarettes are not seriously used for quitting smoking often arose in discussions with non-smokers and smokers, but not with vapers. Those who had this view commented that some vapers were using liquids that had no nicotine content at all, and they pointed to the predilection among vapers for using their devices to do 'smoke tricks'. (Experiences of using of e-cigarettes to do 'smoke tricks' is discussed in Chapter 5.)

'The flavoured ones are like a hobby. It's not really like trying to quit smoking, because if you were trying to quit smoking you'd want something as close to fags as possible. Some of the flavours, you get the ones with zero nicotine, and it's just like you're not getting any nicotine, all you're doing is just smoke rings.' (FG2, Male, smoking group, under 21, in further education)

'I think people just do it now as more of a hobby than actually needing to do it. I don't think they're addicted to it at all. I don't think it's a habitual thing. I just think it's because they like having it and they like that people look at it and go, "Oh, look how much smoke I can blow. It's brilliant."' (FG12, Male, non-smoking group, aged 19-25, in employment)

They're rubbish / they don't work

4.17 The view that e-cigarettes are 'rubbish' or that they 'don't work' was expressed almost exclusively among groups of smokers, and all but one of the smokers' groups expressed this view. The perception that 'they don't work' was often related to an expectation that young adults had that e-cigarettes would help them to stop smoking, whereas the reality of their experience had been different. The view that e-cigarettes are 'rubbish' was partly related to this same expectation, but was also sometimes a comment about the taste or about the fact that the devices break easily. Participants listed a number of perceived failures or shortcomings with the devices in terms of the sensory experience they offer in comparison to smoking:

- They don't curb the cravings for cigarettes
- 'You don't get any good smoke out of them'
- They are not enjoyable
- They cause a feeling of 'fuzziness' on the tongue and / or 'make your nose feel weird'.

4.18 It is not clear whether the smokers who expressed these views were referring to a single device that they had tried to use, or to different types of devices.

4.19 Vapers sometimes also expressed similar views, but they tended to do it in relation to a specific device – the cigalike (or fake fag). Among vapers, there was a common view that 'only a half decent e-cigarette is effective in helping people to quit smoking'.

Switching to e-cigarettes is like swapping one addiction for another

4.20 The view that the use of e-cigarettes is like swapping one addiction for another was expressed mainly by smokers and vapers. One group of non-smokers had a similar view, but this was expressed more along the lines of, 'vaping is just the same as smoking'. This belief was given as the reason why non-smokers were not interested in trying e-cigarettes. Some non-smokers also raised this point, indirectly, in commenting on the behaviour of other non-smokers who **had** tried e-cigarettes:

'I think people who don't smoke think it [vaping] is not smoking – obviously because people say it's not harmful and there's different flavours. So they think they're not actually smoking, when they are.' (FG1, Female, non-smoking group, aged 16-19, unemployed)

4.21 Among smokers and vapers, the view that using e-cigarettes is like swapping one addiction for another was given in some cases as a reason for people not to vape (or to stop vaping), as addiction itself was seen as undesirable. However, in other cases the swapping of one addiction for another was given as an explanation for how vaping helped people to stop smoking. (Chapter 6 will discuss these issues in greater depth.)

Young adults' reasons for not trying vaping

4.22 Before going on to discuss young adults' experiences of using e-cigarettes in the next chapter, it is worth noting that most of the non-smokers and a small number of the smokers (10%) had never tried vaping. (See again Table 3.4 in Chapter 3.) In general, non-smokers tended to equate vaping with smoking – or associated it with stopping smoking – and therefore saw no reason to be interested in vaping themselves. A similar point was made by this small group of smokers: they saw vaping as a way of quitting smoking and, at this point in their lives, they were not interested in stopping smoking and so had no interest in vaping.

5 Young adults' experiences of using e-cigarettes

5.1 This chapter will discuss young adults' experiences of using e-cigarettes – including their reasons for trying them, what they like and don't like about them, the contexts in which they use e-cigarettes, the impact of using e-cigarettes on their use of tobacco, and why some have continued to vape while others have stopped. This chapter will show that e-cigarettes are largely seen as smoking cessation aids by young adults, but that is not their **only** role.

5.2 Chapter 6 will look in more detail at young adults' experiences of smoking cessation, their understanding of their own addiction to, and dependence upon, smoking and their views on the addictiveness of e-cigarettes.

Young adults' first experience of e-cigarettes

Motivations for trying e-cigarettes

5.3 As shown in Chapter 3 (Table 3.4), more than three-quarters (77%) of the young adults who took part in this research (including nearly a quarter of the non-smokers) had tried an e-cigarette at least once.¹⁶ When asked about their reasons for trying one, focus group participants discussed a wide range of motivations.

5.4 The desire to quit, or cut down on smoking was the main reason given, and those who cited this as their motivation for trying an e-cigarette generally believed that they were less harmful than ordinary cigarettes. However, not everyone who tried an e-cigarette did so with the intention of giving up or reducing their smoking. In fact, there were some individuals who stated that they had already successfully stopped smoking for a period of time, and only took up vaping later, and of course, there were also some non-smokers who had tried an e-cigarette.

5.5 Other common reasons for trying e-cigarettes were:

- **Curiosity:** Some said they just wanted to see what it was like; that they were intrigued; that they wanted to know what the difference was between using an e-cigarette and smoking an ordinary cigarette; or because they 'wanted to see if they were as good as everybody was saying'.
- **Flavour / smell:** Linked to the motivation of curiosity was the desire to try the different flavours. Participants were aware of the wide range of flavours available and wanted to sample them. Some also thought that e-cigarettes 'smelled really nice', and this pleasant smell contrasted sharply with the smell of cigarette smoke, which some said they hated.

¹⁶ Note again, that these figures are *not* consistent with current prevalence rates because of the purposive sampling approach used in this research.

- **Cost:** Some participants were motivated by the desire to save money. There was a perception that e-cigarettes were ultimately cheaper than cigarettes – although as discussed in Chapter 9, the relatively large initial outlay for good-quality devices was seen to be a barrier for some young adults, both in starting and in continuing to vape.
- **Convenience:** Some pointed out that e-cigarettes give people a way of getting nicotine in places or circumstance where they could not otherwise have a cigarette – for example, in their own homes (where they would otherwise feel they needed to go outside), on the bus or in the pub. However, participants also noted that many places which had initially allowed vaping on their premises now no longer did so, and this led some to question the convenience of vaping over smoking.
- **The need for secrecy:** Others said they wanted to be able to use an e-cigarette in places where they might get in trouble if they were found smoking, such as on a school trip or a cadet camp, or at home where their parents did not permit them to smoke.
- **Social reasons:** Young adults in some groups had the perception that ‘everyone’, or at least ‘lots of people’, seem to be using e-cigarettes and seem to enjoy them. Thus some said they wanted to be part of what appeared to be a fun and pleasurable activity among their friends – i.e. ‘to join in the banter’.
- **Because it looked cool / they wanted to do smoke tricks:** The perception that e-cigarettes looked ‘cool’ or ‘funky’ motivated some young adults to try them. Some discussed the appeal of doing ‘smoke tricks’ and said that this was a competitive, but fun activity among some vapers.

5.6 Other reasons for trying e-cigarettes, mentioned less often, were:

- Because they had run out of cigarettes and an e-cigarette was readily available at the time
- To annoy a teacher
- Out of boredom
- Because the individual was drunk at the time.

5.7 Regarding the last point, it was clear that, for some individuals, the decision to try an e-cigarette was taken on impulse and without a great deal of consideration – at a party or in a pub or club. Others said they made a snap decision when they were at a kiosk to buy cigarettes or they purchased their first e-cigarette because they had been offered a discount. One individual tried their first e-cigarette as a result of a promotion in which they were being given out for free.

Where they got their first e-cigarette

5.8 The most common sources from which young adults obtained their first e-cigarette were:

- **They bought their own:** Usually those who bought their own first e-cigarette bought it in a shop – i.e. a convenience store or garage, a shopping centre or market stall, a specialist vaping shop – or in a nightclub.
- **Someone bought one for them or gave one to them:** Young smokers sometimes said that their first e-cigarette came from a relative – usually a parent, a grandparent or an aunt – to encourage them to stop smoking. One individual said that the first one he tried was made for him by a friend.
- **They tried one belonging to someone else:** It was also common for young adults to sample e-cigarettes belonging to other people – friends, parents and other relatives, or colleagues.

Experience of first use

5.9 The participants in this study described a range of experiences of their first use of an e-cigarette – both positive and negative.

5.10 Those who said their first experience was positive generally highlighted the pleasant flavour or taste which they contrasted with the ‘disgusting’ taste of a cigarette. Some non-smokers said they also liked the flavour of the e-cigarette they tried, but were not interested in trying one again.

5.11 However, it was more common for young adults to say that their first experience of an e-cigarette was unpleasant in several respects: they disliked the taste; the smoke caused them to cough or choke; they felt a burning or other uncomfortable sensation at the back of their throat; or it made them feel sick or lightheaded. These unpleasant experiences were reported across a range of devices. One individual said that the first time he used an e-cigarette (a pen-style device), the top had not been screwed on properly and he got hot liquid on his face. He also said he felt pains in his lower abdomen when he began using e-cigarettes, but these disappeared over time.

5.12 Others said that they felt e-cigarettes simply did not give them the same satisfaction as a cigarette. The following quotes illustrate some of these issues:

‘I was sitting there continuously smoking it and I was like “This isn’t...”. And the fag one [cigalike], I don’t know what’s used in that, but that seemed to dry your throat out, really dry your throat out.’ (FG5, Male, smoking group, aged 19-25, in employment)

‘I really was not keen on it whatsoever. But I was, like, I’ll try and stick at it to quit smoking, but no, I gave up with it because it was horrible.’ (FG2, Female, smoking group, under 21, in further education)

‘It [a box mod] pure chokes you. Yeah, it’s pure mental how much smoke comes out of that one. It was pure lethal. I smoked it and it was horrible.’ (FG9, Male, smoking group, aged 16-19, unemployed)

‘Someone gave me one [a cigalike], I think it was actually my gran. She was, like, “Oh you should try this, this is so much better”, and I literally was,

like, as if I had just sucked talcum powder out of a straw. I was like, it was so rubbish. “Ok, that didn’t curb any cravings, they’re rubbish!” So then I got one of those ones [pen-style e-cigarettes] and I was like, “I’m really going to do this, I’m really going to try”, but it was just rubbish as well. It doesn’t do the same thing [as a cigarette].’ (FG6, Female, vaping group, under 21, in employment)

5.13 Those in the vaping groups often commented that when they first started vaping, they did not enjoy it and found the experience too different to smoking. However, by persevering, and trying different devices and flavours, they found something that suited them.

Regular use of e-cigarettes

5.14 Despite the unpleasant first experience that young adults often had, some nevertheless continued to use e-cigarettes. As noted in Chapter 3 (Table 3.5), 40% of participants described themselves as current vapers (i.e. at least once a week) and current vaping was highest among former smokers and occasional smokers.

5.15 Young adults’ experiences of vaping, and their explanations of the relationship between vaping and smoking in their lives were varied, complex and highly individual. However, some recurring themes arose and several of these are discussed below. Other themes, related to the use of e-cigarettes as smoking cessation aids and the addictiveness of e-cigarettes, will be discussed in Chapter 6.

E-cigarettes can help people to quit or reduce their smoking, but the journey is not always straightforward

5.16 As reported above, not everyone who tried vaping did so with the aim of quitting smoking. However, it was common for those in the vaping groups to say that the use of e-cigarettes had helped them to reduce their smoking including, in some cases, when they had not actually set out with this aim. For example, some participants reported that, once they started vaping, they found they could not tolerate the smell and taste of cigarettes anymore and so decided to stop smoking as a result. It was also clear that some had managed to quit smoking altogether – although success was not attributable in every case to the use of e-cigarettes, as people sometimes began vaping only after they had already quit smoking.

5.17 However, dual use of e-cigarettes and tobacco cigarettes was common, and decisions about dual use appeared to be highly specific to each individual.

5.18 Some dual users said that they used e-cigarettes at certain times of the day and cigarettes at other times. For example, one person only smoked tobacco cigarettes at home, morning and evening, but vaped throughout the day; while another did the opposite, vaping at home, but smoking when away from home during the day. One young man said he vaped all week until Friday when he went out drinking with friends when he swapped to cigarettes. Another said he tended to use

his e-cigarette 'towards the end of the month when he has no money'. Some reported that they used ordinary cigarettes when they forgot to charge their e-cigarette.

5.19 In addition, a recurring theme in the discussions about dual use was that an e-cigarette simply was not as satisfying as a cigarette in certain circumstances – namely, when drinking, when under stress, or first thing in the morning (discussed further in Chapter 6).

5.20 Just as dual use was common, so too was the movement back and forth between e-cigarettes and tobacco cigarettes. Those who regularly vaped reported that they sometimes went for long periods without a cigarette, but returned to tobacco when their e-cigarette was lost or broken, or simply because 'it was easier to go and buy fags than buy the replacement parts' for the e-cigarette. Others reported resorting to cigarettes at times of intense stress, and then returning to vaping again once the stress had reduced. (Again, see Chapter 6 for further discussion of this point.)

5.21 However, in general, those who vaped regularly reported that they were smoking less – in some cases **much** less – than before they started vaping.

'[For me, it has been an] on and off sort of process. Like, when I first got my new vape, I did it for about two months and then I just sort of forgot about it, so I just got back into smoking, but it didn't really last too long, because I wasn't used to it, you know, I was more used to the vape. So I still smoke quite a bit, but it's less than it was before, but it's just remembering I've got my vape and I should be using it instead.' (FG6, Male, vaping group, under 21, in employment)

'I always said to myself that as soon as I start having 20 a day I would stop. The only time I smoke... there was an occasion a couple of weeks ago when my electric fag broke and I was on a night out, so I had to go and buy fags for that, but even then, I bought a pack of 20 fags, I smoked four and I gave the rest away because I can't smoke a normal fag anymore. I'm on that [e-cigarette] permanently now, yeah. But I don't look at it as a way of stopping smoking, it's just a cost-cutting measure for me, like.' (FG3, Male, vaping group, aged 18-23, in further education)

'[I was smoking] 20 to 30 a day, but after that I started with that [the e-cigarette] and I was, like, one [cigarette] in the morning and I could do without all day.' (FG7, Male, vaping group, aged 19-25, unemployed)

Switching from tobacco cigarettes to e-cigarettes led to improvements in health

5.22 Those who regularly vaped and no longer smoked said that their health had improved as a result. The main health-related benefits they reported were that they no longer coughed, had breathing problems or got regular chest infections. Some reported feeling fitter (i.e. being able to run more than previously), others said they just generally felt healthier. Others referred to changes in their voices: one young woman described her voice as more 'girly' since she quit smoking and took up vaping,

while one young man observed that vaping did not result in the ‘voice deprivation type of thing’ that he often got with cigarettes. One young woman listed several improvements to her health which had occurred since she started vaping:

‘I’ve noticed huge changes in my health. I can sleep better. I don’t get out of breath as quickly, because to be honest I was smoking since I was 16 and I stopped when I was 22, so that was a long time smoking. And to just stop and wean off to something that’s basically steam based... the cough went away, the breathlessness went away, the sleeping got better. I didn’t wake up in the middle of the night with coughing fits, and my kidneys got healthier as well, because I had kidney issues, and that just sort of went away.’ (FG3, Female, vaping group, aged 18-23, in further education)

5.23 In some cases, participants commented that the health of people they knew – parents or friends who had taken up vaping to quit smoking – had also improved.

People do not use e-cigarettes in the same way as cigarettes

5.24 It was common for young adults across all groups to observe that people used their e-cigarettes differently to the way they smoked tobacco. Several statements were repeatedly used to describe this aspect of vaping behaviour: ‘It is never out of my hand’, ‘I use it constantly’, ‘I was smoking it all the time’.

‘I was using it [e-cigarette] constantly, all the time because I had it in my hand. You find out you might cut down on fags, but you’re just smoking that all the time.’ (FG4, Female, smoking group, under 21, unemployed).

5.25 Some participants were unconcerned about this, believing e-cigarettes to be less harmful than ordinary cigarettes. Others thought that their constant use of an e-cigarette possibly meant that it was worse for their health than tobacco cigarettes. Some people gave up vaping because of this concern, and some individuals no longer smoked or vaped. Other individuals found that when they returned to cigarette smoking, they smoked more than they had previously because they were now in a different routine. This issue is discussed in greater depth in Chapter 6.

E-cigarette enthusiasts

5.26 Among the five focus groups of vapers, there were one or two individuals (males and females) in each group who might be described as vaping ‘enthusiasts’ or ‘experts’. For these individuals, the appeal of vaping was not only in relation to the perceived health and social benefits that the devices offered. Vaping appealed to them on an intellectual level too, and all of them had a detailed technical knowledge about how different devices worked (see Chapters 8 and 10). Some of these individuals participated in online forums for vapers which provide advice about vaping etiquette and

to encourage a vaping 'lifestyle'. They also discussed vaping humour,¹⁷ and all of them expressed great pleasure in doing smoke tricks or 'making big clouds'.

Smoke tricks

5.27 One of the appeals of vaping, for some young adults, was in being able to use the devices to do 'smoke tricks'. This activity was seen as fun by some individuals, and one young woman described it as 'a sport – the strongest cloud wins'. Some referred to online videos which demonstrate how to do smoke tricks. Three young adults in one group listed some of the tricks that they had done or seen:

Male 1: 'Blowing Os. French Inhale.'

Male 2: 'I can put vape in a glass and then pour it out.'

Female: 'Making circles and jellyfish things.'

Male 1: 'Blowing it onto the table and doing tornadoes.' (FG10, vaping group, aged 16-19, unemployed)

5.28 Another young man shared his experience of filling a room with vapour:

'It's fun trying to fill your room up with vape when you have the massive big box mods because you can put the wattage right up and try and mess about with it, and there's quite a lot you can do with it. I remember once at a party I completely filled one of the bedrooms.' (FG6, Male, vaping group, under 21, in employment)

5.29 Other vapers were less interested in this type of activity, and some non-smokers who had seen people doing smoke tricks considered it to be immature. At the same time, there was a view expressed by some participants that young children who start vaping often do so because they want to be able to do smoke tricks, and indeed one non-smoker said that this was what had appealed to him. One young woman echoed this sentiment, but said that she eventually lost interest:

'Well, I was only interested in it for the smoke tricks, and I lost interest in it, so, I still have it, it's just I don't use it at all.' (FG2, Female, smoking group, under 21, in further education)

Reasons for giving up vaping

5.30 In this study, 90% of smokers had tried vaping, but only 39% said they were current vapers. This section explores the reasons that young adults gave for stopping vaping and returning to smoking. Many of these have already been mentioned above.

¹⁷ For example, some participants referred to a meme circulating widely on social media sites that pokes fun at the volume of smoke produced by some devices. Google: 'We get it bro, you vape'

- **E-cigarettes are felt to be an inadequate substitute for cigarettes:** Smokers talked about the 'draw' or the 'kick at the back of the throat' which they get from a cigarette, but which they said they did not get from some e-cigarette devices. Others said that the e-cigarette simply did not satisfy their craving, or that it did not help them cope with stress in the same way as a tobacco cigarette.
- **E-cigarettes taste unpleasant:** Although young adults were aware that there was a wide range of flavoured liquids to choose from, not all were interested in exploring and sampling different liquids or could afford to do so. Therefore, if they had an unpleasant experience with the taste the first few times they tried one, they sometimes did not look further. One young man (a former smoker) said that he stopped using his e-cigarette (and now no longer smokes anything) when his preferred liquid began to be manufactured by a different company and the taste changed.
- **The individual was concerned about their health:** Some smokers said that they noticed they began coughing **more** once they stopped smoking and started vaping. Others were concerned that their constant use of the device was resulting in them getting too much nicotine.
- **The individual was concerned about safety:** Some were put off using e-cigarettes because of stories they had read (in the media or social media) about faulty and leaking devices causing injury or harm.
- **E-cigarettes are too 'futtery (fiddly)':** While some young adults (the enthusiasts) enjoyed the technical aspects of using e-cigarettes, others found that the ongoing requirement to charge the device, replace various components, and to clean and refill the reservoir at regular intervals, just turned them off.
- **The individual 'forgot about it':** Participants sometimes 'forgot' to charge their devices – and expressed frustration at being unable to use a vaping device with a flat battery. Others said they went on holiday and forgot to take their e-cigarette device, and so started smoking again while they were away.
- **The device was broken or stolen:** Participants talked about how easily the devices (particularly the pen devices) could break. Some had purchased several devices because each one had broken, but eventually gave up due to the expense and went back to smoking cigarettes. There were also occasional cases where an individual's device had been stolen.
- **The individual lost interest:** Some who started vaping because they wanted to do smoke tricks said they simply lost interest.

6 Cessation experiences and the addictiveness of e-cigarettes

6.1 This chapter discusses young adults' previous experiences of smoking cessation – that is, experiences **prior** to their use of e-cigarettes. It also explores how they viewed e-cigarettes in terms of smoking cessation and what young adults believed about the addictiveness of e-cigarettes relative to ordinary tobacco cigarettes.

Young adults' experiences of smoking cessation

6.2 Smokers, former smokers and vapers were all asked if they had previously tried to quit smoking, and if so, to discuss their experiences.

6.3 Those who had made quit attempts in the past had tried most types of cessation aids, and participants were almost unanimous in the view that these aids had not worked for them, and furthermore, that they had significant unpleasant side effects. Nicotine patches caused allergic reactions, nausea, light-headedness and nightmares; the gum, spray and mouthwash all tasted 'disgusting'; and the 'puffer' caused headaches. Only very occasionally did a participant say that some type of smoking cessation aid had helped them to reduce their smoking.

6.4 Some participants said they had previously attempted to quit by 'going cold turkey' – with varying degrees of success ranging from half-a-day to two and a half years. Others talked about trying to distract themselves (by reading, playing video games or taking up a hobby), playing with elastic bands ('that worked a wee bit, yeah'), and spending money on other things ('so that you don't have money for fags').

6.5 There was a view among some that, 'if you are determined to quit, you can quit'. This view was echoed by some who had been unsuccessful in their previous attempts, who believed that their inability to quit was the result of a lack of 'willpower'. However, others had found it particularly difficult to maintain the motivation to quit smoking when they lived with parents who smoked, or when all their friends smoked.

E-cigarettes as smoking cessation aids

6.6 As discussed in Chapter 5, not everyone who used an e-cigarette did so because they wanted to stop smoking. However, this was certainly the most common reason given and participants believed that it was also the main motivation for other people they knew who used e-cigarettes. Thus, participants saw e-cigarettes **primarily** as smoking cessation aids.

6.7 In discussing their experiences of using e-cigarettes, smokers and vapers tried to explain what it was about an e-cigarette that helped them to quit smoking – or, by contrast, why vaping **did not** help them to quit smoking. These explanations often focused on the perceived pleasure (or perceived unpleasantness) of vaping, or on the

similarities (or differences) between smoking and vaping. Both of these issues often came down to the devices or liquids that participants were using.

The quality of e-cigarettes and liquids

6.8 Young adults often attributed the less pleasant vaping experiences to poor quality, cheap devices and liquids. Switching to a better quality device and better quality liquids made a difference for some.

‘I started on the pen and I kept going back to smoking, and then I thought, I’m just going to invest in a bigger one and it’s worked.’ (FG6, Female, vaping group, under 21, in employment)

6.9 The exchange below also illustrates this point:

Male: ‘When you wake up after drinking and smoking, you feel horrible.’

Female 1: ‘Do you not feel, like, when you’re drunk, though, you crave the fag?’

Female 2: ‘No, see, I prefer using my vapour now, aye.’

Female 1: ‘See, I was using a vape just completely, and then we went to a beer garden one day and it was sunny, and I was having a pint, and I was like “This just isn’t cutting it”, and that’s when I went and bought a packet of fags and it all started again.’

Female 2: ‘Don’t get me wrong, I still get a craving when I’m drinking for a fag, but I prefer smoking that [e-cigarette] now when I’m drinking.’

Male: ‘I think you need to have a half decent electric cigarette.’

Female 2: ‘Aye.’

Female 1: ‘Aye, that’s probably...’

Male: ‘See if you buy these ones that’s all like string inside them and all that, forget that, that’ll not work.’

Female 2: ‘Aye it doesn’t work, exactly.’ (FG11, vaping group, aged 19-25, in employment)

6.10 Vapers who regularly used mod boxes often said that they were better than other devices, because they allowed the user greater control over the level of nicotine and the amount of vapour produced by the device. Mod boxes were also reported by some to give the same ‘kick at the back of the throat’ that a cigarette does.

6.11 However, some participants said that they simply could not afford the large initial outlay required for a better quality device, and these individuals preferred to keep smoking cigarettes rather than continuing to use a cheaper device that they did not enjoy using. The issue of e-cigarette pricing is discussed in Chapter 9.

The similarities and differences between smoking and vaping

6.12 Those who were using e-cigarettes exclusively tended to focus on the more pleasant taste and smell of an e-cigarette, as compared with the ‘disgusting’ taste and smell of a cigarette. While some said they sought to replicate the taste of a cigarette (for example, by choosing a menthol flavour), others said that it had been more helpful to them to choose a flavour that was completely different to cigarettes (to break the association between vaping and smoking).

6.13 Some vapers talked about the importance for them of the hand-to-mouth action and the production of ‘a cloud’ from the exhalation of vapour which they felt helped to mimic the experience of smoking. The production of a vapour cloud appeared to have an important role for some, not only in staying off cigarettes, but in managing stress.

The addictiveness of e-cigarettes compared to cigarettes

6.14 Focus group participants were asked how addictive they thought e-cigarettes were in comparison with ordinary tobacco cigarettes. This question resulted in considerable debate within the groups.

6.15 Those who believed that e-cigarettes were **not** as addictive as tobacco cigarettes gave the following arguments to support their view:

- E-cigarettes are not as enjoyable as cigarettes
- E-cigarettes do not give the same ‘draw’ or ‘hit’ as a cigarette does
- Some e-cigarette liquids have little or no nicotine in them.

6.16 In contrast, those who believed that e-cigarettes were **as** addictive – or **more** addictive – than tobacco cigarettes pointed out that e-cigarettes usually contained nicotine. This group commented that people who use e-cigarettes seem to use them constantly, and do not know when to stop using them. Therefore, it appears that vapers are getting far more nicotine from an e-cigarette than they did from a tobacco cigarette simply because they are using them all the time. This line of argument led this group to conclude that e-cigarettes are more addictive than cigarettes.

Addiction vs habit

6.17 However, young adults were clear that the addiction to nicotine was only **one aspect** of a dependence on cigarettes. While some recounted their own experience of reducing their nicotine levels over time until they were using e-liquids with no nicotine content, or of finally finding a level of nicotine that satisfied their craving for cigarettes, others focused on the **habit** of smoking and the rituals they had developed in their lives around smoking cigarettes.

6.18 Some participants thought their addiction to nicotine was not the issue; rather they found that an e-cigarette was helpful in allowing them to replicate the hand-to-mouth motion that was a big part of smoking (and which patches and sprays and nicotine gums did not do).

6.19 However, others talked about the challenges of establishing new and different habits when using e-cigarettes, particularly given the very common experience that people had of ‘constantly using it’ and ‘never having it out of their hand’. Some believed that they should try to vape at the same times and in the same places as they smoked. Others disagreed: it was better for them to break the association with smoking entirely, including by avoiding situations where they would have previously smoked.

6.20 As noted above, there was also a view that switching to e-cigarettes was simply ‘swapping one addiction for another’. Some participants were unconcerned about this and happy to continue to use e-cigarettes indefinitely; others disliked this idea and so aimed to reduce their dependence on e-cigarettes as quickly as possible.

6.21 Ultimately, participants believed that issues of addiction and habit were very specific to individuals.

There are some circumstances in which people prefer or need a cigarette rather than an e-cigarette

6.22 At the same time, young adults who used both e-cigarettes and ordinary cigarettes explained that there are certain circumstances in which only a cigarette will do. Although there was some debate within the groups about the extent to which an e-cigarette was as ‘effective’ or ‘satisfying’ in those circumstances, nevertheless, there appeared to be a shared understanding among smokers and vapers about **why** some people might resort to a traditional cigarette in these circumstances. These included: (i) when drinking, (ii) during times of stress, and (iii) first thing in the morning.

When drinking

6.23 Vapers and smokers noted that people who smoke often smoke **more** when they are drinking, and people who vape throughout the week will often switch to cigarettes when they are out drinking at the weekend.

‘I was on the vaporiser because I went from smoking about 20 a day when I was travelling, and then came off and then went onto the vaporiser. Then I eventually came off cigarettes through the vaporiser, but I can’t stop smoking when I’m drinking, or socially in a pub or around people that are smoking.’ (FG8, Male, smoking group, aged 19-25, in employment)

‘I had stopped [smoking] for a full year without anything, but I still smoke and use the e-cig just now, because I went back to it. By drinking I ended up starting smoking again.’ (FG11, Male, vaping group, aged 19-25, in employment)

6.24 Non-smokers also commented on the association between smoking and drinking, and a few non-smokers said that their first use of an e-cigarette was when they were drunk.

6.25 For some young adults, the desire to smoke, rather than vape, when drinking was related to taste. One young man said, 'I think vaping and drinking would be a bit weird – a Corona and bubble gum!' Another referred to the smell of cigarettes which triggered a strong craving: 'See, if I'm sitting in the pub and my pal is going out for a fag, oh, you smell it, and you're, like, "I need a fag now. *I need one now.*"'

6.26 The social aspect of 'going out for a fag' and being part of a social group of smokers was also contrasted with the alternative of being left inside alone. As one participant said: 'It doesn't help when the majority of your friends are smokers, because they're not going to be like, 'Oh well, you're smoking an e-cig, I'll stay inside with you.'

During times of stress

6.27 Just as the situation of drinking in a pub with friends triggered a craving for tobacco cigarettes, so also did stress. Some smokers and vapers recounted their experiences of regular vaping which came to an end when a particularly stressful event occurred in their lives. Other dual users explained that their tobacco smoking was restricted to stressful situations, and there was a view amongst some vaper-smokers, particularly those who were unemployed, that they would find it difficult to stop smoking simply because of the stress of life.

'Yeah, I just really smoke when I'm stressed out and that. I'll have a packet of fags there and if I need to smoke I'll have a fag. If not, I'll just vape.'
(FG10, Male, vaping group, aged 16-19, unemployed)

'If you're an ex-smoker, for someone that's trying to stop smoking, the minute there's a stressful situation, the first thing they do is go and get a fag.' (FG9, Female, smoking group, aged 16-19, unemployed)

6.28 Those who highlighted this issue believed that 'smoking helps you calm down' in a way that vaping does not. One young woman commented that she had initially learned this from her mother:

'Like, even when you were younger, you'd ask your mum, "Why are you having a fag for?" And she was like, "Oh, I'm stressed." So you're thinking that will calm you down. So, that mind-set, that fags will calm you down, whereas a vape, you don't know... it doesn't seem to calm you down.'
(FG9, Female, smoking group, unemployed)

6.29 There was also a view that the process of rolling a cigarette is 'quite soothing', and that 'filling a tank of vape' cannot produce the same sense of satisfaction.

First thing in the morning

6.30 The 'need' for a cigarette first thing in the morning was discussed less often, although for some it accounted for their only cigarette of the day:

'I always have a fag in the morning, I have to admit, so I usually start [vaping] maybe about lunchtime.' (FG7, Female, vaping group, aged 19-25, unemployed)

'Nothing beats that morning cigarette. You can vape all day and just like "oh it's ok", but that first one in the morning is just magnificent, honestly!' (FG6, Male, vaping group, aged 16-21, in employment)

6.31 Smokers and vapers clearly had a shared understanding of why some people would choose a tobacco cigarette in such circumstances, although it is important to reiterate that **not everyone** agreed that e-cigarettes were unsatisfying at these times.

6.32 Indeed, in relation to drinking, some vapers said that they now preferred to vape when drinking because they disliked feeling sick the next morning after a night of combined smoking and drinking, or because they preferred to sit inside and drink rather than stand outside in the cold and rain. One young man said he had stopped smoking entirely, and had largely stopped vaping – but he continued to vape only when he was drinking. Another said that going outside to vape with his mod box often resulted in good conversations with smokers.

6.33 In relation to coping with stress, one young woman said that when she feels stressed, she just turns up the watts on her mod box 'to make bigger clouds', and this has a calming effect on her. Others said they simply vaped continuously when they were stressed.

6.34 Others vapers said that they had stopped having a cigarette first thing in the morning because they felt it tasted horrible.

7 Young adults' views about vaping as a gateway to smoking

7.1 The possible 'gateway' effect of e-cigarettes (i.e. that e-cigarettes might be taken up by non-smokers and later result in a progression to cigarette smoking) has been the subject of much debate in the public health community and in the media. For this reason, e-cigarette use by children and adolescents has been a particular focus of concern. However, there is currently insufficient evidence to say whether the gateway effect will materialise to the extent that it poses a significant public health challenge. In order to make a contribution to this debate, participants in all the focus groups were asked their opinions on the question of whether people who **do not** smoke might be likely to take up vaping, and from there, to progress to smoking.

Non-smokers taking up vaping

7.2 As previously discussed, participants gave various reasons for why they started vaping – some of which had nothing to do with quitting smoking. Some said they initially wanted to try an e-cigarette out of curiosity, to taste a particular flavour, to do smoke tricks, or 'because it looked cool'. While some of the non-smokers in this research had tried vaping (usually out of curiosity), these participants were unanimous that they were not interested in vaping in the longer term. Those who had never tried vaping expressed a strong distrust about the safety and perceived 'healthiness' of e-cigarettes. Some had asthma and saw e-cigarettes in the same light as ordinary tobacco cigarettes.

7.3 At the same time, participants across all groups said that they had often seen young children and teenagers using e-cigarettes, or hanging around outside of shops that sell e-cigarettes. Some expressed 'shock' at seeing young teenagers vaping while walking down the street with their parents.

7.4 There was a recurring view expressed that e-cigarettes are made to seem particularly appealing to children – because of the flavours and colours.

'It's made very attractive... because there was a point where I was like, "Oh I wouldn't mind just trying it once." I probably won't because I would like to know what is in it. But you see everyone doing it and sometimes they smell really nice, like sometimes they smell awful, but sometimes you're like, "That smells nice." And people will be like, "Do you want to try it?" and you'd be like – with a cigarette you'd be like "No" – but with that, I think you're not maybe thinking, "Oh I'll get addicted to it", or "No, it'll taste harsh", you're thinking, "Oh it's just a cool flavour", do you know what I mean?" (FG12, Female, non-smoking group, aged 19-25, in employment)

7.5 Participants also commented that e-cigarettes were widely perceived not to be harmful, and since it was possible to use e-cigarettes without nicotine (thus avoiding nicotine addiction), this also encouraged young people to try them even if they had not previously smoked.

Views about the possible progression from vaping to smoking

7.6 There was some disagreement among young adults about whether non-smokers might be inclined to take up smoking after having tried an e-cigarette. The most common view was that it would be unlikely for the following reasons:

- **Taste:** ‘But then somebody that’s never smoked, they’re just used to smoking the vape like, and then they go and get a real fag and they go “Yuck!”’ (FG11, Female, vaping group, aged 19-25, in employment)
- **Cost:** ‘But if you start on an e-cig and you’re paying less money and you get all these awesome flavours and whatnot, and then you try a cigarette and it tastes horrendous, you’re probably not going to want to smoke, and for the price as well, like £10 a go.’ (FG7, Male, vaping group, aged 19-25, unemployed)
- **People think vaping is ‘better for them’ than smoking:** ‘I don’t think so. I think people when they start vaping, they vape more because they think it’s better for them than what smoking is.’ (FG13, Female, non-smoking group, aged under 21, in employment)
- **Vaping is ‘just a phase’:** ‘My little brother came home with one, he’s a health freak, and just because of the simple fact it was a Jägerbomb flavour, he came home with this vape stick, no nicotine in it, but he had it for a couple of weeks and it was just a phase, he just put it away and that was it.’ (FG8, Female, smoking group, aged 19-25, in employment)

7.7 However, others thought the progression to smoking **might** occur in certain circumstances or that certain individuals might be inclined to start smoking after trying vaping.

‘I think it depends on the personality, because you’re either interested or you’re not.’ (FG12, Female, non-smoking group, aged 19-25, in employment)

7.8 Participants also pointed to the ‘hassle’ of vaping which could make smoking seem more attractive to some people:

‘I think so because sometimes the vape can be a bit of a hassle, like if it runs out of charge and you’re on a night out then you’re going to go and buy cigarettes, and then that’s when you start, when you have that one cigarette when you’re drunk.’ (FG11, Female, vaping group, aged 19-25, in employment)

7.9 There were a few participants who knew of someone (usually a younger teenager) who had started smoking after experimenting with vaping. The general view, however, was that this was unusual.

7.10 Some non-smokers also thought that certain people might be inclined to take up smoking after trying vaping. However, all said that they themselves would not be interested in this.

8 Health and safety issues

8.1 The safety of e-cigarettes was a key issue for focus groups participants. This was included as a specific discussion topic but it was also raised spontaneously in initial discussion exploring participants' knowledge and experience of e-cigarettes. Topics included perceptions of the health and safety risks of using e-cigarettes; experience and awareness of health and safety incidents; and information and evidence. Each of these is addressed below. The chapter concludes with a discussion about overall attitudes and behaviours linked to health and safety, which highlights the high degree of uncertainty amongst young adults about the safety of e-cigarettes.

Perceptions of the health and safety risks of using e-cigarettes

8.2 The focus groups included individuals who regarded e-cigarettes as 'safe' at one end of the spectrum and those who regarded them as 'dangerous' at the other end. There was a mix of views present in all groups, and most discussed their views in terms of relative safety in comparison with tobacco cigarettes. Participants expressed concerns on both health and safety grounds. However, while it was common for participants to recount (sometimes dramatic) examples illustrating their safety concerns, the possible health risks of using e-cigarettes attracted more debate in the focus group discussions.

8.3 The most common view among participants was that e-cigarettes were safe or, at least, safer than tobacco cigarettes. Participants offering such views thought that e-cigarettes contained no toxins or fewer toxins than tobacco cigarettes, and several participants specifically noted that e-cigarettes did not contain tar. Some regular vapers confidently explained the safety of e-cigarettes based on their knowledge of the ingredients:

'It's just really nicotine, water and flavouring. I've not seen any solid evidence to suggest otherwise... I don't see any evidence that's really suggesting that there's anything really in them that's that bad, you know.'
(FG8, Male, smoking group, aged 19–25, in employment)

8.4 More often participants stressed the **relative** safety compared with tobacco cigarettes – they thought e-cigarettes were safer than tobacco cigarettes, but were not convinced they were completely safe. One participant, for example, commented:

'Yeah, it's not as bad as smoking, but there is still, like, an element of harm to yourself, so that's why I am trying to get off it.'
(FG7, Male, vaping group, aged 19–25, unemployed)

8.5 Some who shared this view referred to the nicotine content in e-liquids as a potential source of harm:

'They're not [safe] because you are still smoking the nicotine... Safer than cigarettes, but they are not safe, obviously.'
(FG5 Male, smoking group, aged 19–25, in employment)

8.6 The view that e-cigarettes were ‘safer than cigarettes, but not entirely safe’ was often linked to a lack of information, with participants saying that they were concerned about the health risks because they did not know what was in them. Further, the discussion amongst participants often suggested a general sense that inhaling any substance into the body was ‘not natural’ and therefore could not be healthy.

8.7 There were a few instances, however, of participants noting specific factors which they thought affected the safety of e-cigarettes. These included:

- The pattern of usage – long-term use, frequency of use and the amount of vapour inhaled were all seen as having an effect on safety
- The flavours used – some flavours were reported to be safer than others
- The price and / or quality of the products used – there was particular concern about the ingredients in cheap e-liquids
- The age of the user – young people were said by some to be more vulnerable to negative health effects.

8.8 The remaining participants generally thought that e-cigarettes and tobacco cigarettes were ‘equally as bad’ or ‘just as bad as each other’; or that they were less safe than tobacco cigarettes. Younger participants – smokers and non-smokers – were most likely to offer such views.

8.9 These participants sometimes referred to unspecified ‘chemicals’ (or other ingredients) in e-liquids as harmful to health, and tended to give greater weight than other participants to accidents and product malfunctions, rather than just the possible impact on general health in reaching their conclusions. Some also suggested that the nature of the product – combining electricity, heat and ‘oil’ – made using it inherently risky. As with those who thought e-cigarettes were safer than tobacco cigarettes, this group also made it clear that a lack of information was contributing to their views.

8.10 Although participants often offered views on health and safety risks associated with e-cigarettes, they also frequently expressed a degree of uncertainty on this issue. It was not uncommon for participants to phrase their comments on this topic as rhetorical questions, or questions to the group, asking: ‘Are they not bad for you?’; ‘I know that smoking is toxic, but does a vape not have a really bad toxic chemical in it too?’; ‘Do vapes give you cancer?’, etc.

Health and safety incidents

8.11 As part of the discussion, participants often referred to health and safety ‘incidents’ caused by e-cigarettes which they had either experienced personally or were otherwise aware of. These included adverse health effects and physical injuries.

8.12 In relation to possible **health** problems, participants often relied on the media and ‘hearsay’ as their main source of information. They had, for example, heard that e-cigarettes could cause cancer, harm your liver, damage your hearing, and damage

your lungs, and there was a discussion in several focus groups about a condition called ‘popcorn lung’ which participants had read about on the internet.

8.13 Participants had less **personal** experience of health problems caused by e-cigarette use. Those who had used e-cigarettes did, however, occasionally say that their health had initially been affected when using e-cigarettes – e.g. they reported coughing and pains in the lungs – but that this had, in most cases, resolved itself with continuing use (these might be seen as typical symptoms associated with stopping smoking). There were also some reports of family members being affected by respiratory problems caused by ‘oil on the lungs’ as a result of using an e-cigarette, or suffering from asthma attacks as a result of being exposed to e-cigarette vapour. In contrast to these types of comments, some vapers described how their health had improved since switching from tobacco cigarettes. They talked of improved breathing, being able to exercise more, no longer coughing, and generally feeling healthier (see Chapter 5, paragraphs 5.23–5.24).

8.14 In relation to external **injuries** caused by e-cigarettes, participants across all the groups were able to provide examples of this, either first- or second-hand. Most commonly, people mentioned burns and blisters caused by hot liquid leaking or ‘spitting’ from e-cigarettes, or from e-cigarettes breaking, ‘popping’ or exploding, apparently, in some cases, while not in use. Some of these incidents had resulted in the need for hospital treatment.

8.15 While some respondents had had direct experience of such incidents, others related episodes involving family members or others in their wider social circles. Participants had also become aware of accidents involving e-cigarettes from the media, and social media in particular.

8.16 Some suggested that injuries could largely be attributed to poor quality products and components. Others thought that misuse of devices – perhaps resulting from inadequate knowledge – was a contributory factor in some accidents. Such participants tended to be regular vapers who stressed the importance of ‘knowing your stuff’ when using e-cigarettes, and maintained that they were safe ‘if you know what you are doing’.

Concerns about health and safety risks for children

8.17 Participants often voiced particular concerns about the potential health risks for children exposed to e-cigarettes: the harm that might be caused by inhaling ‘second-hand’ vapour; and the risk of injury caused by handling e-cigarettes and liquids owned by others (e.g. family members). Some vapers reported that they avoided using their e-cigarettes if children were present.

Information and evidence on the health effects of using e-cigarettes

8.18 Participants occasionally indicated some awareness of ongoing scientific and policy debates about the health effects of using e-cigarettes. Regular vapers were most likely to be aware of evidence and to refer to this in general terms, arguing that

e-cigarette use presented a low risk to health. Interestingly, one vaper referred to research that he said showed e-cigarettes to be '95% safer than cigarettes'. This is likely to be the evidence review published by Public Health England in August 2015 which received media coverage in the months prior to the fieldwork for this research.¹⁸ Other participants indicated a vague awareness of current research with one saying, for example, that 'they are trying to figure out if vapes are worse for you in the long run'.

8.19 However, more often, participants indicated a degree of confusion and / or scepticism about available evidence and related health advice. One participant was aware of research that had shown chemical levels in e-cigarettes to be low, but went on to say, 'I don't know if that's lying or not'; another said he was not sure what to believe. Others drew comparisons with constantly changing public health messages on issues such as diet. Others believed that the tobacco companies were involved in e-cigarette research and therefore questioned the validity of the findings.

8.20 Participants consistently referred to a perceived lack of evidence about the health risks. They repeatedly made the point that e-cigarettes were relatively new and it took time to build up hard evidence, particularly in relation to long-term health risks. Many respondents compared the situation to that of tobacco, and highlighted how it had taken many years for the health risks to be established and accepted. One individual said, 'Our generation will basically be the test subjects for long-term vaping,'

8.21 Participants often indicated that their own uncertainty was due to a lack of information. They suggested that they had insufficient information or that there was insufficient evidence currently available to reach a conclusion about safety, variously making statements such as: 'Nobody knows what's in them'; 'Nobody knows the long term effects'; and 'I don't know how safe they are because you don't know what kind of chemicals are actually inside it.'

Overall attitudes and behaviours linked to health and safety concerns

8.22 In terms of overall attitudes towards the safety of e-cigarettes, participants can be characterised as falling into the following main categories:

- Those who regarded e-cigarettes as safe products and had no concerns about using them. Participants in this category generally based their position on a relatively good understanding of the contents of e-liquids and how e-cigarettes worked; they also tended to use more expensive, better quality products.
- Those who had concerns, largely fuelled by first- and second-hand experiences of harm caused by e-cigarettes and a lack of clear evidence

¹⁸ A McNeill *et al* (2015) *E-cigarettes: an evidence update*. Public Health England. Available at: <https://www.gov.uk/government/publications/e-cigarettes-an-evidence-update>

demonstrating their safety, but who were nevertheless of the view that e-cigarettes were 'not as bad as tobacco cigarettes'.

- Those who were aware of concerns but were unperturbed by the possible health risks. These participants were smokers and held the same position with regard to tobacco cigarettes, with one person saying 'I've been smoking [tobacco cigarettes] for plenty of years and I don't care what's in them'. Their attitude was summed up by another participant who said 'you might get run over by a bus tomorrow'.
- Those whose concerns stemmed from the apparent shortage of information and evidence, and who therefore preferred to continue smoking tobacco cigarettes. The position of this group was best characterised as 'better the devil you know than the devil you don't'.
- Those who regarded e-cigarettes as 'dangerous', based on first- and second-hand experiences of harm caused by e-cigarettes. In general, this group was not interested in using e-cigarettes.

8.23 Some young adults reported that their use of e-cigarettes had been influenced by health and safety concerns, as follows:

- Some vapers reported not using their e-cigarettes around other people (children) because of health concerns, and one said he had stopped using e-cigarettes altogether because of his increasing concerns.
- Some smokers had been put off using e-cigarettes because of injuries caused by e-cigarettes, either to themselves or others.
- Some non-smokers and non-vapers said that health and safety concerns contributed to their decisions to not try e-cigarettes.

8.24 For the most part, however, concern about health and safety aspects of e-cigarettes was not a significant factor in overall behaviours and attitudes towards their use. Rather, it was more often the health and safety concerns related to **tobacco cigarettes** which influenced behaviour, encouraging people to switch to e-cigarettes despite their concerns.

8.25 Across all groups, though, there was a great deal of uncertainty about the health and safety implications of using e-cigarettes, particularly in relation to health risks, and participants called for more information. They wanted information on what was in e-cigarettes, how their use affected the body, whether they were more or less harmful than tobacco cigarettes, and what the long-term effects of use were.

9 Young adults as consumers of e-cigarettes

9.1 Chapter 5 noted that cost was an important motivator and perceived benefit for young adults who used e-cigarettes regularly, either exclusively or in combination with tobacco cigarettes. This chapter looks in more detail at the knowledge and attitudes of young adults relating to cost issues. It covers topics such as the relative cost of e-cigarettes and traditional cigarettes, long-term and short-term costs, and the links between cost and quality. The second part of the chapter looks at the purchasing of e-cigarettes; where young adults buy their e-cigarettes, any barriers encountered in making purchases, and perceptions of the availability of e-cigarettes.

The cost of e-cigarettes

9.2 Participants were aware of the wide price range for e-cigarettes – ranging from a pound or two for a ‘cigalike’ e-cigarette bought in a bargain store to a couple of hundred pounds for a ‘mod’ device bought from a specialist retailer. Discussion prompted by the photographs shown to the groups indicated that participants could generally recognise low cost and high cost devices. As discussed in Chapter 4, participants were aware that the more expensive devices incorporated features such as bigger batteries and the facility to vary the power and air flow and thus the ‘smoke’ produced. Less commonly, participants (largely non-smokers and non-vapers) were unclear about why one device might cost so much more than another.

9.3 In general, vapers had started on a cheap device – sometimes a disposable cigalike – and had then progressed to a more expensive and better quality one. Those using the more expensive mod type of e-cigarette were often those who might be classed as ‘enthusiasts’.

The relative cost of e-cigarettes and cigarettes

9.4 By and large participants agreed that using e-cigarettes was cheaper than smoking tobacco cigarettes – this was seen as one of their main advantages. Participants contrasted costs of between £20 and £40 a month for e-cigarettes and costs of £200 or more a month for tobacco cigarettes. The lower cost compared to tobacco cigarettes was said to be part of the ‘pitch’ used by those selling e-cigarettes.

9.5 Participants – particularly those in older age groups – agreed that this was a factor in trying e-cigarettes and in continuing to use them. Even those who did not see cost as a key reason for using e-cigarettes, nevertheless appreciated the money they saved as a ‘bonus’. Participants talked about the significant savings that they, or people they knew, had made as a result of switching wholly or partly to e-cigarettes.

9.6 However, not everyone was convinced that the case for saving money through switching to e-cigarettes was so clear cut. There was a view that the potential savings were influenced by the extent to which people vaped. Some suggested that the fact that e-cigarettes were used ‘constantly’ had cost implications; others highlighted that

moving on to better quality devices and liquids involved additional expense. One enthusiast explained the cost implications of having upgraded his device:

‘There’s only one thing that I really wish somebody had told me when I bought my box mod, and it’s how much vape the big ones go through. They really guzzle through it, and it can get really expensive if you’re buying nice liquid and you really enjoy the liquid so you use it over and over again.’ (FG6, Male, vaping group, aged 16–21, in employment)

He went on to say that he wished he had also kept his older less sophisticated e-cigarette which was cheaper to ‘run’ because it used less liquid.

9.7 Even though participants generally thought that cost was a factor in encouraging people to switch to e-cigarettes, this was not, in itself, always enough to persuade people to stop smoking tobacco cigarettes. One participant explained her feelings on this issue as follows:

‘It is a huge, huge saving. I actually get really angry with myself for not being able to quit smoking and go onto vaping because it is just, like, such a massive saving... It’s really annoyed me that I can’t [switch to e-cigarettes]... but it’s so much easier said than done. You can’t say, “Oh, I would save £200 a month, I’m going to stop tomorrow”, and then it comes to it and you’re like, “But it’s only £200 a month, it’s fine, I’ll manage, I’ll squeeze by and I’ll scrape and I’ll get money from somewhere so that I can smoke”, which is just a nightmare. I really wish I could stop.’ (FG6, Female, vaping group, aged 16–21, in employment)

Long-term and short-term costs

9.8 In discussing the cost advantages of e-cigarettes, participants in all groups acknowledged the short-term up-front costs involved in purchasing a refillable e-cigarette device. In most cases, however, they understood that savings would be achieved over the longer term. The up-front costs were, though, a potential barrier to using e-cigarettes, particularly for those participants in the younger age groups and those not in employment, i.e. those most likely to be on limited budgets. As one participant explained, it was ‘easier to go into the shop and spend £3 or £4 a day on buying 10 fags’ than to find the money for a one-off payment for an e-cigarette device, which he suggested might cost around £80.

9.9 Such participants also noted the advantages of being able to buy ‘single’ cigarettes, beg cigarettes from friends, or roll their own when they were short of money – all cheaper, ‘stop-gap’ options which were not available in the context of using e-cigarettes.

Price vs quality

9.10 Participants frequently expressed the view that ‘you get what you pay for’, i.e. that price was linked with product quality, for both e-cigarettes and liquids –

participants used terms such as 'high end' and 'up-market' when talking about more expensive products. Such views were particularly common among older individuals and those using e-cigarettes on a more regular basis. These participants had greater experience of using more sophisticated devices and more expensive liquids, and could thus make comparisons with cheaper products.

9.11 Participants often reported poor experiences which they attributed to using cheap devices and cheap liquids. Cheap e-cigarettes were described as flimsy, and prone to breaking, leaking or clogging up. Cheap liquids were associated with harsh tastes and, in some cases, injuries such as blistering in the throat and mouth.

9.12 Regular e-cigarette users also suggested that the quality of the vaping **experience** was enhanced by using a more expensive device. Some suggested that their enjoyment of vaping had increased when they moved onto using a more sophisticated device or more expensive liquids. This was attributed to factors such as improved flavours, greater control over the vapour production and, in some cases, an experience that was closer to smoking tobacco. Others suggested that those who experimented with cheap devices or cheap liquids were less likely to continue vaping because of the poorer vaping experience.

9.13 E-cigarette users often gave first-hand examples of positive and negative experiences linked to high cost and low cost products. However, there was also a generally accepted view that price could be regarded as an indicator of quality, and an associated wariness with regard to cheap devices or liquids. One participant stated, 'If you are going to buy a cheap version of anything, like anything in life... it's obviously not going to be good for you'. Participants often said they did not 'trust' cheap devices and liquids. Concern about the ingredients of e-liquids and the electrical safety of e-cigarettes, and a lack of product regulation were all noted as factors which contributed to this lack of trust.

Purchasing e-cigarettes

9.14 The research explored where young adults who used e-cigarettes bought their devices and liquids. Those with experience of using e-cigarettes reported purchasing their devices from a range of high street and online retailers. High street retailers included: newsagents, corner shops and convenience stores, bargain stores, supermarkets, stalls in shopping centres and on the street, as well as specialist e-cigarette shops. Less commonly, participants had purchased e-cigarettes in 'hippy' or 'legal high' shops and nightclubs. Online retailers included sites such as Amazon and eBay as well as specialist e-cigarette sites.

9.15 Non-specialist retailers were most likely to be used by younger, less regular vapers, while specialist retailers were most likely to be used by older more regular vapers. Vaping enthusiasts were particularly likely to use specialist retailers (high street and online); they also reported buying liquids from online retailers based outside the UK.

Views relating to purchasing on the high street

9.16 Participants in focus groups comprised of smokers and vapers were very aware of specialist e-cigarette shops in their local areas, and they often referred to them by name. These shops were said to have proliferated in the previous couple of years to the point that there was said to be ‘one on every street’ (it should, however, be noted that the fieldwork for this project was carried out in three wholly urban areas). Not surprisingly, awareness was lower among non-smokers – there was little discussion about places where e-cigarettes might be bought, and even some surprise at the existence of dedicated e-cigarette shops.

9.17 Those using e-cigarettes often valued the service provided by specialist shops. Such retailers were associated with quality products – they were referred to as ‘proper branded shops’ and ‘premium’ shops, and the staff were reported to be helpful and knowledgeable. For some, visiting the shops themselves was an attraction. One participant described a ‘pretty cool shop... where you can go in and make a day of it... you can try all the different liquids’.

9.18 Non-specialist retailers were valued for convenience, but tended to be associated with lower quality products, and less knowledgeable staff.

9.19 Some participants suggested that the growth in the number of high street retailers selling e-cigarettes was a factor which influenced behaviour. One smoker-vaper contrasted the current situation with that of a few years ago when he had first started using e-cigarettes:

‘... it was easier [then] to go and buy fags than buy the replacement parts! So that’s how it’s... and then at that time it was when it had first started, so there were only a few shops, there wasn’t as many shops as there are now. There was only certain places. Now every second shop you can get the stuff.’ (FG5, Male, smoking group, aged 19–25, in employment)

9.20 In another group two e-cigarette enthusiasts agreed that they were buying and using more e-liquids because the increasing number of specialist shops on the high street offering a wide range of different flavours made it easy to do so.

Views relating to purchasing online

9.21 Those buying online used specialist and non-specialist sites. Those using non-specialist sites were still keen to discriminate between legitimate and ‘dodgy’ suppliers.

9.22 Confidence was an issue for people in deciding to buy online. Some were uncertain about the origins and quality of products sold online or felt they did not have the basic knowledge to allow them to make informed choices. Such participants preferred buying face-to-face in a high street shop. Regular e-cigarette users with good knowledge levels were often more enthusiastic about buying online and saw this

as a way of accessing a wider range of high quality products, including those not available from UK-based suppliers.

Retailers and suppliers as sources of information

9.23 With regard to all types of retailers and suppliers, some participants voiced a degree of scepticism about the extent to which they could be trusted to provide unbiased information. (See Chapter 10 for further exploration of information sources.)

Marketing of e-cigarettes

9.24 This study did not specifically explore the issue of e-cigarette marketing. However, participants sometimes raised the topic spontaneously. Participants had encountered a range of marketing and promotional techniques used to encourage the use of e-cigarettes. These included:

- Adverts designed to promote e-cigarette use as a 'life-style' choice
- The opportunity to 'try before you buy' (for both devices and flavoured liquids) in shops and at stalls
- Counter displays encouraging impulse buys
- A promotional bus giving out free e-cigarettes
- The sale of e-cigarettes in nightclubs – perceived as a way of encouraging people to try e-cigarettes in an environment where they may have been drinking
- Discounts for staff who worked in shopping centres which hosted stalls.

9.25 Some also commented on the perceived role (and power) of the tobacco companies, and put forward two differing viewpoints as to how they could influence the market: (i) that tobacco companies were diversifying into e-cigarettes to protect their businesses as people's habits changed, and would use their power to promote the product and oppose regulation; and (ii) that research emphasising the dangers of e-cigarettes had been funded by the tobacco companies to discourage people from switching products.

10 Knowledge and information

10.1 Chapter 4 of this report looked at young adults' general awareness of e-cigarettes. This chapter explores in more detail what young adults know about e-cigarettes, what they would like to know, the information sources they are using and their views on those sources. The first part of the chapter focuses on knowledge, while the second part focuses on information sources.

What young adults know about e-cigarettes

10.2 The research explored what young adults know about (i) e-cigarettes and how they work, and (ii) e-liquids and their ingredients. The comments from participants indicated varying levels of knowledge and understanding, both within and across groups. The most knowledgeable young adults – perhaps not surprisingly – were regular vapers; however, the research also included regular vapers who said they knew 'nothing, literally nothing' about how e-cigarettes worked, and non-vapers who demonstrated at least a basic level of knowledge about e-cigarettes and e-liquids. Knowledge levels appeared to be lowest among non-smokers, who were also least likely to use or have ever tried an e-cigarette.

10.3 All the research groups included participants with some basic knowledge about e-cigarettes and liquids. These participants had a general understanding that e-cigarettes were battery powered, and worked by applying heat to a liquid to create 'steam' or 'vapour', and that newer e-cigarette devices (mods) incorporated additional functionality. It was also commonly understood that e-liquids contained 'oils', nicotine (participants often knew that liquids containing different levels of nicotine were available), water and flavourings, and that they did not contain tar. Younger participants, in particular, speculated as to the extent to which e-cigarettes contained unspecified 'chemicals' or other ingredients.

10.4 The most knowledgeable participants (all of whom were regular e-cigarette users) talked at length about how e-cigarettes worked and what e-liquids contained. Some were comfortable with terms such as VG (vegetable glycerine) and PG (propylene glycol), wattage and voltage, and had a sophisticated understanding of the more advanced types of e-cigarette devices and the effects of varying the proportions of PG and VG in their e-liquids. Some in this group were building their own e-cigarettes and buying ingredients and creating their own liquids. Some had spent time seeking out information on e-cigarettes (see paragraph 10.10), and others explained how their own scientific or technical education helped with their understanding of e-cigarettes. It was, however, clear that this level of knowledge was exceptional, and that not everyone who vaped was familiar with – or interested in – the technical detail recounted by these participants.

What young adults would like to know about e-cigarettes

10.5 When asked what they would **like** to know about e-cigarettes, smokers and vapers were largely in agreement about wanting more information about two related issues:

- The ingredients of e-liquids
- The health effects of using e-cigarettes – particularly the long-term health effects, and the relative effects compared to tobacco cigarettes.

10.6 Regarding health effects, some vapers and smokers drew comparisons with the wide availability of information on cigarettes. They commented that information was routinely available on cigarette packs about contents and health risks; others noted health education provided in schools as a source of information on smoking.

10.7 Less often, vapers also suggested that they would like more practical information on how e-cigarettes worked, the different options available to them, and how they should be used. Discussion in groups involving vapers indicated that the absence of easily accessible information on using e-cigarettes was an issue that others had also encountered, particularly when they had first taken up vaping:

‘It’s not very easy to find information if you don’t know anything about vaping. If you type in [an internet search] “What is vaping?”, like, you find, like, “This is this type”, like, mechanical mods, and you’re, like, “Whoa, I don’t understand anything!” It’s too much information at the start. No-one gives like a short explanation of everything. It’s very hard to understand all the types of devices, all the liquids, what’s inside the liquids, it’s too much information for people.’ (FG3, Male, vaping group, aged 18–23, in higher / further education)

10.8 However, not all e-cigarette users expressed interest in getting more information. Some were happy with the information they had or indicated that they preferred not knowing what was in their e-cigarettes.

10.9 Non-smokers and non-vapers in general had less interest in getting more information about e-cigarettes.

Steps taken to improve their knowledge of e-cigarettes

10.10 Some vapers had actively sought to improve their knowledge about e-cigarettes and e-liquids. This included carrying out internet searches, visiting vaping chat rooms and websites, and requesting information in shops and from suppliers of e-liquids. Some reported that they had carried out some research before making their first purchase, or because they wanted to improve their knowledge as they became more interested in vaping as an ‘activity’. One vaper explained as follows:

‘I remember when I was starting getting into it, I basically was just, like, I want to know a general amount of information before I go to the vape shop

and start buying expensive liquids, so I went on a website. They basically just said this is the difference between this and this, and actually taught me quite a lot.’ (FG6, Male, aged 16–19, vaping group, in employment)

10.11 This, however, was not the case for all e-cigarette users: one admitted to ‘never having looked into it’, and another said, ‘It’s terrible we are smoking these things and we don’t know what they are’.

Information sources

10.12 The research explored where the young adults in the research had got their information about e-cigarettes. It was clear that informal sources of information were important to participants who often mentioned learning about e-cigarettes from family and friends who already used them or via word-of-mouth. More formal sources mentioned most frequently by participants included: retailers and producers, the internet, social media, and, very occasionally, health agencies and professionals. Participants offered mixed experiences and views on each of these sources.

Retailers and suppliers

10.13 Participants had used both high street and online retailers as sources of information and reported a variety of experiences, both positive and negative:

‘People in the shops don’t really have a clue what they are. They are just selling them. Anything I ask them, like, what’s different with that one, they don’t have a clue.’ (FG2, Male, smoking group, aged 16–21, in further education)

‘I trust the people in the shops to be honest. I like to speak to people face to face. If I’ve got any questions I’ll ask them.’ (FG6, Female, vaping group, aged 16–21, in employment)

10.14 Participants were, however, keen to distinguish between specialist and non-specialist shops and websites as reliable sources of information:

‘I’d go to a specialist store, I’d assume they’d all have to know what they’re talking about when it comes to certain products and stuff, so that’s probably your best bet.’ (FG7, Male, vaping group, aged 19–25, unemployed)

10.15 Others were generally sceptical about retailers and suppliers as sources of information because, as one participant put it, ‘they are trying to sell you a product’.

10.16 Those who had used vaping shops as a source of information also referred to picking up product leaflets as well as consulting with staff.

The internet and social media

10.17 It was common for participants to report that they had used the internet to find information about e-cigarettes – through social media sites such as Facebook and YouTube and internet searches. However, they frequently, questioned the reliability of the internet as an information source. One said, ‘There’s a lot of misinformation about [e-cigarettes] online, so I’m not really sure what’s right and what’s wrong’; another said the internet ‘was so full of garbage, that you don’t know what to trust’.

10.18 Those who reported the greatest level of satisfaction with using the internet to access information were often more experienced vapers. They referred to researching products, reading reviews and reports online, and some said they had accessed academic research papers. They also referred to vaping forums and websites.

Health agencies and professionals

10.19 Occasionally, participants said that they had got information from health professionals or agencies in a range of different contexts which had included:

- Talking to family or acquaintances who worked as health professionals
- Being advised to try e-cigarettes by a doctor as a smoking cessation method
- Receiving information when being treated for an e-cigarette related injury
- Consulting NHS websites.

10.20 Although some saw medical professionals and health websites as trustworthy sources of information, participants were more often doubtful about how much doctors would know about e-cigarettes. Other participants did not regard health professionals as a potential source of information because they did not have a particularly positive or ongoing relationship with their doctor, or because it was simply not convenient or ‘too much effort’ to visit a doctor.

Trustworthy sources of information

10.21 When asked directly about the information sources they would trust, participants offered a range of suggestions. These included:

- Doctors and scientists (including those with a media presence)
- Public sector organisations, such as the NHS, Health Scotland and ‘the government’.

10.22 Less common suggestions included:

- Third sector organisations such as Chest, Heart and Stroke Scotland
- Published studies and research by ‘respected’ organisations – the World Health Organisation was a specific example put forward.

10.23 Despite the misgivings frequently expressed, some participants also saw e-cigarette producers, shops, and websites as potentially trustworthy sources of

information. Participants often stressed that they would look to 'legitimate' sites, but were not always clear about how they would identify such sites.

Overall views on available information

10.24 With the exception of those regular vapers who were confident about the knowledge they had about e-cigarettes, participants generally expressed a dissatisfaction or frustration with information available on e-cigarettes. Two participants commented as follows:

'The government doesn't even know what's in it, so how are we meant to know.' (FG4, Female, smoking group, aged 16–19, unemployed)

'It would seem that it would be safer because of what it is, but at the same time, you don't actually know because there's not been any proper testing on it, so you don't really know, you're just kind of going off of what people are saying essentially.' (FG12, Male, non-smoking group, aged 19-25, in employment)

10.25 Comments such as these were not untypical and suggest that young adults would welcome accessible, reliable and evidence-based information provided by credible sources.

11 Regulation of e-cigarettes

11.1 This project did not specifically aim to explore the views of young adults on the regulation of e-cigarettes, but this was a subject which came up spontaneously in a number of early focus groups and so was covered more proactively in later groups. Given the timing of the fieldwork for this study (December 2015-February 2016), participants may have been aware of recent changes in legislation in England and Wales, proposals to regulate e-cigarette sales in Scotland, and the planned introduction (at an EU level) of the Tobacco Products Directive – all of which received some media attention in autumn 2015.

11.2 This chapter begins with a discussion of general attitudes and awareness relating to regulation. However, the individual aspects of regulation which came up most often in discussion were: use of e-cigarettes in enclosed public places; sales to and use by children; product safety and consumer protection; and taxation. Each of these is addressed in turn in the sections below.¹⁹

General attitudes towards, and awareness of, regulation of e-cigarettes

11.3 Comments from participants indicated a broad level of support for regulation of e-cigarettes in principle, whether that was in terms of product regulation, or regulation of sales and use. Young adults expressed concerns about a range of issues such as product safety and health implications, use of e-cigarettes in public places and use of e-cigarettes by children and young teenagers, and often commented on the apparent absence of current regulation. Across all the groups, some compared e-cigarettes with cigarettes and felt a similar regulatory framework should be in place.

11.4 While there was a general consensus on the need for regulation relating to product safety and age restrictions, views were more mixed with regard to regulation of use in enclosed public spaces. In addition, some participants queried the feasibility of regulation, given the prevalence of online and non-UK suppliers, and home-made or modified devices and e-liquids.

11.5 Those who expressed reservations about regulation in general tended to be younger participants who were concerned that e-cigarettes might be ‘banned’.

11.6 There was, however, a degree of uncertainty amongst participants with regard to the current regulatory framework covering e-cigarettes. In general, participants appeared to believe that the sale of e-cigarettes to those under the age of 18 was

¹⁹ A recent paper by Glasgow University researchers discusses attitudes to regulation: H Weishaar, F Trevisan, S Hilton (2016) “Maybe they should regulate them quite strictly until they know the true dangers”: A focus group study exploring UK adolescents’ views on e-cigarette regulation. *Addiction*, doi: 10.1111/add.13377.

illegal,²⁰ and that using e-cigarettes in enclosed public places was at the discretion of owners or managers. However, not everyone was confident in their knowledge and some asked for clarification of the law on, for example, age-restrictions on the sale of e-cigarettes, whether using e-cigarettes in cars with children was permitted and whether e-cigarette use was ‘technically’ banned in pubs.

11.7 One participant (a smoker-vaper) indicated during the discussion that he thought that statutory regulation of e-cigarettes was due to be introduced in the UK – specifically in relation to restrictions on cartridge sizes and the amount of e-liquid that could be purchased.²¹ This information was offered spontaneously, and was not asked systematically of all participants.

Using e-cigarettes in (enclosed) public places

11.8 Using e-cigarettes in (enclosed) public places was an issue of some debate in the discussion groups, with a range of views expressed. There was some confusion about what was allowed, but most commonly participants believed (correctly) that restrictions were at the discretion of individual owners and operators of premises.

11.9 E-cigarette users reported varied experiences of using the devices in public places. Most commonly they had used them on public transport and in the workplace and pubs and clubs. Other places people had vaped included ice rinks, cinemas, football grounds, shops and shopping centres, and school/college. However, people reported that they had encountered a range of different rules and regulations with regard to indoor use, and there was also a clear view that change was underway, with e-cigarette use being banned in an increasing number of places. Participants were, though, often aware of ‘vape-friendly’ venues. They also reported rules being regularly disregarded with little apparent consequence, and in some cases admitted doing this themselves, for example, in a pub or using an e-cigarette discreetly at work.

11.10 There appeared to be a general acceptance of restrictions on e-cigarette use: e-cigarette users often expected to have to ask if vaping was permitted in a particular place, and accepted the need to respect the views of others. There was also a degree of ‘self-regulation’ with regard to e-cigarette use: this included not vaping in the presence of non-vapers and non-smokers; asking permission to vape; choosing to vape outside for social reasons or because they enjoyed the ritual of ‘going for a fag’. Vaping enthusiasts were amongst those who advocated self-regulation – this appeared to be associated with promoting a positive image of e-cigarette use.

²⁰ Legislation came into effect in England and Wales in October 2015 making it an offence to sell e-cigarettes to people under 18. It is also an offence for an adult to purchase an e-cigarette for use by a person under 18. However, at present, there is no age restriction enforced in Scotland on the sale of e-cigarettes.

²¹ This individual was likely to have had in mind the restrictions to be introduced in the UK with the EU Tobacco Products Directive. See http://ec.europa.eu/health/tobacco/docs/dir_201440_en.pdf

11.11 Some smokers and vapers offered a slightly different rationale for supporting restrictions on using e-cigarettes in enclosed public spaces, arguing that it could be seen as unfair if vapers were treated more favourably than smokers.

11.12 Those opposed to restrictions on using e-cigarettes in enclosed public places were generally vapers (although one non-smoker also expressed this view), and they offered two main arguments: (i) there was no scientific evidence that the vapour was harmful and a ban was therefore not justified on public health grounds; and (ii) being able to use e-cigarettes indoors was one of their attractions and removing this option could reduce the incentive to switch from tobacco cigarettes (this second argument was also recognised to some extent by non-smokers). Some highlighted the irony of vapers sharing outdoor shelters with smokers. (There was one example provided of a workplace providing separate shelters for vapers and smokers.)

11.13 Non-smokers expressed mixed views on the use of e-cigarettes indoors. Some did not like it when people vaped around them, some were happy to tolerate it in moderation, and others said they were 'not bothered' by it. The balance of opinion in these groups, though, was in favour of restrictions on where e-cigarettes could be used – some thought this was needed for health reasons, some for courtesy reasons, and others wished to see consistency with smoking restrictions.

Product safety and consumer protection

11.14 Chapter 8 discussed participants' views on health and safety concerns. Some had suffered minor injuries or knew of others being injured as a result of using an e-cigarette. It was also common for participants to express concerns about the possible long-term health effects of e-cigarette use. In this context, they often commented on what they perceived as poor or inadequate existing regulation of devices and e-liquids. There was strong support for the introduction of greater controls to ensure products were **safe**, both in the short term and with regard to long-term health impacts. Participants were particularly keen to see greater regulation of the contents of e-liquids.

Children and e-cigarettes

11.15 The research identified a range of concerns about the use of e-cigarettes by children and young teenagers.

11.16 As discussed in Chapter 7, participants across all groups had seen children using e-cigarettes and expressed concern about this. Younger research participants reported e-cigarettes having been used at school, and some said they had seen e-cigarettes being used by children as young as 10. In most cases, people were concerned about children being exposed to possible unknown health risks, given that e-cigarettes were such new products. Very occasionally, participants said they knew of young teenagers who had progressed from e-cigarettes to tobacco cigarettes.

11.17 Participants also expressed concern about young people being impressionable, and vulnerable to advertising campaigns and promotions. Indeed, as discussed in

Chapter 5, participants who used – or had experimented with – e-cigarettes reported being attracted to them because they thought they looked ‘cool’, or by flavours such as bubble gum and Irn Bru.

11.18 Given these concerns, there was a clear view expressed by participants that there should be age-restrictions on the sale of e-cigarettes to deter and prevent use by children. Discussions suggested that participants generally believed there were already restrictions in place at the time of the research, although some, including vapers, were uncertain about this.

11.19 Although younger participants were most likely to have been given their first e-cigarette by someone else (usually an older relative) most also had experience of buying e-cigarettes, and did not report significant difficulties in doing so. Just two participants mentioned being asked for ID when buying e-cigarettes; one of these participants thought it was harder to buy e-cigarettes than tobacco cigarettes which he thought somewhat ironic given the use of e-cigarettes as a smoking cessation aid.

11.20 Although there was strong support for steps to be taken to discourage e-cigarette use amongst children, there was also an alternative view that e-cigarette use by teenagers may, in fact, be useful if it prevented them from taking up smoking – a counter argument to concerns about the ‘gateway theory’. (See Chapter 7.)

Taxation

11.21 The issue of taxation occasionally arose in discussions with smokers and vapers groups. Those who offered views were concerned about the possibility of e-cigarettes being taxed or were cynical about the government’s possible motives in considering this option. Participants were concerned that taxing e-cigarettes would increase the price and deter use; they thought this would be counterproductive, given that e-cigarettes were mainly being used as smoking cessation aids. Some participants thought that the government might consider taxing e-cigarettes as a way of making money out of people’s addictions, or as a way of compensating for revenue being lost as a result of reduced tobacco sales as people switched to e-cigarettes.

Advertising

11.22 Participants occasionally commented on advertising of e-cigarettes. Those that did indicated a growing awareness of e-cigarette advertising, and an impression that it depicted e-cigarettes in a favourable light. Some smokers and vapers thought that e-cigarette marketing should be subject to the same kind of regulation as tobacco cigarette advertising.

12 Discussion

12.1 This study sought to explore the views and experiences of young adults in Scotland in relation to e-cigarettes. Its objectives were to find out what they know about them; what they feel they need to know about them; what they think about them; and their experiences of using them.

12.2 The study used a purposive sampling approach to include young adults in different socio-economic circumstances and those with different experiences of smoking, vaping and not smoking. However, the focus was mainly on young adults who smoke, or vape, or do both. This accounts for the high proportion of participants in this study who had experience of vaping.

What young adults know, and want to know, about e-cigarettes

12.3 There were high levels of awareness of e-cigarettes across all the focus groups, although less so among the groups of non-smokers. The use of e-cigarettes appeared to be relatively common in the family and social networks of the young adults who took part. This may relate partly to the socio-demographic characteristics of this group, and it may also relate to the urban focus of the research.

12.4 In terms of specific knowledge about e-cigarettes, this was more variable within the groups. Much of the information young adults had about e-cigarettes had been acquired through informal networks (family and friends who use the devices), through retailers, or through the media (including social media). Although there were some e-cigarette 'experts' in each of the vaping groups, more often than not, the participants in this study expressed uncertainty about the contents and safety of e-cigarette liquids, the safety of the devices, and about the long-term health impacts of vaping.

12.5 There were repeated calls for better, more trustworthy information, particularly regarding the health risks of using e-cigarettes.

What young adults think about e-cigarettes

12.6 The views of young adults about e-cigarettes were often closely linked to their experiences of using them. Smokers and vapers generally accepted the use of e-cigarettes as 'normal'. Non-smokers, on the other hand, saw it as a bit outside their experience – and in some cases, slightly odd. Although this was a minority view among this group of research participants, it is likely to be a majority perspective in the wider population of young adults, the majority of whom do not smoke tobacco.

12.7 Smokers and vapers largely saw e-cigarettes as aids to smoking cessation, and many approached the use of e-cigarettes with a history of previous unsuccessful cessation attempts. However, there was some scepticism voiced, particularly within the smoking groups, about the effectiveness of e-cigarettes in this respect. In contrast, those in the vaping groups (and those in the smoking groups who had made a commitment to vaping) often voiced more positive attitudes about the use of e-

cigarettes for cessation. At the same time, however, they expressed mixed views about the efficacy of particular devices and certain e-liquids.

12.8 Those who had positive attitudes to e-cigarettes saw them as healthier and less anti-social than ordinary cigarettes. In contrast, those with negative attitudes considered them to be ‘rubbish’ – a description which referred not only to their perceived lack of effectiveness as smoking cessation aids, but also to the unsatisfactory sensory experience reported by some.

12.9 At the same time, young adults were also aware that the desire to quit smoking was not the *only* reason that their peers and younger people were using e-cigarettes. Sometimes e-cigarettes were seen as a more convenient, and less anti-social, way of getting nicotine and for some a way to cut down on smoking, rather than a way of stopping altogether. For others, vaping was a means of saving money. There was also a view that some people’s use of e-cigarettes was just a ‘hobby’, for doing smoke tricks – and was just a ‘passing phase’.

12.10 Non-smokers (including ones who had tried an e-cigarette) were generally uninterested in the devices. While this group thought *some* people believed e-cigarettes were ‘cool’, they themselves did *not* believe that and were not interested in using one in the future. There was also a general view that, while some people might initially be attracted to e-cigarettes because of the interesting flavours, the progression from e-cigarettes to smoking would be unlikely for most people.

Experiences of using e-cigarettes

12.11 Young adults’ experiences of using e-cigarettes were complex and highly individual. However, the focus group design of this study did not allow scope to explore individual experiences in any depth.

12.12 Many of the young people in this study tried their first e-cigarette out of curiosity – often prompted by a pleasant fragrance or the desire to taste a particular flavour of e-liquid. Other motivating factors included cost, convenience, and the ability to vape secretly, without others being aware of one’s use. The social aspects of vaping attracted others: vaping appeared to be fun.

12.13 Participants described both positive and negative experiences of their first e-cigarette, and these experiences did not necessarily correlate with their desire or intention to take up regular vaping.

12.14 For example, among the few non-smokers in this study who had tried an e-cigarette, some enjoyed its flavour, but none had any interest in continuing to vape. Similarly, nearly all of the smokers in this study had tried an e-cigarette at some point, but for a range of reasons, some did not continue to vape despite, in some cases, a continued strong desire to quit smoking. Those who persevered with vaping were generally smokers who wanted to quit smoking, and who were willing (and could afford) to experiment with different devices and liquids until they found a combination that worked for them.

12.15 Many of the smokers and former smokers in this study had made previous unsuccessful attempts to quit smoking, and reported generally poor experiences of other cessation methods. Some stated that their use of e-cigarettes had helped them to quit, or significantly reduce their use of ordinary cigarettes, and that they saw improvements in their health as a result.

12.16 However, dual use of cigarettes and e-cigarettes was common in this group, and it was also clear that people moved in and out of vaping at different times. Again, these experiences were very specific to individuals but often related to the person's perceptions about: (i) the acceptability (or not) of smoking in certain locations and situations; (ii) the social context – who they were with and where they were; (iii) ease of access to e-cigarettes and cigarettes; and (iv) the relative satisfaction derived from a cigarette or e-cigarette in certain circumstances. Certainly, these experiences seem to suggest that patterns of using e-cigarettes are complex and variable.

12.17 The cost associated with e-cigarette use is an issue for young adults. On the one hand, the overall lower cost of vaping encouraged some to switch from tobacco cigarettes to e-cigarettes. On the other, the initial outlay could be a barrier to obtaining better quality devices which vapers argued were the key to successfully quitting smoking. These findings have particular implications for young adults – especially those who are unemployed – who are often on very low incomes.

Regulation of e-cigarettes

12.18 It was not part of the remit of this study to explore young adults' views on e-cigarette regulation. Nevertheless, the subject often arose during the discussions. In general, those who took part in this research were in favour of better regulation of e-cigarettes – particularly in relation to the sale of e-cigarettes to children, the safety of devices, and advertising.

12.19 There were more mixed views in relation to regulation of where people are permitted to vape, although the balance of opinion was in favour of some restrictions. Participants were not always persuaded that this was necessary on health grounds and some saw one of the advantages of vaping (over smoking cigarettes) as being the ability to vape indoors.

12.20 There was also a view that heavy taxation of the devices should be avoided because of the possible impact this might have on discouraging people to switch from tobacco cigarettes.

Public health implications of this research

12.21 This research study was undertaken in the context of ongoing debates about the health effects of using e-cigarettes and the potential role of e-cigarettes as a public health response to smoking.

12.22 The findings of this study indicate that young adult smokers in Scotland are experimenting with, and in some cases turning to, e-cigarettes in an attempt to quit

smoking – often having failed in previous quit attempts using other smoking cessation methods.

12.23 The young adults in this study who were regular vapers generally reported that they had either quit or reduced their level of smoking, although the progression to less or no smoking was not always straightforward. This study suggests that experiences of using e-cigarettes are complex and very individual. It would also seem that particular devices suit some people but not others, and that young adults can be put off using e-cigarettes by an initial bad experience with a particular device or e-liquid.

12.24 At the same time, the research found that there is a great deal of confusion among this group about e-cigarettes, and little good quality information available from trusted sources to enable them to make an informed choice about how to use these devices to best effect. Concerns were voiced about the safety of the devices and liquids, and the frequency with which people appear to use their e-cigarettes ('it's never out of my hand'). Moreover, much of the perceived 'best' information available to young adults comes via word-of-mouth from friends or relatives, from the internet, or from retailers.

12.25 The research points to a clear role here for the public health community in providing good quality information while continuing to acknowledge that this is an area of emerging evidence. Further, increased understanding of the experiences and attitudes of young people – and those from other age groups – will be of interest to health promotion policy makers and practitioners who are exploring the role that e-cigarettes might play in encouraging and facilitating smoking cessation. The findings of this research suggest that it will be important to engage with young smokers, not only in terms of developing policy on e-cigarettes, but also in planning services to help people quit smoking.

Limitations of this research

12.26 As noted above, the focus group methodology used in this research meant it was not possible to explore people's individual histories of smoking and vaping. Nor was it the intention to carry out a detailed analysis of the relationships between individual participant characteristics (including smoking status) and their attitudes and experiences. This was an exploratory research study in an area where there has been very little investigation to date. The desire was to make a timely contribution to an emerging evidence base and a rapidly changing area of policy.

Conclusion

12.27 This research has provided valuable information on young adults' behaviours and attitudes relating to e-cigarette use – an area of interest to both policy makers and practitioners in the health field. The findings point to a need for the public health community to take a lead in providing information and advice to young adults in a context where there is little reliable information available.

12.28 This exploratory study has also offered valuable insights which will help to inform further research – either currently underway or planned – on e-cigarettes in the UK. Future research is needed to obtain a more detailed understanding of the circumstances of dual use of cigarettes and e-cigarettes, and the various, often non-linear, pathways that young adults take between smoking, vaping and the cessation of smoking. Further work on these issues will benefit from a longer term perspective, and will be able to build on the groundwork provided by this and other research currently being undertaken in this area.

Annex: Self-completion questionnaire for participants

About you

It would help us to know a little about the people who are taking part in our focus groups. Could you please answer the following questions.

1. Are you:

Female

Male

2. How old are you?

16

21

17

22

18

23

19

24

20

25

3. Are you currently (tick all that apply):

In college or university

Working full-time

Working part-time

Unemployed

4. Have you ever vaped (used an e-cigarette)?

Yes

No

5. Do you **currently** vape (i.e. use an e-cigarette at least once a week)?

Yes

No

6. How would you describe yourself in terms of smoking tobacco (ordinary cigarettes)?

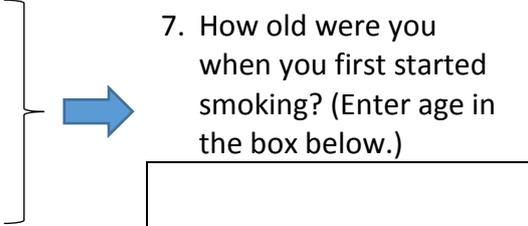
I am a non-smoker

I am a smoker

I smoke occasionally, but not every day

I used to smoke, but don't anymore

7. How old were you when you first started smoking? (Enter age in the box below.)



Thank you!

How to access background or source data

The data collected for this social research publication:

cannot be made available by Scottish Government for further analysis as Scottish Government is not the data controller.



© Crown copyright 2016

You may re-use this information (excluding logos and images) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit <http://www.nationalarchives.gov.uk/doc/open-government-licence/> or e-mail: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

The views expressed in this report are those of the researcher and do not necessarily represent those of the Scottish Government or Scottish Ministers.

This document is also available from our website at www.gov.scot.

ISBN: 978-1-78652-228-3

The Scottish Government
St Andrew's House
Edinburgh
EH1 3DG

Produced for
the Scottish Government
by APS Group Scotland
PPDAS70795 (05/16)
Published by
the Scottish Government,
May 2016



Social Research series
ISSN 2045 6964
ISBN 978-1-78652-228-3

Web and Print Publication
www.gov.scot/socialresearch

PPDAS70795 (05/16)