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Vaping Product Users' Awareness, Perceptions and Anticipated Responses to Potential Changes Under the UK Tobacco and Vapes Act 2026

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Abstract

Recently-enacted UK legislation gives the government extensive regulatory powers over vaping products, including the ability to restrict the availability of non-tobacco and non-menthol vaping product flavours. This survey study assessed awareness of the legislation and the potential for flavour restrictions, and potential behavioural responses, among 3,148 UK vaping product users. The vast majority or participants were either former smokers using vaping products to maintain smoking abstinence (n = 2,839; 90.2%) or current smokers using vaping products to reduce cigarette consumption (n = 237; 7.5%). More than three-quarters of participants were unaware of the potential for flavour restrictions. Among former smokers, commonly reported responses included returning to smoking (n = 1,394; 49.1%), seeking out illicit flavoured vaping products (n = 692; 24.3%), or making their own flavoured vaping products (n = 295; 10.4%). Similar patterns were observed among current smokers. These findings challenge the assumption that vaping product users will readily transition to alternative flavours if preferred flavours become unavailable. Instead, they indicate that flavour availability may represent an important determinant of continued vaping of individuals who have moved away from smoking, with restrictions potentially destabilising smoking cessation trajectories.

INTRODUCTION

Combusted tobacco use remains the leading preventable cause of morbidity and mortality both in the United Kingdom (UK) and globally. Cigarette smoking, the predominant form of combusted tobacco use, is associated with a substantial burden of cancer, cardiovascular disease, respiratory disease and health inequalities [1–4]. UK government estimates indicate that approximately 80,000 deaths and 400,000 hospital admissions each year are attributable to smoking, with an overall economic cost of approximately £22 billion per year [1]. Although smoking prevalence has declined over recent decades [5], including in the UK [6], population growth has supported an overall increase in the absolute number of smokers globally [5] and the persistence of initiation among adolescents and young adults has sustained a cycle of disease and socioeconomic disadvantage. In parallel, rapid growth in the availability and use of vaping products (also termed electronic cigarettes or e-cigarettes) [6–8] has created a complex regulatory challenge. Findings from both randomised controlled trials and real-world observation studies show that vaping products support smoking cessation to a greater degree than nicotine replacement therapy (NRT) [9–12], and their exclusive use poses a significantly reduced risk to users compared with cigarette smoking [13–16]. However, youth uptake of vaping and exposure to nicotine products has caused concerns about addiction, product appeal, and the normalisation of nicotine use among young people [17–20]. Striking the correct regulatory balance is challenging [21]; while flavours are reportedly a major driver of youth vaping product use [22], they are also preferred by adult vaping product users [23–25], most of whom are former smokers [26–28].

The Tobacco and Vapes Act 2026 represents the UK's most comprehensive tobacco control reform in a generation [29, 30]. The Act received Royal Assent on 29th April 2026 and establishes a legal framework intended to create the UK's first "smoke-free generation" by making it an offence to sell tobacco

products, herbal smoking products or cigarette papers to anyone born on or after 1 January 2009 [19, 31]. In effect, the legislation introduces a birth-cohort-based phase-out of lawful tobacco sales, rather than relying solely on a fixed minimum age of sale. The Act also includes provisions relating to proxy purchasing, vending machines, retail licensing, product displays, free distribution and discounts, enforcement powers, fixed penalties, and the regulation of vaping and other nicotine products [19]. Government communications accompanying Royal Assent described the legislation as a means of breaking the cycle of tobacco addiction and reducing avoidable pressure on both the National Health Service and the wider economy [31]. The Act's vaping-related provisions are intended to balance two public health objectives: maintaining access to vaping products as a potential cessation aid for adults who smoke, while reducing the appeal and availability of vaping and other nicotine products to young people. These measures include restrictions on advertising and sponsorship, powers to regulate flavours, packaging, product presentation and displays, and prohibitions on under-18 sales and free distribution [19, 32]. The Act may provide an important policy context for research on tobacco use, vaping, nicotine-product regulation, cessation, youth prevention and health inequalities in the UK and worldwide. Its implementation has the potential to shape future patterns of product availability, retailer behaviour, youth access, adult quitting behaviour and enforcement activity globally. Evaluating the intended and unintended consequences of this legislation is essential for determining whether a generational phase-out of tobacco sales, combined with stronger regulation of vaping products, can accelerate progress towards a smoke-free population while preserving proportionate harm-reduction pathways for adults who smoke.

As framework legislation, the Tobacco and Vapes Act 2026 confers broad delegated powers on ministers to regulate vaping products, including the authority to restrict or prohibit flavours. Given the scale of these powers, it is important to understand the potential consequences. Although flavours are frequently regarded as a superficial product attribute, a substantial body of evidence shows them to be an important determinant of product appeal, satisfaction, and sustained switching, with non-tobacco flavours consistently preferred over tobacco flavours [23, 24, 33–35]. Conversely, evidence from jurisdictions that have implemented flavour restrictions documents product substitution, cross-border and illicit purchasing, and increases in cigarette sales [36–39]. Comparable evidence is lacking in the UK. This study therefore examined the importance of non-tobacco flavours among UK vaping product users, explored anticipated behavioural responses to potential flavour restrictions, and assessed whether support for such policies would influence voting intentions.

RESULTS

Survey Participants

Among the participants, 90 (2.9%) were aged 18 to 24, 422 (13.4%) were aged 25–34, 716 (22.7%) were aged 35 to 44, 851 (27.0%) were aged 45 to 54, 750 (23.8%) were aged 55 to 64, and 319 (10.1%) were aged 65+. A total of 1,481 (47.0%) participants were male, 1,630 (51.8%) were female, and 33 (1.0%) did not report their gender. Length of vaping product use was less than 1 year for 148 (4.7%) participants, 1

to 3 years for 873 (27.7%) participants, 3 to 5 years for 771 (24.5%) participants, and more than 5 years for 1,348 (42.8%) participants; Nine (0.3%) participants did not report duration of use. Fruit was the most commonly preferred category (Fig. 1) reported by almost two-thirds (n = 2,079; 66.0%) of participants followed by 'fruit with menthol' flavour (n = 547; 17.4%), 'dessert' (n = 336; 10.7%), 'mint' (n = 113; 3.6%), and 'tobacco' (n = 69; 2.2%). Four (0.1%) participants reported no flavour preference.

Among the participants, 2,839 (90.2%) were former smokers who used vaping products to stay off cigarettes, 237 (7.5%) were current smokers using vaping products to reduce cigarette consumption, 71 (2.3%) were vaping product users who had never smoked, and 1 (0.03%) was a never-smoker and never-vaping product user.

Awareness of and Potential Behavioural Responses to Flavour Regulation

Most participants (2,395; 76.1%) were unaware that flavours could be significantly restricted under new legislative powers granted by the UK Tobacco and Vapes Act 2026. Only 649 (20.6%) participants were aware that the new legislation could affect the availability of vaping product flavours, while 105 (3.3%) were unsure, and 6 (0.2%) did not answer this question. This low level of awareness contrasts with the importance participants placed on flavours. Among the 3,076 current vaping product users who were current or former smokers 2,906 (94.5%) said that flavours were very important in helping them cut down or stay off cigarettes. A further 117 (3.8%) said that flavours were somewhat important, 25 (0.8%) stated they were not very important, 11 (0.4%) stated they were not important at all, and 6 (0.2%) responded that they don't use vaping products to help them avoid smoking.

When asked about their anticipated response to a restriction of vaping product flavours to tobacco and menthol only (Fig. 2), almost half of the 2,839 participants who were using vaping products to stay off cigarettes said that they would go back to smoking (1,394 participants; 49.1%). Other reported responses including seeking out flavoured vaping products from illegal sellers (692 participants; 24.4%) and making their own flavoured vaping products (295 participants; 10.4%). Among these former-smoking vaping product users, 315 (11.1%) reported that they would switch to tobacco/menthol flavours, and a very small proportion (n = 67; 2.4%) stated that they would stop vaping/smoking altogether.

Of the 237 smokers using vaping products to reduce cigarette consumption, returning to smoking was the most commonly reported response (169 participants; 71.3%). Of the remainder, 32 participants (13.5%) reported that they would seek out flavoured vaping products from illegal sellers, 11 participants (4.6%) would make their own flavoured vaping products, and 21 (8.9%) would switch to tobacco/menthol flavours. Only 3 participants (1.3%) indicated that they would stop vaping/smoking altogether.

Vaping Product Users' Potential Political Responses to Flavour Restrictions

The majority of participants (n = 2,258; 71.7%) supported the removal or restriction of flavour names considered disproportionately youth appealing (for example, cartoon or sweet-branded names), while retaining flavour availability for adult smokers (Fig. 3). A further 706 (22.4%) participants did not want to see any action on vaping product flavours or names. By contrast, only 34 (1.1%) participants supported restrictions or bans on both flavours and flavour names, 143 (4.5%) were not sure, and 7 (0.1%) gave no response. Overall, 94.2% of participants (n = 2,964) did not support removing flavours from adult consumers, either favouring targeted restrictions on youth-oriented names or no restrictions at all.

When asked how their voting intentions would be affected if their party or local Parliamentarian supported restrictions on flavours or flavour names, 2,301 participants (73.1%) reported that they would be much less likely to vote for them in the future, while 322 (10.2%) participants reported that they would be somewhat less likely. Party or Parliamentarian support for restrictions would have no impact on the voting plans of 127 (6.9%) participants, 42 (1.3%) participants would be somewhat more likely to vote for them, 174 (5.5%) would be much more likely to vote for them, 175 (5.6%) were not sure, and 7 (0.1%) gave no response.

When asked whether the UK Government has the best public health interests of adult smokers and vaping product users at heart, 1,029 (32.7%) participants very strongly disagreed, 1,224 (38.9%) strongly disagreed, 772 (24.5%) were neutral, 69 (2.2%) strongly agreed, 34 (1.1%) very strongly agreed, and 20 (0.6%) gave no response.

DISCUSSION

In this study of adults who use vaping products in the UK, the vast majority were former smokers who had been vaping for three years or longer. The principal findings were that almost all participants (approximately 98%) preferred non-tobacco flavours; more than three-quarters were unaware that the Tobacco and Vapes Act 2026 provides powers to introduce future flavour restrictions; and approximately 95% of participants who used vaping products to reduce cigarette consumption or maintain smoking cessation considered flavours important in helping them achieve these goals. Many reported that, if flavours were restricted, they would either return to smoking, seek flavoured products through illicit sources or produce their own flavoured e-liquids. Participants generally supported targeted measures to reduce youth appeal, such as restricting child-appealing flavour names while maintaining adult access to flavours. Most also reported that flavour restrictions would negatively influence their voting intentions and expressed low confidence that future restrictions would prioritise the interests of adult smokers and former smokers.

Our findings are consistent with those of Fan *et al* [40], who surveyed 548 UK adult vaping product users while the Tobacco and Vapes Bill progressed through Parliament. As in the present study, opposition to

flavour restrictions was high, whereas support for more targeted approaches, including restrictions on youth-oriented flavour names and descriptors, was considerably greater. Fan et al. also identified concerns that excessive flavour regulation could discourage smokers from switching, increase relapse among former smokers and stimulate illicit markets for flavoured vaping products. Reports of returning to smoking or obtaining flavours through alternative sources are also consistent with findings from studies conducted in the UK and the US [39, 41–48]. At the individual level, relapse to smoking would re-expose former smokers to substantially higher levels of toxicants and disease risk compared with continued vaping [13–16]. At the population level, any reduction in switching from smoking or increase in smoking relapse could slow, or potentially reverse, recent declines in smoking prevalence [6, 7, 49].

The behavioural intentions observed in the present study are consistent with a substantial body of evidence demonstrating that non-tobacco flavours are preferred by most adults who use vaping products to replace cigarettes [23, 24, 49]. This evidence challenges an implicit assumption underpinning many flavour restriction policies: that adults will readily substitute prohibited flavours with those that remain available, such as tobacco or menthol. However, available evidence suggests that adult flavour preferences are neither arbitrary nor readily interchangeable, making this assumption overly simplistic. Flavour preferences among adults who have switched from smoking are often well established and closely linked to maintaining abstinence from cigarettes rather than representing a superficial product preference. Friedman and Xu [50] reported that adults initiating vaping with non-tobacco flavours were significantly more likely to quit smoking than those using tobacco-flavoured products, suggesting that non-tobacco flavours may contribute to smoking cessation rather than simply increasing product appeal. More recently, Friedman *et al* [33]. demonstrated that following implementation of flavour restrictions in the United States, reductions in e-cigarette sales were accompanied by only limited substitution towards remaining permitted flavours, while cigarette sales increased. These findings indicate that many adults do not simply transition to tobacco-flavoured products when preferred flavours become unavailable but instead alter their nicotine use in ways that may undermine public health objectives.

The importance of flavour choice is also recognised within UK smoking cessation practice. A recent assessment of vaping products supplied by NHS Stop Smoking Services found that fruit flavours were most commonly provided to people attempting to quit smoking, with tobacco flavours representing only a minority of products supplied [51]. Thus, while flavour restrictions are often proposed primarily as a means of reducing youth appeal, current cessation services continue to rely predominantly on non-tobacco flavours to support smoking cessation among adults. This apparent disconnect highlights the need for flavour policy to reflect both youth protection objectives and the evidence supporting adult smoking cessation.

Unlike several jurisdictions in the US, flavours have not yet been restricted in the UK, meaning equivalent UK behavioural evidence is not yet available. Nevertheless, evidence from jurisdictions that have introduced flavour restrictions provides important insight into possible behavioural responses. Studies conducted in the US have reported that following the change in enforcement discretion by the Food and Drug Administration (FDA) in 2020 [52] to prohibit the sale of closed-system vaping products in anything

other than tobacco and menthol flavours, vaping product use overall was largely unaffected among both youth and young adults [38, 39, 53]. Collectively, these and our findings suggest that flavour restrictions may not simply alter flavour preferences but may influence broader nicotine-use behaviour in ways that reduce the potential public health benefits of vaping product use.

These observations are also consistent with evidence from Norway demonstrating that flavoured snus products (a form of oral tobacco consumption) are used disproportionately by current and former smokers rather than never smokers. Vedoy and Lund [54] reported that flavour restrictions would therefore be more likely to affect smokers and former smokers than nicotine-naïve individuals and cautioned that policies limiting flavours should recognise that flavoured products also function as alternatives to cigarettes. Although conducted in the context of snus rather than vaping products, these findings reinforce the broader behavioural principle that flavour preferences reflect established patterns of product use rather than a trivial consumer preference.

Our findings concerning potential behavioural responses among current vaping product users may be understood by examining the prevalence and reasons for use of flavoured vaping products among adult users. Non tobacco flavours are predominantly preferred and used by adult vaping product users [23, 24, 49], and studies suggest that the use of fruit and other sweet flavoured e-liquids is positively related to smokers' transitioning away from cigarettes [55] or that adult smokers who began using or now use non tobacco-flavoured vaping products were more likely to quit smoking than those who used tobacco flavours [49, 50]. It is not surprising therefore that faced with removal or their preferred, flavoured vaping products that large proportions of users would either reinitiate smoking, source their preferred products from an illicit source, or produce their own flavoured vaping products.

This study has a few limitations. Data were obtained from a convenience sample of vaping product users recruited through the consumer databases of UK vaping product retailers, and the findings may not be generalisable to all vaping product users in the UK or elsewhere. Selection bias is also possible, as individuals with stronger views on vaping regulation may have been more likely to participate in the survey. However, this is unlikely to fully account for the findings, given that more than three-quarters of participants (> 76%) were unaware that the Tobacco and Vapes Act 2026 provides powers to introduce future flavour-related restrictions. The findings therefore appear unlikely to simply reflect recruitment of individuals already engaged in policy debates. The study also reflects the views of current vaping product users rather than the general population. Although previous research has demonstrated broad support for regulation of novel nicotine products, support for specific vaping-related measures, including flavour restrictions, has been less extensively characterised [56]. The present study addresses an important evidence gap by examining the views of the population most likely to be directly affected by future flavour regulation: adults who currently use vaping products and who either currently smoke or have previously smoked. This represents an increasingly important group within UK tobacco control. Vaping has expanded substantially over the past decade and, for the first time, the number of adults who vape in Great Britain exceeds the number who smoke [6]. This transition has occurred alongside the

implementation of harm reduction policies, including evidence-based smoking cessation initiatives such as the UK Government's Swap to Stop programme [57, 58].

The findings highlight an important consideration for future flavour policy. Flavours should not be regarded as incidental product attributes that can be removed or exchanged without consequence. For many adults who have transitioned away from smoking, flavour preferences appear to be established components of their vaping behaviour and may contribute to continued avoidance of combustible tobacco. The assumption that consumers will simply substitute restricted flavours with remaining permitted options, such as tobacco flavours, is therefore not supported by the available evidence. Policies based on this assumption risk overlooking the complexity of consumer behaviour and may produce unintended consequences, including reduced switching among smokers, increased relapse among former smokers, or greater demand for illicit alternatives.

Effective regulation requires balancing the legitimate objective of reducing youth uptake with the need to preserve the potential public health benefits of vaping for adults who smoke or have previously smoked. Decisions regarding flavour regulation should therefore be informed not only by concerns about appeal to young people, but also by empirical evidence on how adult consumers actually use these products. Failure to recognise that flavour preferences are meaningful, persistent and not necessarily interchangeable risks undermining the very smoking cessation and harm reduction objectives that tobacco control policies seek to achieve.

In summary, taken together with real-world evidence from jurisdictions that have implemented flavour restrictions, our findings indicate that the behavioural effects of flavour regulation are likely to be more complex than is often assumed. Rather than simply prompting consumers to switch to the flavours that remain available, restricting flavours may alter patterns of nicotine use more broadly. Many adults would revert to combustible tobacco rather than substituting for the remaining permitted flavours, and significant proportions would undertake activities such as sourcing from illicit channels or self-mixing of flavoured vaping liquids, which would increase risk. For many adults who have transitioned away from smoking, flavour choice appears to represent an established component of sustained vaping behaviour rather than a readily interchangeable product characteristic.

Participants overwhelmingly supported measures aimed at reducing the appeal of vaping products to young people, provided these did not unnecessarily limit access for adults using vaping products as an alternative to smoking. This suggests that protecting young people and supporting adult smoking cessation are complementary, rather than competing, public health objectives. As secondary legislation under the Tobacco and Vapes Act 2026 is developed, flavour policy should therefore be informed by evidence of how adults might respond to restrictions, alongside consideration of their intended impact on youth uptake. Failure to account for these behavioural responses may result in unintended consequences, including reduced switching from smoking, increased smoking relapse, growth of illicit markets and other changes in nicotine-use behaviour that could ultimately diminish the public health benefits of tobacco harm reduction.

METHODS

This was a descriptive study conducted in accordance with relevant guidelines and regulations. In April 2026, an invitation to complete a short online survey was emailed to vaping product users in the UK (see Supplementary Information for the full questionnaire and response options). The survey was hosted on the Monday.com platform (Monday.com Ltd, Tel Aviv, Israel). Invitations were distributed by UK Vaping Industry Association (UKVIA) member retailers to registered purchasers of vaping products who had consented to being contacted by the study Sponsor to receive communications and/or take part in research studies. The email invitation contained information regarding the study and by clicking on a hyperlink in the invitation email, participants consented to take part and were routed to the survey website.

This survey study did not collect personally-identifiable information and did not assess any sensitive information such as health effects. Based on this, the investigators utilised the decision tool provided by the UK National Health Service Health Research Authority, the UK provider of Research Ethics Committee services, to deem that this survey study did not need to undergo ethics review. This decision, and the responses entered into the decision tool, can be found in the Supplementary Materials.

A total of 3,488 partially and fully completed survey responses were collected. Surveys with 2 or more unanswered questions (< 87.5% complete; n = 348) were excluded, leaving 3,148 responses for analyses. Data were collated and analysed in Excel (Microsoft Excel for Mac v16.108.2; Microsoft Corporation, Redmond, WA, US). Analysis was descriptive and data are presented as n (%) responses.

DECLARATIONS

Competing Interests

IMF is an independent consultant to nicotine/tobacco product manufacturers and retailers, including Snusbolaget Norden AB (HAYPP), contract research organisations (CROs), and health advocacy groups, to provide scientific and regulatory support. IMF is a Non Executive Director with Advanced Inhalation Rituals (AIR) Global PLC, a manufacturer of waterpipe tobacco, electronic waterpipe products, and vaping products, and is also a retained Scientific Advisory Board member of Qnovia, LLC, an inhaled nicotine pharmaceutical smoking cessation product manufacturer. IMF is a member of the ‘VapeVerify’ panel of the UK Vaping Industry Association (UKVIA). MAM is employed by HAYPP Limited and is a Director of the UKVIA. JD is the Director General of the UKVIA. JM is employed by JBP Associates Ltd, a company which provides support to the UKVIA.

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Author Contribution

This paper was conceptualised by MAM and JD. JM supported survey rollout and data collection. IMF analysed the data and wrote the first draft of the manuscript. All authors contributed to the writing and critical review of this paper.

Data Availability

Data from this study are available from the Corresponding Author on reasonable request.

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Figures

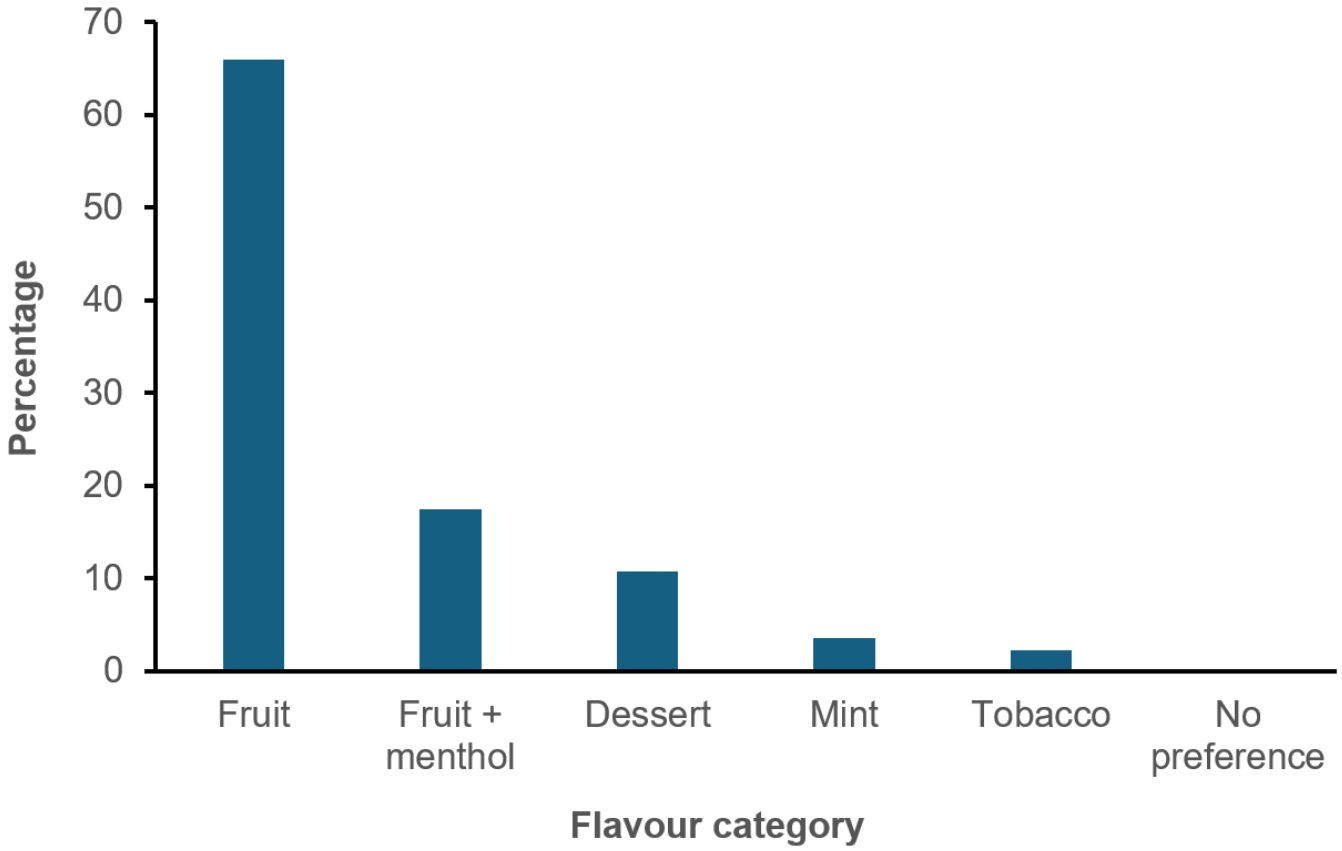


Figure 1

Vaping Product Flavour Preferences of Survey Participants. Data are presented as the percentage of participants selecting each flavour category.

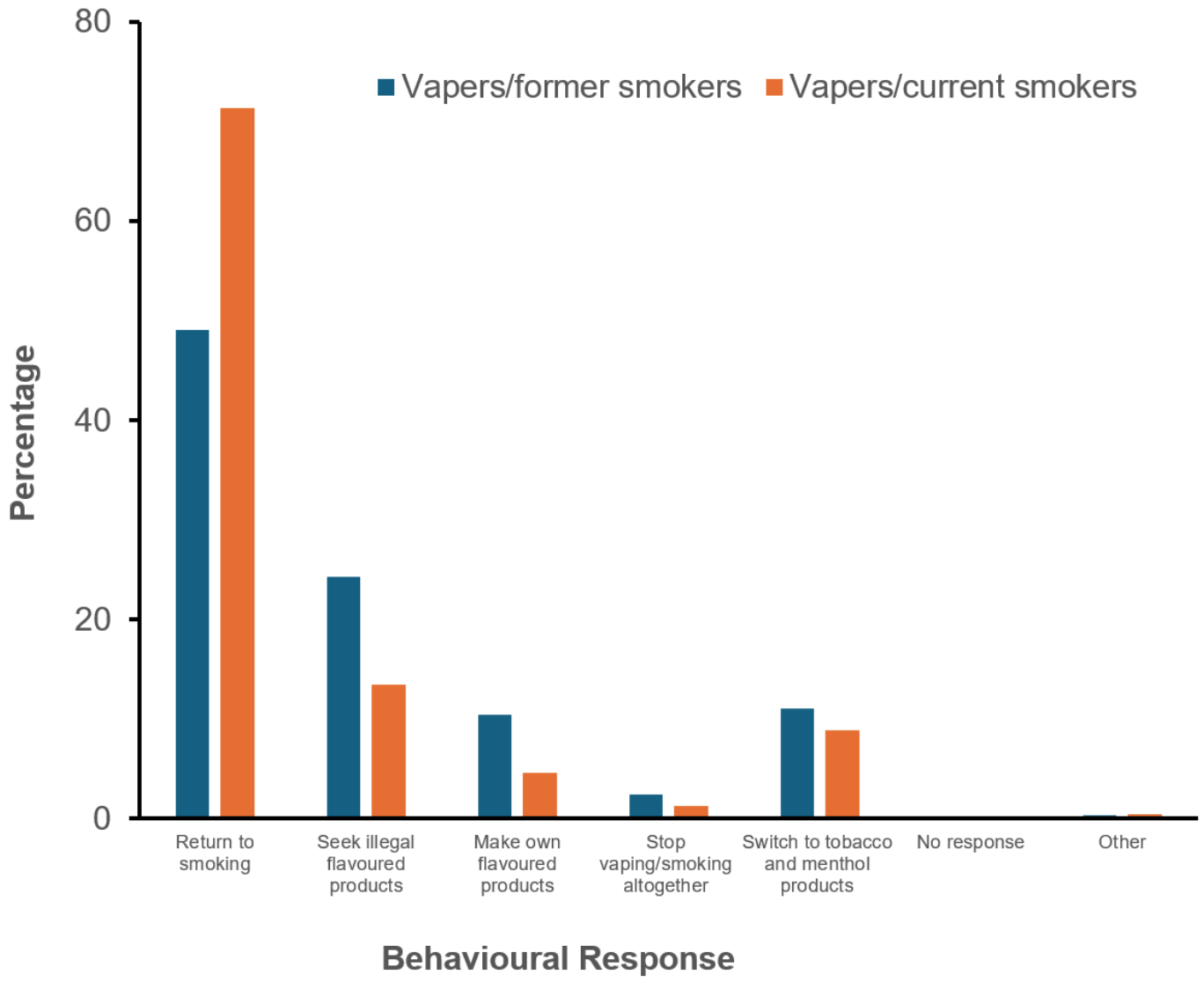


Figure 2

Potential Behavioural Responses to Flavour Restrictions. Data are presented as the percentage of participants selecting each response among vaping product users\former smokers (blue bars) and vaping product users/current smokers (amber bars).

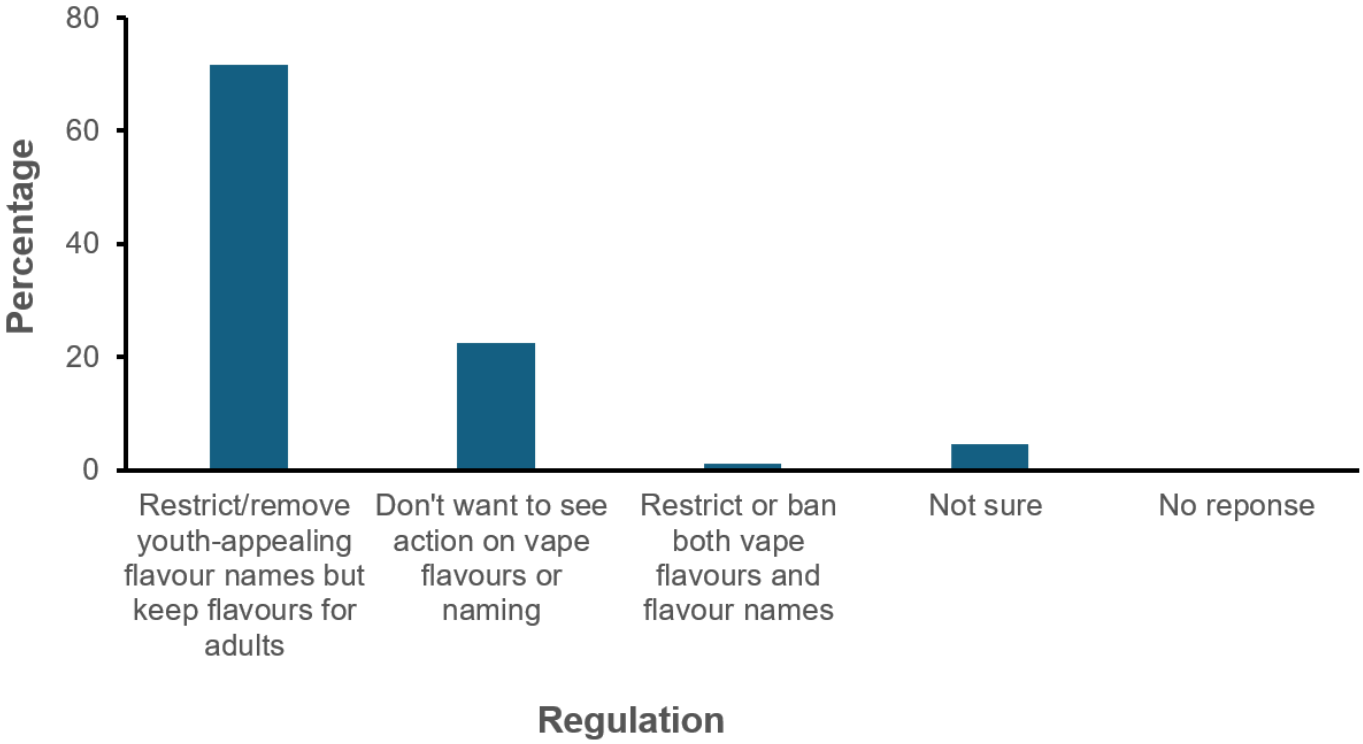


Figure 3

Survey Participants' Support for Regulation. Data are presented as the percentage of participants selecting each response.

Supplementary Files

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