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Behavioural insight – smoking among
young people

Report prepared for Public Health
Wales NHS Trust and Cardiff and Vale
University Health Board

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Executive summary

Although smoking remains the largest single cause of avoidable death in Wales (PHW and WG, 2012), the number of people who smoke have more than halved over the past 40 years (ASH, 2016). Despite these positive trends, children as young as 11 are still taking up tobacco smoking and more recently, they are also experimenting with and smoking e-cigarettes.

Cardiff Metropolitan University was commissioned to conduct research to understand the current smoking/vaping prevalence among young people in Cardiff and Vale of Glamorgan and to explore what influences their decision to smoke/vape.

The research took place over a six-month period from October 2015 to April 2016. A mixed methodology was utilised and quantitative and qualitative data were collected using a large-scale survey, interviews and focus groups. Participants included head teachers, teachers, young people aged 16 and those in Years 7 and 9 across Cardiff and the Vale of Glamorgan.

Findings from the research suggest there are key risk factors for smoking behaviour in young people, the strongest predictive factor being whether the mother smokes. The next influencing factors are whether their friends smoke or vape and whether they reside in lower socioeconomic areas. There was no association between education on smoking and smoking behaviour and the perception of harm. The findings also highlighted that young people who had not smoked previously were using e-cigarettes.

Young people are smoking in Year 7 and 9 and are able to purchase cigarettes and e-cigarettes despite current legislation and Government policy. They are also smoking in schools despite no smoking policies in schools. Young people are confused by the mixed messages around e-cigarettes as Government messages imply they are less harmful than tobacco and are easily accessible.

It is clear that there are numerous factors that influence smoking behaviour in young people. Recommendations have been made to reduce the likelihood of young people taking up smoking and to help those who want to give up smoking.

Background

Although smoking remains the largest single cause of avoidable death in Wales (PHW and WG, 2012), the number of people who smoke have more than halved over the past 40 years (ASH, 2016). According to the results of the Welsh Health Survey 2015 (Welsh Government, 2016) the prevalence of smoking in individuals has decreased since the survey was initiated in 2003/4. It reported that currently, 18% of adults smoke and 6% use an e-cigarette. However, the survey does not include any young people under the age of 16 years. Despite these positive trends, children as young as 11 are still taking up tobacco smoking and more recently, they are also experimenting with and smoking e-cigarettes.

Since smoking causes premature death and illness, it is a major public health concern, particularly in young people where smoking affects lung development. Research findings have reported that young people who start smoking before the age of 15 have an increased risk of lung cancer as well as many other terminal and serious chronic illnesses (Wiencke et al, 1999; Patel et al, 2004). Little is known about the long-term effects of vaping e-cigarettes.

Legislation and government policy control the purchase and sales of cigarettes and e-cigarettes, however, ASH Wales Cymru (2015) highlighted the scale and extent of illegal tobacco across Wales. They reported that illegal tobacco accounts for 15% of tobacco sales in Wales. Since illegal tobacco is sometimes half the price of tobacco and cigarettes from legal sources, it can increase the number of individuals (including children and young people) who will try to smoke or maintain their smoking behaviour.

Over the last decade there have been a number of large-scale surveys evaluating smoking behaviour in children and young people. According to the Welsh Health Behaviour in School-aged Children (HBSC) survey (2009/10) around 269 young people aged 11 to 15 who have not smoked in the past, try smoking every week in Wales (Currie et al, 2012). That amounts to 14,000 per year. Further analysis of this annual figure reveals that approximately 1,000 of these young people experimenting with smoking are aged between 10 and 11. Even more worryingly, the number of young people who try smoking increases with age with figures more than doubling when they are between 12 and 13 and trebling in the 13 and 14 age group. Similarly, large-scale European surveys, such as the European School project (ESPAD, 2011), suggest that 23% of 15-16 year old children in England and Wales in some areas are smoking on a regular basis. These findings are supported by a recent UK study (Health and Social Care Information Centre, 2015).

The Health and Social Care Information Centre have commissioned a series of surveys since 1982 to monitor smoking, drinking and drug use among secondary school pupils aged 11 to 15. The latest findings from the series are from data collected in 2014 from 6,173 pupils in 210 schools throughout England. Less than a fifth of the sample (18%) said they had smoked at least once compared to 42% in 2003. Fewer of the sample also reported smoking

one cigarette a week: 3% compared with 10% in 2002. Unfortunately similar data is not recorded for young people in Wales.

Moore et al (2015) reported on data from two nationally-representative cross-sectional surveys undertaken in 2013-2014. It appears that e-cigarettes are used by children and young people who have never smoked tobacco. Whereas only 1.6% of primary school children reported they had smoked tobacco, higher numbers (5.8%) had used e-cigarettes. Eight percent of young people aged 15-16 who had never smoked tobacco, reported using e-cigarettes. These findings are supported by the recent Health and Social Care Information Centre (2015), which found that 22% of their sample (n=6173) had smoked e-cigarettes at least once. The majority of the 22% were smokers, 11% of e-cigarette smokers had never smoked tobacco.

Hiscock et al (2012) undertook a secondary analysis of the smoking and socioeconomic status of 88,000 individuals aged 16 and over who took part in the Health Survey for England. The findings suggested that the most disadvantaged were four times more likely to smoke than the most affluent. Although the prevalence of smoking reduced between 2001 and 2008, this decline was not evident amongst individuals with lower socioeconomic status. Currie et al (2012) reported on their findings that smoking is significantly more prevalent among young people living in low-affluent areas.

Young people living in households where parents and/or siblings smoke, are more likely to start smoking (Royal College of Physicians, 2010). According to Kandel et al (2015) children of smokers are three times more likely to smoke and twice as likely to become addicted than children of parents who have never smoked. Further, Leonardi-Bee et al (2011) conducted a meta-analysis and found that there was a significant increase in the uptake of smoking by children and young people, even if one parent or a sibling smoked. Since young people living in socially disadvantaged areas are more likely to smoke, the relationship between children being exposed to smoking in the home and low socioeconomic status is perpetuated (Royal College of Physicians, 2010).

Cavalca et al (2013) undertook a study to investigate the influence of peers in risk taking with adolescents who reported smoking and not smoking. They concluded that the influence of peers enhances risk taking amongst adolescents and those who smoke, may be more prone/open to such influences.

Morin et al (2012) explored the relationship between the initiation of smoking and academic achievement in young people during a four-year longitudinal study in the US. They found that adolescents who did well in school were less likely to smoke; persistently high achievers' rate of smoking initiation was 7.1%, average achievers 15.1% and low achievers 49.1%. Although this study was conducted in the US similar findings emerged from a study in Finland. Pennanen (2012) evaluated a schools-based prevention programme that had been implemented over three years and suggested that the largest determinant of smoking was poor school achievement. Young people who had poor grades were six times more likely to smoke than students who

achieved excellent grades.

Rationale for the research

Although Public Health Wales are aware of the prevalence of young people smoking (experimenting and smoking regularly) in Cardiff and the Vale of Glamorgan there is much to be learned regarding the beliefs and attitudes in areas where there is an increased prevalence of smoking. Similarly, we can also learn from areas where there is a low prevalence of smoking. This current research will look for insightful correlations between smoking behaviour and socioeconomic and demographic factors as well as other variables such as, family and peer smoking behaviour and school policy. In turn, this will allow resources to be targeted effectively to help achieve the Welsh Government's aim to reduce the prevalence of smoking by 2020 (Welsh Government, 2012) as well as meeting the principles of Prudent Healthcare (Welsh Government, 2015).

There are media campaigns and a number of educational strategies and interventions in place in Wales already. One education programme is the Just Be programme (previously the ASSIST Programme: A Stop Smoking In Schools Trial). Its aim is to reduce the number of young people who take up smoking by training pupils in Year 8 to have informal conversations with their peers regarding the benefits of not smoking and the risks associated with smoking. The programme was evaluated by Campbell et al (2008) using a randomised controlled trial with 10,730 students aged 12-13 years in 59 schools in England and Wales. Findings suggested that the ASSIST programme was effective in reducing the prevalence of smoking over two years after the intervention was delivered.

Despite these programmes and campaigns, the studies above demonstrate that children as young as 11 years are experimenting or taking up smoking. Recent research suggests that social media campaigns and education programmes alone are not effective in reducing substance use (AMCD, 2015). Sussman et al (2013) note that there are effective elements within all smoking prevention and cessation strategies. They suggest that what is required is to identify these so that they can be evaluated further.

The timing of this research is therefore apposite in that there is a need to ascertain from young people themselves what motivates them to initiate smoking (including e-cigarettes) or influences them to not smoke. This should include other factors such as the role of parents and other role models, Government policy, school policy, education and health and how they impact on the young person's decision to smoke or not. The findings will help to inform the development of appropriate (and age specific) recommendations for action and interventions which can be implemented and evaluated for effectiveness.

Methodology

The research was commissioned by Cardiff and Vale Public Health Team to explore the current prevalence of smoking (tobacco and e-cigarettes) among young people in Cardiff and the Vale of Glamorgan and what influences smoking behaviour. The findings and recommendations can be used to inform approaches to prevent the uptake of smoking in young people and develop appropriate interventions to help those young people who smoke to quit.

Objectives

- Understand the smoking prevalence for young people (age 11-13 years old) in Cardiff and Vale of Glamorgan, how many young people smoke, what areas have higher numbers of smokers and why they smoke or choose not to smoke.
- Conduct research (for example questionnaires, focus groups) with young people to understand the behaviour relating to smoking and the influences, incentives and barriers to behaving the way they do.
- Bring together partners who may be able to assist in solving the problem and identify what can be done to address smoking uptake among this age group.
- Make recommendations for action based on the findings of the research and assist with implementation of these actions locally.
- Focus the work in areas of deprivation where smoking prevalence is highest.

The research took place over a six-month period from October 2015 to April 2016 and utilised a mixed measures methodology using qualitative and quantitative data collection methods. Specifically data was collated through a large-scale survey as well as interviews and focus groups, which allowed for a more in-depth exploration of the perceptions and views of participants.

Participants

Twenty-six schools across Cardiff and the Vale of Glamorgan were invited to participate in the research (see Appendix 1). Head teachers from 13 consented to allow young people in years 7 and 9 (11 and 13 year olds) to complete a survey questionnaire (see Appendix 1). Three of the 13 participating schools were purposively selected, based on socio-economic demographics to conduct focus with young people aged 11 and 13 year olds (n=34). We also arranged two focus groups (one in Cardiff and one in the Vale of Glamorgan) with young people aged 16 years (n=14). The aim of these focus groups was to explore young people's views retrospectively regarding what they believe influences young people to smoke or not. We also explored their beliefs regarding age of onset, consumption, awareness of campaigns, sources of support to give up smoking and health issues.

Six members of teaching staff participated in one to one semi-structured interviews.

All schools were invited to share their school policy in relation to smoking with the researchers. Only two schools responded to this request.

Data collection measures

The survey was developed to explore smoking behaviour for tobacco and e-cigarettes. Questions were derived from previous findings in the literature and were age-appropriate (see Appendix 2). The questionnaire took no more than 10 minutes to complete.

The findings from the survey informed the development of a semi-structured interview schedule for the focus groups and the interview schedule for teaching staff (see Appendix 3 and 4).

The survey and qualitative data collection tools were piloted with 11 year old primary school children to ensure they understood the questions and the nature of the study. Prior to collecting data, all information and data collection tools were submitted to the commissioners for approval and modification before distributing it to participants.

Ethical approval

Ethical approval was sought from the Cardiff Metropolitan University Health Sciences ethics board. Approval was gained on 27 November 2015 (Ethics Reference Number: 7174)

Procedure

The survey was uploaded to an online platform (Qualtrics) for participants to complete and return to the researchers anonymously. Where schools requested hard copies these were delivered. Students completed them individually and they were collected by the researchers.

Focus groups were conducted on school premises at a mutually convenient time to allow minimum disruption for pupils. In line with ethical procedures all participants were given the opportunity to opt out of the research without giving any reason. No participants opted out. The focus groups were recorded on an IPAD programme and all participants were made aware of, and consented to, this.

Members of teaching staff in each school were contacted and asked to participate in a telephone or face-to-face discussion. Prior to the interviews, individuals were sent a letter of information (see Appendix 4) outlining the parameters of the review and the questions we wanted them to consider. Six were completed between January and March 2016.

Analysis of data

The quantitative data from the questionnaires were uploaded to a statistical software package (SPSS) and were analysed using descriptive and inferential

statistics. Where appropriate tables and graphs have been used to present the findings.

Qualitative data obtained from interviews and focus groups were written up immediately. Thematic analysis was utilised to explore the qualitative data and emerging themes were identified and reported. Anonymous quotes have been used where appropriate to illustrate and support the perceptions and views of participants.

Findings are reported under key themes derived from the data.

Results

Quantitative survey findings

Young people from 13 schools participated in the survey (n =1863). This included 806 young people aged 11-12 (Year 7) and 1057 young people aged 13-14 (Year 9).

Of those who responded in year 7 (n= 790) twenty-two (2.8%) reported having smoked at least one cigarette and ninety-three (9.1%) of the total sample in year 9 (n=1027) (see Table 1).

From the total sample in year 7 (n= 748) thirty-nine (5.2%) young people responded that they had tried smoking e-cigarettes. Of the young people in year 9 (n=1011) one hundred and seventy-four (17.2%) of those who responded said they had tried smoking e-cigarettes (see Table 1).

One hundred and ninety-seven (24%) young people in year 7 reported that their mothers smoked tobacco, 188 (23%) of their fathers and 67 (8%) of siblings. One hundred and thirty-two (16%) of those who responded said their mother's used e-cigarettes, 111 (14%) of fathers and 42 (5%) of siblings (see Table 1).

Data from young people in year 9 suggests that 200 (19%) of mothers smoke tobacco, 210 (20%) fathers and 95 (9%) have siblings who smoke. In relation to e-cigarettes, 136 (17%) reported their mothers vaped, 122 (15%) their fathers and 74 (7%) their siblings (see Table 1).

	Year 7	Year 9
Smoked at least one cigarette	22 (2.8%)	93 (9.1%)
Tried e-cigarettes/vaping	39 (5.2%)	174 (17.2%)
Mother who smokes	197 (24%)	200 (19%)
Father who smokes	188 (23%)	210 (20%)
Sibling who smokes	67 (8%)	95 (9%)
Mother who uses e-cigarettes/vapes	132 (16%)	136 (17%)
Father who uses e-cigarettes/vapes	111 (14%)	122 (15%)
Sibling who uses e-cigarettes/vapes	42 (5%)	74 (7%)

Table 1: Number of young people who have tried smoking/vaping and the number of parents and siblings who smoke/vape

The data in Tables 2 and 3 and Figures 1 to 4, summarises numbers and/or percentages of young people and their significant others who smoke and vape along with percentages of free school meals, attendance during the year and achievement at expected level for Key stage 4*. The data highlights that many schools in our sample exceed the Welsh Average of 17.5% for free school meals. There is a higher likelihood of young people and their significant others smoking and vaping in schools where there is a higher take-up of free school meals, there are lower attendances during the year and less pupils are achieve the expected level at Key stage 4.

School	Free school meals	Attendance during the year	Pupils achieving expected level at Key stage 4	Young people smoking	Young people vaping	Parents smoking		Parents vaping		Friends smoking	Friends vaping	n=
						Mother	Father	Mother	Father			
1	41.7%	85.7%	14.9%	1 (4%)	5 (22%)	7 (30%)	5 (22%)	6 (26%)	3 (13%)	11 (48%)	10 (43%)	23
2	5.9%	95.6%	86.8%	<i>No data</i>								
3	14.3%	93.2%	63.4%	<i>No data</i>								
4	7.3%	96.7%	83.2%	0	0	2 (7%)	5 (19%)	4 (15%)	2 (7%)	1 (4%)	0	27
5	44.3%	90.1%	25.2%	3 (4%)	3 (4%)	27 (37%)	23 (32%)	16 (22%)	15 (21%)	13 (18%)	13 (18%)	72
6	36%	91.7%	45.4%	2 (1%)	2 (1%)	38 (25%)	44 (29%)	28 (19%)	26 (17%)	31 (21%)	24 (16%)	151
7	6.8%	96.5%	45.4%	0	0	1 (3%)	3 (10%)	0	2 (7%)	2 (7%)	4 (13%)	31
8	8.9%	95.2%	69.9%	0	0	5 (9%)	2 (4%)	3 (6%)	1 (2%)	2 (4%)	3 (6%)	54
9	13.6%	94.4%	56.2%	5 (4%)	14 (10%)	33 (23%)	30 (21%)	21 (15%)	21 (15%)	25 (18%)	38 (27%)	141
10	30.9%	93%	45.0%	1 (2%)	2 (3%)	16 (25%)	22 (35%)	8 (13%)	7 (11%)	13 (21%)	10 (16%)	63
11	28.9%	92.6%	41.9%	3 (2%)	4 (3%)	33 (26%)	30 (24%)	23 (18%)	20 (16%)	24 (19%)	30 (24%)	125
12	23.1%	93.7%	50.0%	7 (7%)	8 (8%)	29 (30%)	20 (21%)	19 (20%)	13 (13%)	43 (44%)	47 (48%)	97
13	7.6%	94.8%	67.6%	0	1 (5%)	6 (29%)	4 (19%)	4 (19%)	1 (5%)	4 (19%)	5 (24%)	21

Table 2: Percentage of young people in Year 7 and their significant others who smoke and vape, and the take-up of free school meals, attendance during the year and the pupils who achieve the expected level at Key stage 4, for each school

* The first three columns are sourced from data supplied by <http://mylocalschool.wales.gov.uk> in 2015

School	Free school meals	Attendance during the year	Pupils achieving expected level at Key stage 4	Young people smoking	Young people vaping	Parents smoking		Parents vaping		Friends smoking	Friends vaping	n=
						Mother	Father	Mother	Father			
1	41.7%	85.7%	14.9%	2 (6%)	3 (9%)	11 (31%)	6 (17%)	9 (26%)	2 (6%)	21 (60%)	21 (60%)	35
2	5.9%	95.6%	86.8%	12 (6%)	14 (7%)	26 (12%)	25 (12%)	15 (7%)	22 (10%)	43 (20%)	57 (27%)	214
3	14.3%	93.2%	63.4%	5 (22%)	9 (39%)	4 (17%)	7 (30%)	3 (13%)	2 (9%)	11 (48%)	14 (61%)	23
4	7.3%	96.7%	83.2%	7 (6%)	16 (14%)	11 (10%)	15 (13%)	8 (7%)	12 (10%)	34 (30%)	42 (37%)	115
5	44.3%	90.1%	25.2%	3 (4%)	6 (9%)	25 (37%)	20 (29%)	13 (19%)	12 (18%)	28 (41%)	30 (44%)	68
6	36%	91.7%	45.4%	7 (14%)	7 (14%)	11 (22%)	15 (29%)	5 (10%)	4 (8%)	21 (41%)	14 (27%)	51
7	6.8%	96.5%	45.4%	3 (7%)	8 (19%)	2 (5%)	3 (7%)	2 (5%)	1 (2%)	16 (38%)	18 (43%)	42
8	8.9%	95.2%	69.9%	7 (8%)	13 (16%)	13 (16%)	18 (22%)	10 (12%)	9 (11%)	41 (49%)	36 (43%)	83
9	13.6%	94.4%	56.2%	12 (12%)	28 (29%)	18 (19%)	26 (27%)	18 (19%)	23 (24%)	40 (41%)	55 (57%)	97
10	30.9%	93%	45.0%	8 (18%)	12 (27%)	15 (34%)	14 (31%)	7 (16%)	3 (7%)	19 (43%)	20 (45%)	44
11	28.9%	92.6%	41.9%	16 (13%)	33 (26%)	37 (29%)	35 (28%)	23 (18%)	13 (10%)	49 (39%)	80 (63%)	127
12	23.1%	93.7%	50.0%	10 (12%)	20 (24%)	20 (24%)	17 (20%)	16 (19%)	11 (13%)	45 (54%)	63 (76%)	83
13	7.6%	94.8%	67.6%	1 (2%)	5 (12%)	7 (17%)	8 (20%)	7 (17%)	8 (20%)	14 (34%)	18 (44%)	41

Table 3: Percentage of young people in Year 9 and their significant others who smoke and vape, and the take-up of free school meals, attendance during the year and the pupils who achieve the expected level at Key stage 4, for each school

* The first three columns are sourced from data supplied by <http://mylocalschool.wales.gov.uk> in 2015

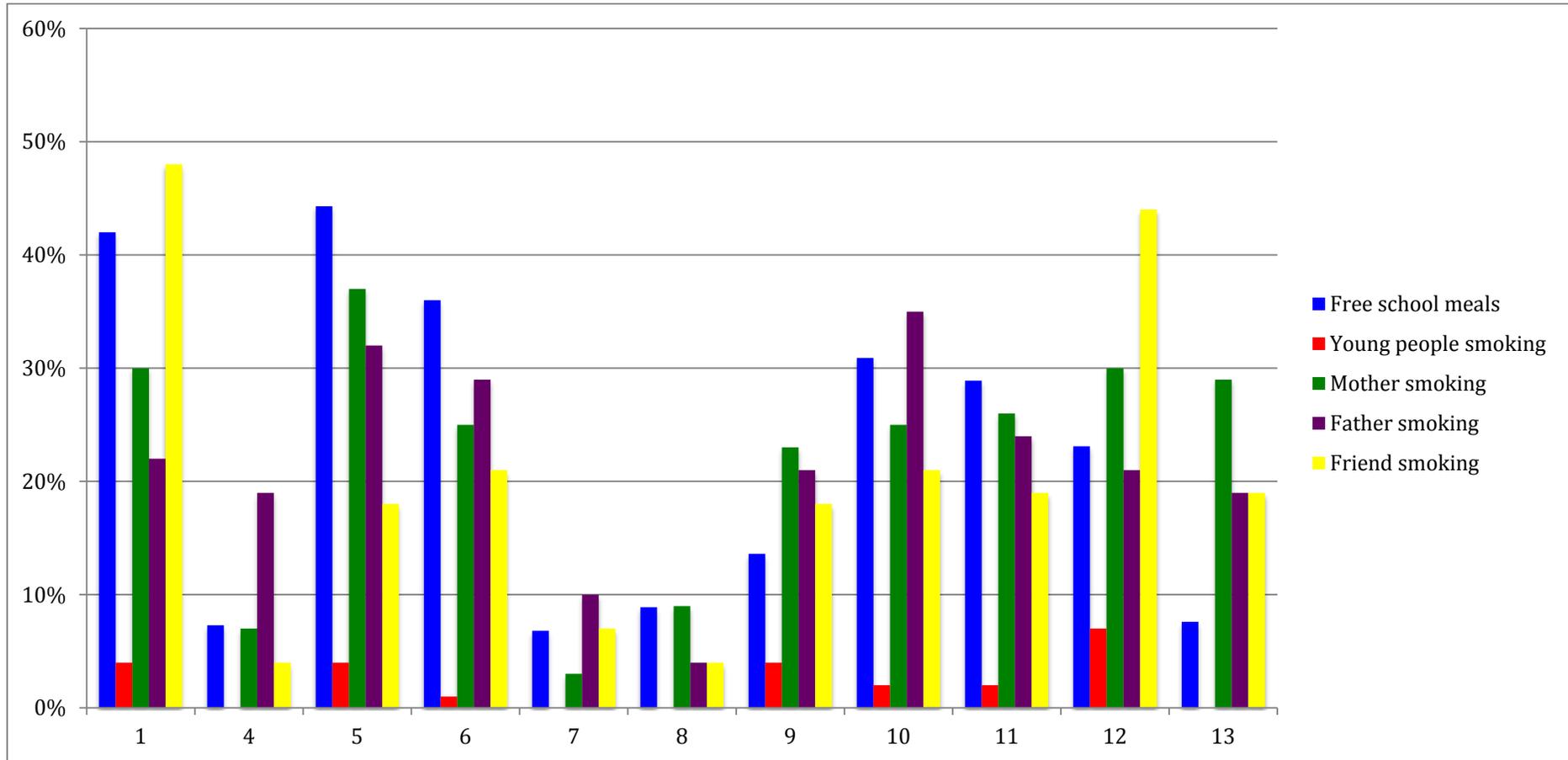


Figure 1: Percentage of young people in Year 7 and their significant others who smoke, and the take-up of free school meals (y axis) for each school (x axis)

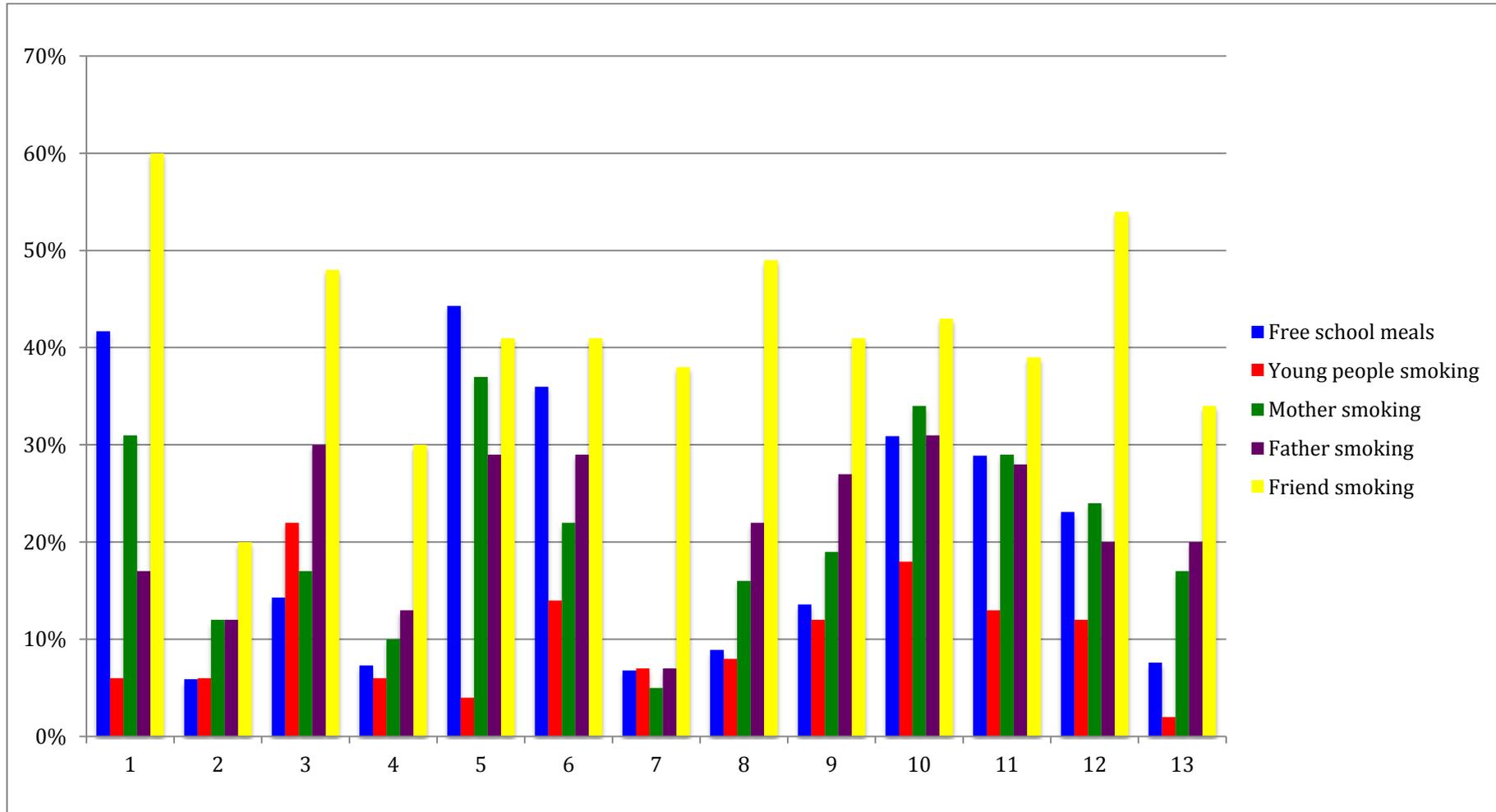


Figure 2: Percentage of young people in Year 9 and their significant others who smoke, and the take-up of free school meals (y axis) for each school (x axis)

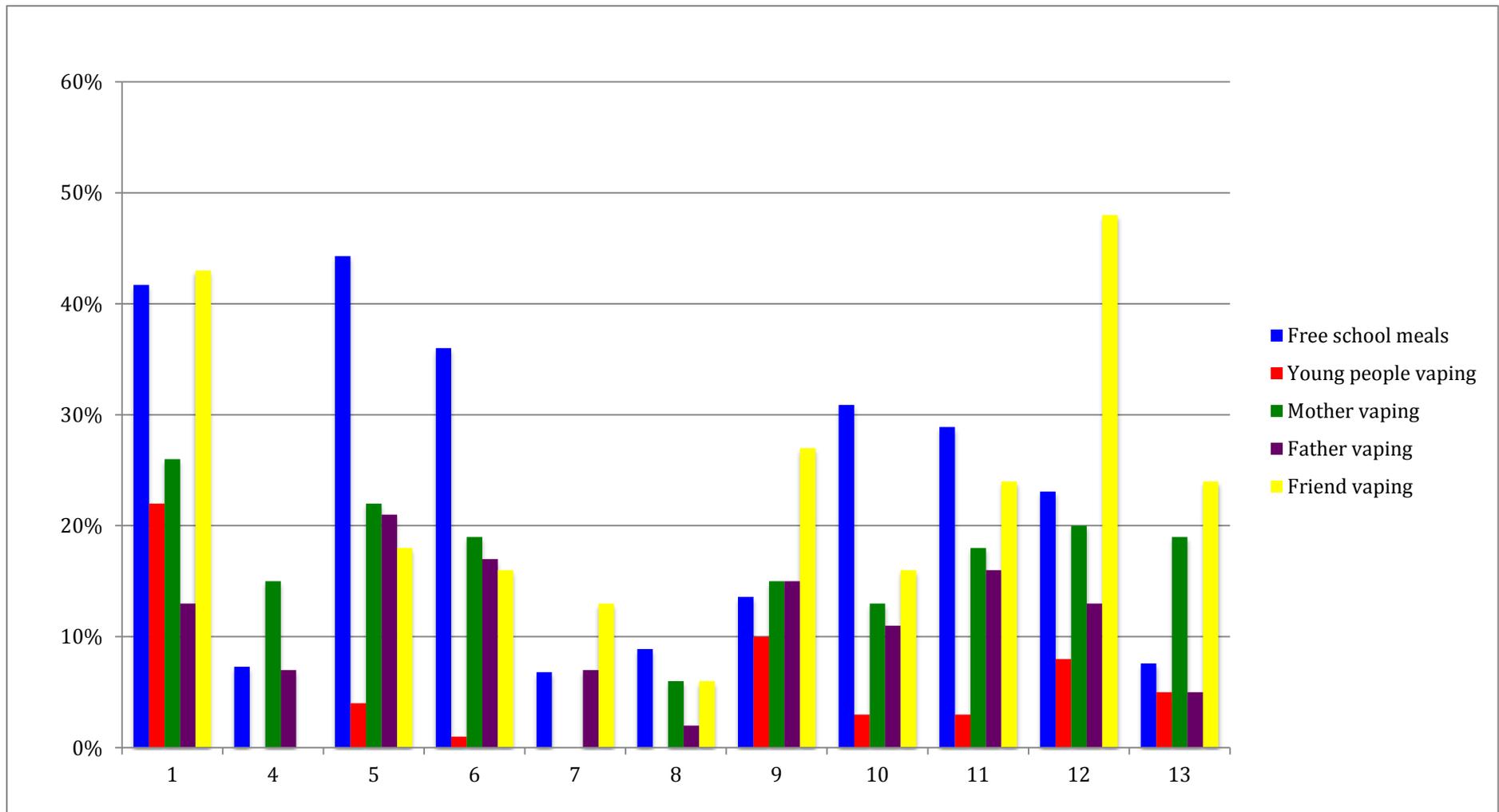


Figure 3: Percentage of young people in Year 7 and their significant others who vape, and the take-up of free school meals (y axis) for each school (x axis)

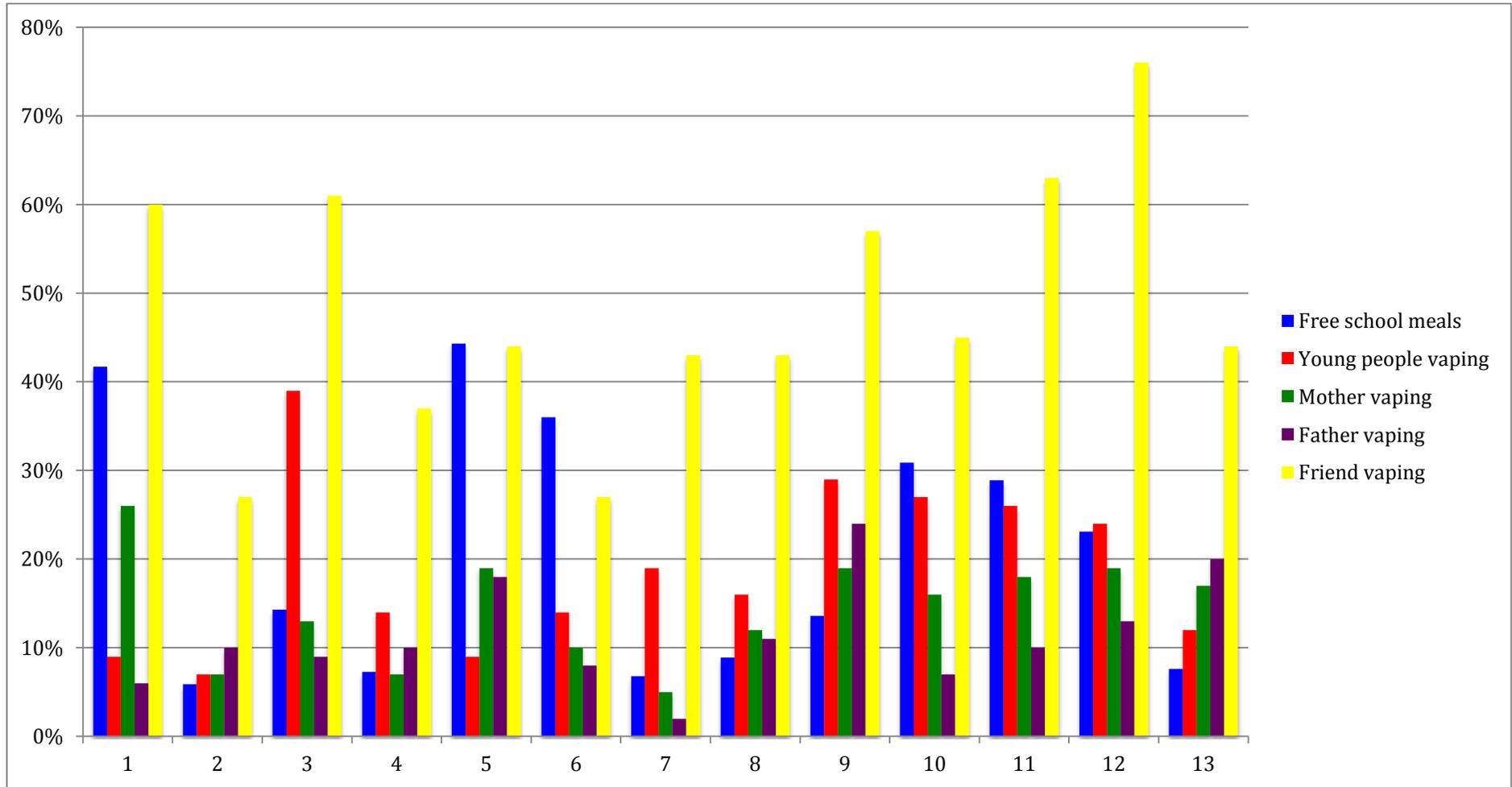


Figure 4: Percentage of young people in Year 9 and their significant others who vape, and the take-up of free school meals (y axis) for each school (x axis)

Inferential analysis

Influence of relatives and friends

Those who lived with a relative that smoked (Mother, Father or Sibling) were over five and a half times more likely to have tried smoking than those not living with a relative who smoked ($X^2=87.0$, d.f.=1, $p<0.001$). Those who lived with a relative that used e-cigarettes were three times more likely to have tried vaping ($X^2=80.6$, d.f.=1, $p<0.001$).

Separate Chi Square analysis shows that those with a mother who smoked were three times more likely to have tried smoking than those with a mother who did not smoke ($X^2=41.5$, d.f.=1, $p<0.001$). Those whose father smoked were two times more likely to have tried smoking than those with a father that did not smoke ($X^2=16.6$, d.f.=1, $p<0.001$). Young people with a sibling who smoked were nearly four and a half times more likely to have tried smoking than those with a sibling that did not smoke ($X^2=67.2$, d.f.=1, $p<0.001$).

Young people whose mother vaped were nearly two and a half times more likely to have tried vaping than those whose mother did not vape ($X^2=39.7$, d.f.=1, $p<0.001$). Those with a father who vaped were also more likely to have tried vaping than those with a father that did not vape ($X^2=4.1$, d.f.=1, $p<0.05$). Young people with a sibling who vaped were more than three and a half times more likely to have tried vaping than those who did not have a sibling that vaped ($X^2=109.6$, d.f.=1, $p<0.001$).

Those with a friend that had tried smoking were twenty-two times more likely to have tried smoking than those with no friends that had tried smoking ($X^2=205.1$, d.f.=1, $p<0.001$). Likewise, those with a friend that had tried vaping were over sixteen times more likely to have tried vaping than those with no friends that had tried vaping ($X^2=315.2$, d.f.=1, $p<0.001$).

When those who tried smoking but did not carry on were excluded, the findings are as follows:

Those who lived with a relative that smoked (Mother Father or Sibling) were nearly three times more likely to smoke than those not living with a relative who smoked ($X^2=31.8$, d.f.=1, $p<0.001$). Those who lived with a relative that used e-cigarettes (Mother Father or Sibling) were nearly three times more likely to smoke ($X^2=30.9$, d.f.=1, $p<0.001$).

Separate Chi Square analyses were run for Mother, Father and Sibling. Analysis shows that Smokers were two and a half times more likely to have a mother who smoked ($X^2=13.2$, d.f.=1, $p<0.005$), twice as likely to have a father who smoked ($X^2=8.87$, d.f.=1, $p<0.005$ - see table 2) and three times more likely to have a sibling who smoked ($X^2=8.87$, d.f.=1, $p<0.005$).

All smokers had friends that had tried smoking while this was less than a third for non-smokers ($X^2=55.3$, d.f.=1, $p<0.001$).

Is there a difference in the number of males and females who report smoking?

There was no association between gender and smoking status ($X^2=0.2$, d.f.=1, $p>0.05$) nor having tried smoking ($X^2=2.6$, d.f.=1, $p>0.05$).

How do respondents rate cigarettes and e-cigarettes in relation to harm

A Wilcoxon test showed that across the sample, cigarettes were considered more harmful than e-cigarettes ($z=27.0$, $p<0.001$).

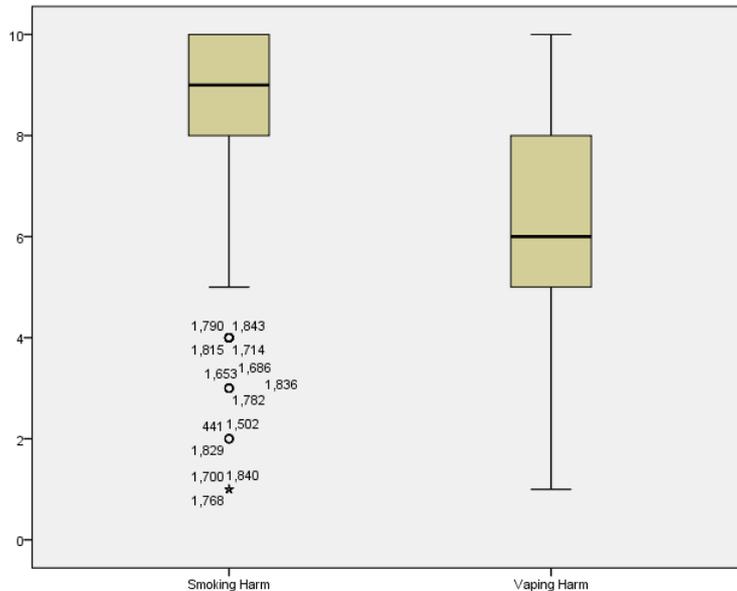


Figure 5: Young people's perception of harm from cigarettes and e-cigarettes/vaping

Relationship between perception of harm and uptake of smoking

A Mann-Whitney U test showed that Smokers rated cigarettes less harmful than Non-Smokers ($U=12540.5$, $p=0.001$)

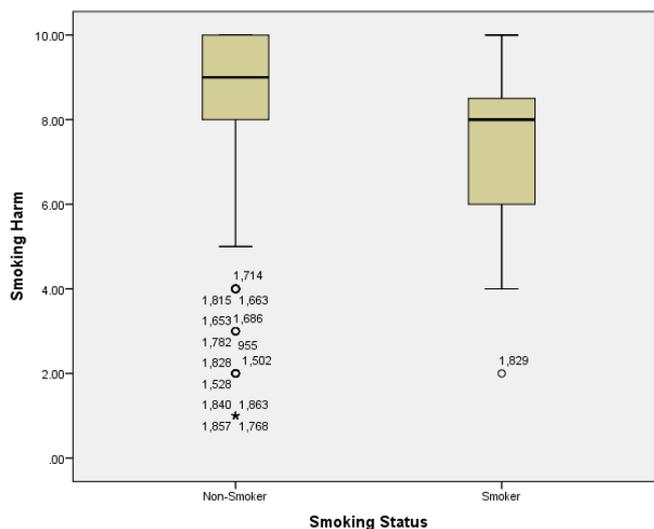


Figure 6: Smokers and non-smokers perception of harm

Vapers rated e-cigarettes less harmful than non-Vapers ($U=2369.5$, $p<0.001$)

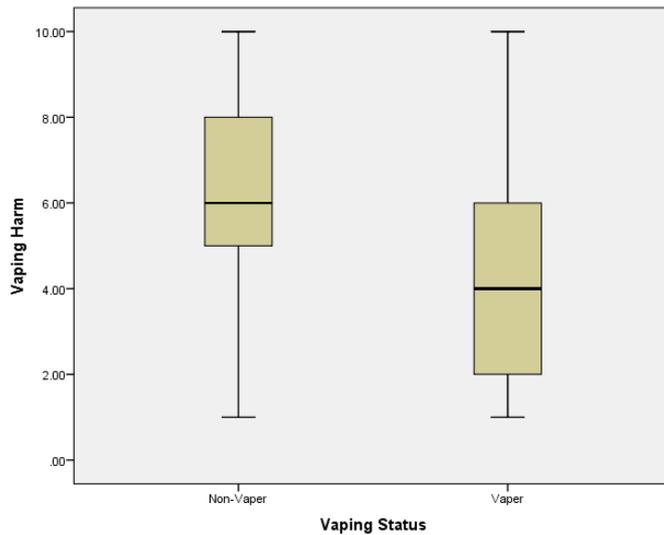


Figure 7: Young people's perception of harm from those who use and do not use e-cigarettes/vape

Relationship between having education on smoking and uptake of smoking

Having had lessons about smoking/vaping was not associated with having tried smoking ($X^2=0.001$, d.f.=1, $p>0.05$) or smoking status ($X^2=1.42$, d.f.=1, $p>0.05$).

Relationship between having/not having education on smoking and perception of harm

Smoking education was not related to the perception of harm associated with smoking ($U=277558$, $p>0.05$). From Figure 4 below, while the median scores are the same, those that had received education tended to cluster at a higher harm rating for vaping than those that received no education (Figure 4).

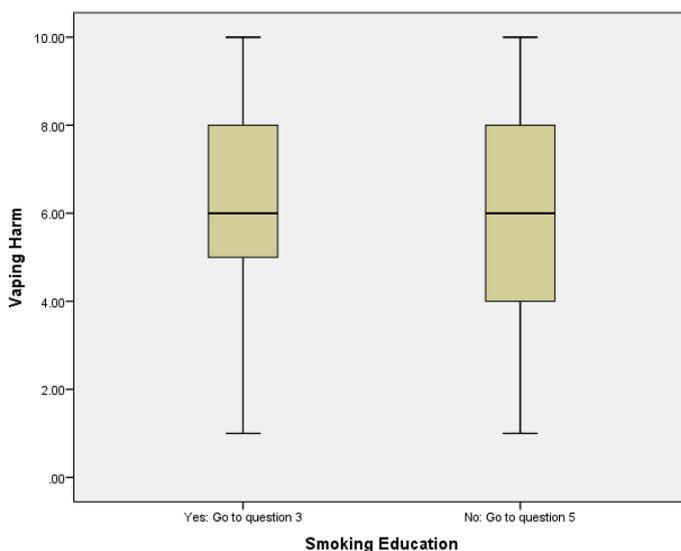


Figure 8: Association between the perception of harm and whether they received or did not receive education on smoking.

Are there any differences in how young people perceive the risk of smoking depending on whether their parent(s) smoke or not

Parents smoking was associated with a lower perceived risk of smoking related harm ($U=319577.5$, $p<0.005$ - See Figure 5) while parents vaping was unrelated to the perception of vaping related harm ($U=228287.0$, $p>0.05$).

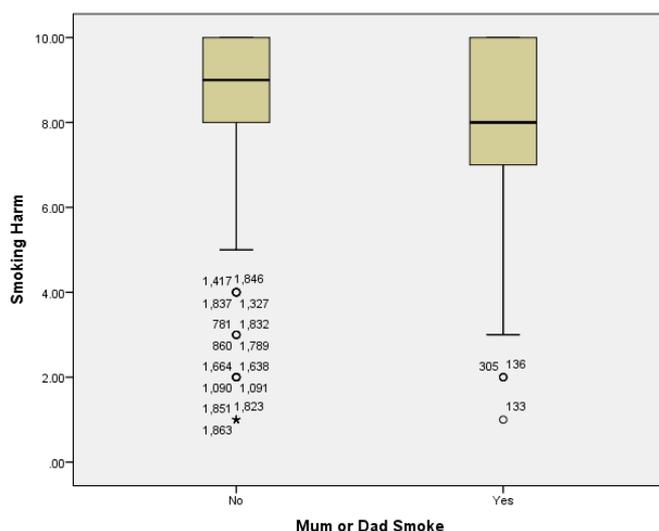


Figure 9: Association between parental smoking and perception of harm

Summary of key findings from the quantitative data:

- The strongest predictive factor for young people smoking tobacco is whether the mother smokes.
- Young people from lower socioeconomic areas are more likely to smoke.
- Young people living with a relative who smokes cigarettes are five and a half times more likely to smoke than others. Those who live with relatives who vape are three time more likely to vape.
- Those with a friend who smokes cigarettes are 22 times more likely to have tried smoking and likewise those with a friend who vaped are 16 times more likely to try e-cigarettes.
- Of those who lived with a relative who smoked, they were three times more likely to continue smoking cigarettes and e-cigarettes.
- There were no significant differences in smoking behaviour in boys and girls.

- Cigarettes were considered more harmful than e-cigarettes and smokers rated cigarettes less harmful than non-smokers. Young people who used e-cigarettes considered vaping less harmful than non-vapers.
- There was no association between education on smoking and smoking behaviour and the perception of harm.
- People tried vaping irrespective of whether they had education on smoking or not.
- Those who received education about smoking, tended to view vaping as more harmful than those who had not received education on smoking.
- Young people whose parents smoke had a lower perception of smoking related harm. However, there was no difference in the perception of harm from using e-cigarettes, whether parents vaped or not.

Qualitative findings

Qualitative data obtained from interviews and focus groups were analysed and emerging themes were identified. The key themes are outlined below. Anonymous quotes have been used where appropriate to illustrate and support the perceptions and views of participants.

Young people are smoking at a younger age

There was a general impression from the 16 year olds who participated that more young people are smoking and are starting from a younger age. They related this belief to their own experiences. They confirmed that this included experimenting with e-cigarettes. The younger participants (aged 11 to 13) confirmed that they too believed *'a lot of children smoke'*. Participants who were aged 16 years were asked why they felt this did not reflect the survey data from their school, where relatively low numbers reported having tried smoking. Their response was that *'people lie in surveys and in classes where children are asked whether they smoke'*.

'I see year sevens smoking in school... not just experimenting, they're smoking'

'It's under-reported... 25% of children smoke'

'It's more common for younger people under 14 to smoke now, they smoke when they're 12-13'

School policy is not enforced

Not all schools in Cardiff and the Vale of Glamorgan have a dedicated policy document for smoking and e-cigarettes. Some schools have incorporated the information relating to smoking and e-cigarettes into a general policy for substance use. Where schools have no written policy, staff report that their schools promoted zero tolerance to smoking on school premises for staff and pupils. Our findings suggest that some teachers and young people who attended the focus groups challenge this notion.

'Certain areas [within the school] are notorious for smoking and they're not really hidden'

'There are certain areas in schools where people know where they can smoke, where everybody knows they are there, including the teachers, but they don't do anything'

'I see people smoking on school premises, hidden behind the block, teachers know about it but no teachers tell them off'

'Some people in years 10 and 11 walk around the school with e-cigarettes and they hide them when they see a teacher'

Teachers are also aware of young people smoking on school premises but are reluctant to deal with the smokers. Teachers gave various reasons why zero tolerance policies were not implemented.

'There is Government Policy but it's not followed through. The advice we have been given is 'turn a blind eye' as they have to go somewhere to smoke. The pupils are usually out of class before the teacher who is on break duty and are already smoking by this time; they plan before hand where they're going to go to smoke. We are told move them on if you can but do not be confrontational. Some go outside the school wall and sit on the pavement but that just gives a bad impression for visitors and people passing the school.'

'they'll find somewhere else if you stop them, they'll just do it anyway'

Teachers also cited lack of time for not confronting young people who smoke and also more worryingly, it was suggested that some teachers are often frightened to confront the young people who smoke in school as they can find themselves the victims of verbal abuse.

'We need help to follow the policy through... we need more time. We know who the smokers are but we don't have time during school time. I've found smokers and told them to move on but I get a mouthful of abuse. It can be 7 or 8 pupils against one teacher. I can take their names and pass onto head of year but the pupils know that nothing will be done, as there's no time to follow up issues. We need pastoral help where they can be taken aside individually'

It appears from the data that smoking is seen as more acceptable than other substances. When young people were asked about the actions teachers were likely to take if pupils were drinking on school premises, they all felt that this would not be tolerated.

'It [cigarettes and e-cigarettes] belong to them, they would take alcohol off them but not cigarettes'

Factors and influences contributing to initiation and maintenance of smoking behaviour

Our findings suggest that there are a number of factors and influences that contribute to smoking behaviour in young people.

➤ Peer influence

Peer pressure appears to be highly influential in the initiation and maintenance of smoking behaviour. The idea of 'fitting in' and being part of a group is perceived as an important factor when young people describe the reasons why some are encouraged to smoke.

'Friends make people smoke, they pressure them... it makes you feel left out... the odd one out if you're the only one who doesn't smoke'

'You'd be left out if you said no'

'It probably happens quite a lot [peer pressure] especially if someone is new and they want to fit in'

'Some people don't even like smoking they just do it with their friends'

'If one of my friends did something or a group of friends did something, I'd instantly feel left out if I didn't do it... you'd be easily influenced'

However, not all young people reported that their peers would influence them. Some recognised the importance of peer pressure and being left out if their friends were smoking, but suggested that they would not join them as they recognised the consequences and had the confidence to refuse.

'If my friends were smoking, I certainly wouldn't join them'

Teachers appear to think peer pressure plays a role in initiating smoking as well.

'Even if they get all the information, peer pressure is strong, they want to fit in and look cool, they see older children smoking on the way to school and they think it's cool.'

'I've [teacher] seen year 10/11 students passing e-cigarettes around and discussing different flavours. They're sending a message that they're grown up to younger students, they think they look cool – we don't see smoking on TV anymore so it's peer pressure.'

Other factors also appear to play a role in the initiation and maintenance of smoking behaviour. Young people identified certain characteristics amongst individuals who are more likely to experiment and take up smoking. There was a consensus amongst the young people in the focus groups that there is a 'type' of young person who smokes.

'Naughty people, people who don't listen... it adds to their reputation'

Others suggest that some people smoke as a means of representing an image of themselves.

'Some do it as fashion, they don't inhale it, just do it to fit in, for the look'

'Emos smoke rollies - it adds to their image'

'E-fags are more popular, they [young girls] just do it for the image'

Teachers suggests a relationship between smoking and low academic performance.

'I think the problem becomes evident around the end of year 9 and going into year 10. In year 9 they have their options... the school is under pressure to have pupils to do the academic subjects (sciences, languages and maths). Those who do not feel they live up to this feel excluded in the options and academic life. In order to look cool, they take up smoking and then when they go through year 10, they carry on as they are recognised for this... recognised as a smoker. They avoid the subjects so their identity is smoking.'

➤ Parental influence

There were different perceptions regarding how parental smoking influences whether young people smoke or not. Some of the sample held the belief that if young people had parents who smoked there was a sense of normalisation and therefore more likely to smoke. They suggested that this might be an explanation as to why some young people think smoking is not harmful.

'they think it's normal if their parents smoke'

'parents are right, therefore they wouldn't be doing it [smoking] if it was bad for you, and children copy them'

'Children will try and imitate parents'

Some young people contradicted this belief and were less likely to smoke if they had been brought up by parents who smoked.

'Parents and family smoking does influence children a little bit... it might make them not smoke... they see the effects of it and the smell'

It was also suggested that smoking might be a form of rebellion against what parents advise.

'If parents' say don't do it, people will do it'

➤ The role of social media

All the young people in our sample suggest that social media is highly influential as a conduit in imparting messages. In terms of cigarettes and e-cigarettes the messages from social media are contradictory, for example, there are messages around harm and consequences of smoking alongside videos demonstrating tricks with 'smoke' from e-cigarette. They reported using social media as a way of knowing what is 'cool' and suggested that

most young people were the recipients of shared links (for example links to YouTube videos) through social media sites such as Facebook. Some felt that these videos were influential in initiating experimental smoking and should be restricted for certain age groups

'Social media is a bad thing – it makes people look really cool and that's why they smoke'

Children as young as 11 and 12 years old reported that they found YouTube videos demonstrating tricks with 'smoke' from e-cigarettes, intriguing and fun. They suggested that many young people who have never smoked, buy e-cigarettes to try and copy the videos.

➤ Cigarettes and e-cigarettes are easy to access

Young people, regardless of Government restrictions around the sale of cigarettes and e-cigarettes, know how to access and buy them. E-cigarettes are particularly easy to obtain according to our sample group. Young people have a great deal of shared knowledge regarding where and how to buy them.

'It's easier to get hold of fags now, some shops will serve you'

'You can get them in certain corner shops'

'You can get them [e-cigarettes] anywhere... Cardiff, Barry market, anywhere... they don't even ask your age'

The young people in our sample believe that if cigarettes were not sold in shops the people who smoke in school would still find a way to access cigarettes and e-cigarettes.

'If they are not sold in shops – they [young people] will go on the black market [to buy them]'

'Shisha pens[e-cigarettes] are sold in the school'

Our sample reported that some young people ask older adults, who are known and unknown to them to purchase cigarettes on their behalf. Many of the young people could cite personal examples where their friends or relatives had been asked to purchase cigarettes on behalf of young people.

'I was at the corner shop with my mum and one young person asked my mother, 'Can you buy me cigarettes?' ...this person was around the age of 14'

'a kid in the park asked my dad for a lighter and he was only around 12'

In relation to access, our sample were questioning how young people could afford to purchase their cigarettes or e-cigarettes.

'How can some of these people [young people] afford it.. in a queue in front of me – they say 'oh we've only got 20 left we should buy some more' ...its 20 quid for 40 cigarettes – how can they afford that.'

Another young person suggests that *'they share with other people'*

They also suggested that Government agencies need to be more proactive in dealing with accessibility.

➤ Combating stress

Alongside the influences already highlighted above, participants suggested there were situations where young people who had not previously smoked would take up smoking. The most common reason cited was to deal with stress.

'Years 10 and 11 say they smoke to calm down around exams'

'Friends say they smoke because of stress but I've been on the smoking course and I know that it doesn't relieve stress'

E-cigarettes are believed to be less harmful

The young people's interpretation of Government and health promotion messages relating to e-cigarettes is that they are not as harmful as cigarettes and as such they have perceived using them as socially acceptable.

'They [the Government] say it's better for you... it's better to smoke e-cigarettes than cigarettes'

'There aren't many adverts about the dangers of e- cigarettes so they probably think it's not dangerous compared to smoking'

'They're way more popular than cigarettes... it's more acceptable to smoke shisha [pens] than cigarettes'

'Young people would think it's not harmful as they have different flavours, some of them don't even have nicotine in them... you can buy any flavour, even skittles flavour'

'you get messages on cigarette packages but there's nothing on e-cigarettes so it can't be bad for you'

The smell of e-cigarettes also appear to be more acceptable

'They don't smell as bad as cigarettes'

E-cigarettes also appear to be more acceptable with certain ethnic groups

'Cigarettes don't interest the Muslim community in school but they would do, and can do shisha'

Some young people suggested that e-cigarettes should be more acceptable as they are used by people to help give up smoking.

'it should be more acceptable to smoke e-cigarettes as it helps them'

Others saw the use of e-cigarettes leading to the take up of smoking tobacco and as a gateway to smoking other substances.

'They go on to smoke cigarettes'

'they use other stuff in e-cigarettes, I smelled weed, you know the smell'

'Some people take the powder for e-cigarettes and put it in cigarette paper and smoke it'

The effectiveness of health education

The younger participants in the focus groups can cite the consequences and take on board health messages from educational programmes, including the moral messages.

'It's not cool as it damages your lungs... don't know why they think it's cool – every time someone looks at them they think what dumb people cause they smoke'

However, there was a sense of hopelessness amongst young people aged 16 and over regarding smoking prevention and interventions. They appeared to be indifferent and rather negative about educational programmes and current prevention interventions. Health promotion material does not appear to be heeded by young people who smoke. Focus group participants suggest that these young people seem to think cigarette smoking will not harm them. Further they reported that young people who do smoke are less likely to, or do not, attend PSE lessons in school when the subject of smoking is covered.

'Nobody listens to lessons and posters'

'The ones who need to go to the lessons, the smokers, they mitch... even if they go to lessons – they don't listen... they're laughing... they also pretend that they don't smoke'

The 16 year olds in the sample reported that despite health education in schools around smoking behaviour, there are still young people taking up smoking. They also suggest that the young people who smoke think the messages do not apply to them.

'I've got a strong body, I don't care. If they were bad for you they wouldn't sell them in shops'

'Things you learn in PSE don't really apply as you're growing up'

'lessons don't work for some people – it's a psychological feeling for them – if they think it won't harm them – they won't believe it harms them'

'they know the dangers but they carry on as they're addictive'

'they probably just think it won't happen to them... the effect it has only happens to certain people'

Even some teachers feel reticence about the impact of health education in relation to smoking for some young people.

'Students don't believe us... they don't think we tell them the truth, they say 'it's lies isn't it'

The usefulness of interventions

There was a clear disparity between the views and beliefs of younger and older participants in focus groups. Whereas the 11 to 13 year olds had practical ideas regarding helping to stop the take up and maintenance of smoking, the 16 year olds were negative about the impact of interventions. They suggest that the only interventions that will work are to ban them and help people who are already addicted to stop smoking.

'They should stop selling fags then....ban them'

'education doesn't work... everyone knows the effects and the consequences... we're not uneducated'

'it's themselves they're killing, not killing us'

The younger age group were forthcoming with suggestions and more positive about the benefits of educational interventions. A lot of their solutions were to develop interventions that reduced accessibility, for example, the implementation of legislation to make it more difficult for young people to access and buy cigarettes.

'need more lessons in PHSE about e-cigarettes... there's less knowledge about e-cigarettes... lessons don't cover it.... they need to say what's in them'

'start lessons in primary school'

'there needs to be more support to give up'

'Make them [cigarettes and e-cigarettes] more expensive'

'Have tougher rules so you can't buy them'

'they should make it more difficult to smoke cigarettes'

Some of the younger people also suggested using famous people as positive role models, particularly sports personalities. This was regarded as a way of

promoting health and fitness as opposed to the belief that people who smoke were unfit.

‘Certain people on social media could help, if they said it [don’t smoke]... like a really good athlete, then other role models could help as well... a variety of famous people... actresses, singers, pop stars’

Summary of key findings from the qualitative data:

- Young people are smoking at a younger age.
- Peer pressure strongly influences smoking behaviour in young people.
- The accessibility of cigarettes and e-cigarettes encourage smoking behaviour.
- Legislation around accessibility is not being enforced e.g. corner shop sales, school policy.
- Young people who have not previously smoked cigarettes are using e-cigarettes.
- Sixteen year olds and the 11 and 13 year old groups, held contradictory views regarding interventions to prevent smoking and using e-cigarettes. Whereas the 16 year olds were ambivalent about the success of possible interventions to prevent the take-up of smoking, younger children were more optimistic that age appropriate interventions could work.
- Social media is a contributory factor in the initiation of using e-cigarettes.
- Mixed messages around e-cigarettes add to the attraction of using them.
- In relation to the impact of education on smoking young people felt that initial outcomes may be positive but there is a belief that this decreases over time.
- School policy around smoking is not enforced in all schools.

Discussion of findings

The following section is a synthesis of the qualitative and quantitative findings. These findings will be compared and contrasted with those from previous research.

Young people are smoking at a younger age

As reported in previous studies, the findings of this research indicate that children as young as 11 have smoked tobacco and used e-cigarettes at least once: 3% and 6% consecutively. However, only four young people in year 9 report they smoke daily and one in Year 7. During focus group discussions, participants suggested that the survey data might be misleading as they reported that there is an increase in the number of young people who smoke, and some as young as 11, were smoking regularly. An interesting finding from the survey was that young people reported a high proportion of their friends smoked tobacco; 21% in year 7 and 36% in year 9. An even higher proportion of friends used e-cigarettes; 23% in year 7 and 44% in year 9. Since, in the current study, there is a positive correlation between young people having smoked and friends having smoked, the relatively low numbers who admit to smoking might lead one to make the assumption that this is under-reported. Other surveys have also found that young people under-report smoking behaviour (Craig and Mindell, 2008). Another explanation is that more than one young person has cited the same friends who smoke.

With research findings demonstrating an increase in prevalence of young people smoking e-cigarettes, there is some concern that they are being exposed to nicotine from an early age. As with other studies, the current study found that many young people who have not smoked tobacco, experiment with, and use e-cigarettes. These findings confirm Moore et al's (2015) assertion that young people are not using e-cigarettes as a means of quitting smoking. This may lead to a detrimental accumulative effect over time on the health of these young people. There also appears to be a significant relationship between the smoking of tobacco and the use of e-cigarettes.

There may be a number of precipitating factors to explain smoking behaviour in young people, with accessibility being a major contributing factor. Sixteen year olds reported that purchasing cigarettes without age restriction appeared to be relatively straight forward for young people. Some retailers appear to be 'known' by young people as places where it will be easy to buy without questions. Many young people in the lower age group (11 and 13 year olds) could also name specific locations where they could purchase e-cigarettes, which included the school grounds (purchased from other pupils in the school).

The way that e-cigarettes are marketed was also cited as a reason for the increase in their use. Young people cited the various flavours that mostly appealed to young people, such as skittles and fruit flavours. The World Health Organisation (2014) raised concerns that e-cigarettes may even be a 'gateway' to smoking tobacco. There is no statistical evidence in the current

study to support this, however, the data from the focus groups suggest that young people who are experimenting with nicotine based e-cigarettes may be more likely to smoke tobacco. There is also qualitative evidence suggesting that young people are using e-cigarettes in a novel way, for example, 'powder' purchased for e-cigarettes are used to smoke in rolled up cigarettes. There was also a suggestion that young people are using e-cigarettes to smoke other substances, e.g. liquid cannabinoids.

Peer influence was cited in both the survey and through focus group data as a risk factor for young people to take up smoking cigarettes and e-cigarettes, supporting Cavalca et al's (2013) findings. Being able to 'fit in' appears to be pivotal in encouraging experimentation. Those with a friend who smoke cigarettes are 22 times more likely to have tried smoking and likewise those who have a friend who vapes are 16 times more likely to use e-cigarettes.

The predictive analysis demonstrated how friends and family members influence smoking behaviour. Having a mother who smokes was the strongest predictive factor of smoking behaviour in young people. This is worrying as our survey findings highlight that a quarter of those surveyed in Year 7 and a fifth in Year 9 have mothers who smoke. Moreover, young people who have parents who smoke tobacco are much more likely to rate the risks of smoking as lower than young people whose parents do not smoke.

Previous findings from the literature have also suggested a link between parental smoking and the risk of the young person becoming addicted to cigarettes (Kandel et al, 2015). Although we cannot make this causal link from our data, our findings do show that those who live with a relative who smokes, are three times more likely to continue smoking cigarettes and to continue to use e-cigarettes.

Although Welsh Government (2012b) and NICE Guidance (2010) advocate that no one should smoke on school premises, findings from the focus groups indicate that this is not observed in all schools. Some young people are smoking tobacco and e-cigarettes in school and teachers and pupils are aware of this. Teachers are frightened in some cases to confront a group of smokers or report that they do not have time to deal with the consequences of confronting them. They also report that they have no time or experience to help them to give up smoking. Condoning smoking on school premises can influence young people's views and lead to the normalisation of smoking behaviour.

There is some evidence to support patterns of tobacco smoking and the use of e-cigarettes in young people by socio-demographic factors. This finding for e-cigarette smoking is in contrast to the findings of Moore et al (2015) but support the findings by Hiscock et al (2012). In our research, more young people smoke tobacco and use e-cigarettes in schools where there is a high number of pupils eligible for free school meals.

There is limited, but nonetheless worrying accounts from teaching staff suggesting that there is a link between young people smoking and low academic achievement. This corresponds with previous research findings (Morin et al, 2012; Pennanen, 2012).

Our survey findings confirm that the majority of young people have had some educational intervention and that they can cite facts and knowledge related to tobacco smoking and risks to health. However, they were less likely to have knowledge of harm around e-cigarettes. The youngest children in our sample were more likely to hold moral views in regard to smoking tobacco and most felt that it was not acceptable. Conversely, they felt that e-cigarettes posed less risk to harm and young people were more likely to try them irrespective of whether they had education or not. This was attributed to the mixed messages they receive.

With regards to interventions, younger people felt that any smoking campaigns should include positive role models, with whom they could relate. Sport personalities were believed to be the most appropriate role models to impart the health messages. It was suggested in the focus groups that peer pressure can also be positive in preventing the uptake of smoking behaviour and should be built in to any interventions.

The 16 year olds held ambivalent views towards the effectiveness of smoking interventions for tobacco. The findings concurred with those of younger people in that they had less knowledge regarding the harm from e-cigarettes. Although they felt that knowledge was essential, there was very little else that would help apart from a total ban on cigarettes or implementing current legislation to make them less accessible.

Conclusion

The findings from the data confirm previous study findings. Young people are experimenting with smoking behaviour from a very young age. This is concerning as there appears to be an incremental increase with age, despite the knowledge that young people have through educational interventions.

Our findings suggest that children as young as 11 are smoking tobacco, albeit not on a regular basis and that the trend toward taking up smoking e-cigarettes is increasing. Our findings confirm that young people who have never smoked tobacco previously are using e-cigarettes. Contrary to the known effects of nicotine, very little is known about the risks of e-cigarette use in adolescence. Although cigarette advertising has been banned in the UK, e-cigarettes continue to appear in advertisements. Clearly, there are influences that encourage the use of e-cigarettes, such as imitation of smoking behaviour led by YouTube videos, the marketing of e-cigarettes using flavours and the accessibility and acceptability of smoking e-cigarettes.

Young people were very clear in the focus groups that mixed messages from the government are confusing. In relation to these messages some of the participating schools are tolerating smoking behaviour on the premises. The attitudes of staff and students to this flouting of policy is underpinned by their belief that smoking behaviour cannot be prevented for some and that it is better to allow them to smoke on school premises rather than to let them leave the school.

It is clear that there are numerous factors that influence smoking behaviour in young people. Parental smoking (particularly the mother) is highly predictive of young people initiating and maintaining smoking behaviour. There is a need to develop collaborative public health interventions targeting parental smoking to reduce the influence on children.

Recommendations

- It is clear from our findings that the influence of others is pivotal in the initiation and maintenance of smoking behaviour. Public Health Wales need to lead the collaboration between smoking cessation service and schools to develop campaigns and interventions to ameliorate the impact of adult smoking on their children.
- Teachers require more support to enforce the no-smoking school policy. Head teachers need to lead school staff to implement and enforce no smoking policies. Further, Public Health need to liaise with Head Teachers to identify barriers around implementing policy.
- A referral pathway is required to enable school staff to refer young people who smoke, and want to give up, to appropriate services.

- The current research has highlighted young people's knowledge around purchasing e-cigarettes from a variety of sources, including on-line. In order to evaluate the potential harm of e-cigarettes Welsh Government/Public Health Wales need to commission a research project. This will include an evaluation of: the legislation around the sale and purchasing of e-cigarettes; the social and cultural context around the use of e-cigarettes; and the ingredients and make-up of e-cigarettes.
- Educational programmes for young people should include preventive measures on the use of e-cigarettes and vaping.
- Welsh Government needs to ensure that the Licensing Authorities enforce legislation around the sale of cigarettes and e-cigarettes.
- To make best use of resources, Public Health need to target interventions in areas where the prevalence of smoking is high, for example, low socio-economic areas.
- The Donaldson review (2015) outlines four purposes of the curriculum and six new areas of Learning and Experience, one of these being Health and well-being. The findings of this current report highlight the issues that need to be addressed in order achieve the recommendations made by Donaldson for a healthy school population and school environment.

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Appendices

Appendix 1: Head teacher letter of information and consent forms



Cardiff
Metropolitan
University

Prifysgol
Metropolitan
Caerdydd

Title of Project: Behavioural insight – smoking among young people

Ethics reference number: 7174

Background

Despite numerous education and media campaigns, survey findings suggest young people in Wales are at risk of taking up smoking (and using e-cigarettes, including vaping). As such, Cardiff Metropolitan University has been commissioned by Public Health Wales to carry out a survey to look at the beliefs and attitudes of children and young people to smoking and e-cigarettes (including vaping). Ethical approval for this study has been granted by the Department of Applied Psychology, School of Health Sciences at Cardiff Metropolitan University.

Your school's participation in the project

All secondary schools in Cardiff and the Vale of Glamorgan have been invited to take part in this project. We would like you to arrange for all Year 7 and 9 students complete an online questionnaire. This will take no more than 15 minutes and could be incorporated into an IT lesson. If it is not possible for children at your school to complete online questionnaires, we can give you paper copies to distribute. Children will not be asked to give their name or any other information that can identify them. Schools will not be identified in the final report either. There is an opportunity, however, to present anonymised findings related to your school to help in developing your own educational programmes.

Are there any risks?

We do not think there are any significant risks to the children who take part in the project. If on the day a child does not want to complete the questionnaire, there is no pressure on them to do so. If a child has any concerns or questions relating to smoking or e-cigarettes, they can be given age appropriate information which we will forward to you in advance.

What happens to the results of the project?

The findings will help Public Health Wales develop an appropriate and age specific campaigns, programmes and interventions to reduce the risk of children taking up smoking (using e-cigarettes including vaping).

What happens next?

Can you please return the consent form attached to this letter to indicate whether you agree or not for your school to be involved in this project. If you agree, we will forward the questionnaires to you.

Further information

If you have any questions about the project or how we intend to conduct the study, please contact us.

Name Dr Tina Alwyn

 02920 417126

 talwyn@cardiffmet.ac.uk



Cardiff
Metropolitan
University

Prifysgol
Metropolitan
Caerdydd

Teitl y Project: Mewnwelediad ymddygiadol – ysmegu ymysg pobl ifainc.

Rhif Cyfeirnod Moeseg: 7174

Cefndir

Er gwaethaf sawl ymgyrch addysgol a chyfryngol, mae darganfyddiadau arolygol yn awgrymu fod pobl ifainc yng Nghymru mewn perygl o ddechrau ysmegu (a defnyddio sigaretau-e, yn cynnwys 'vaping'). Mae Prifysgol Metropolitan Caerdydd wedi cael ei chomisiynu gan Iechyd Cyhoeddus Cymru i gynnal arolwg sy'n edrych ar syniadau ac agweddau plant a phobl ifainc tuag at ysmegu a sigaretau-e (yn cynnwys 'vaping'). Mae Cymeradwyaeth Moesol ar gyfer yr arolwg hon wedi ei chaniatau gan Adran Seicoleg Cymhwysol, Ysgol Gwyddorau Iechyd ym Mhrifysgol Metropolitan Caerdydd.

Cyfranogiad eich ysgol chi yn y project

Mae pob ysgol uwchradd yng Nghaerdydd a Bro Morgannwg wedi cael eu gwahodd i gymeryd rhan yn y broject hon. Hoffem i chi drefnu fod pob myfyriwr Blwyddyn 7 a Blwyddyn 9 yn cwblhau holiadur ar-lein. Ni gymerith hyn fwy na 15 munud a gellir ei chorffori mewn gwers TG. Os nad yw'n bosib i'r plant yn eich ysgol chi i gwblhau holiadur ar-lein, gallwn roi copiau papur i'w dosbarthu. Ni fyddwn yn gofyn i'r plant roi eu henwau nac unrhyw wybodaeth arall allai ddatgelu pwy ydynt. Ni fydd yr ysgolion yn cael eu henwi yn yr adroddiad derfynol ychwaith. Bydd cyfle, fodd bynnag, i ni baratoi canfyddiadau anhysbys ynglyn a'ch ysgol chi er mwyn eich helpu chi ddatblygu eich rhaglenni addysgol eich hunain

Oes yna unrhyw beryglon?

Nid ydym yn credu fod yna unrhyw beryglon arwyddocaol i'r plant fydd yn cymryd rhan yn y project. Os na fydd unrhyw blentyn eisiau cwblhau yr holiadur, ni fydd unrhyw bwysedd iddyn nhw wneud hynny. Os bydd gan unrhyw blentyn unrhyw bryder neu unrhyw gwestiwn ynglyn ag ysmegu neu sigarennau-e, mae na wybodaeth ar ddiwedd yr holiadur.

Be ddigwyddith i ganlyniadau y project?

Bydd y ganlyniadau yn helpu Iechyd Cyhoeddus Cymru i ddatblygu ymgyrchoedd, rhaglenni ac ymyriadau addas ac oedran-benodol er mwyn lleihau y perygl o blant yn dechrau ysmegu (yn cynnwys sigaretau-e a 'vaping').

Be nesa?

Fyddech chi mor garedig a dychwelyd y ffurflen ganiatâd amgaeedig i ddatgan os ydych yn fodlon i'ch ysgol chi gymeryd rhan yn y project neu beidio? Os ydych yn cytuno, fe wnawn ni ddanfon yr holiaduron i chi.

Gwybodaeth ychwanegol

Os oes gennych unrhyw gwestiynnau ynglyn a'r project neu ynglyn a sut yr ydym ni yn bwriadu prosesu yr astudiaeth, cysylltwch â ni, os gwelwch yn dda.

Enw: Dr Tina Alwyn

 02920 417126

 talwyn@cardiffmet.ac.uk



HEAD TEACHER CONSENT FORM

Title of Project: Behavioural insight – smoking among young people

Ethics reference number: 7174

Name of Researcher: Dr Tina Alwyn

Please initial each box if you agree with the statement.

- | | |
|---|--------------------------|
| 1. I confirm that I have read and understand the information sheet for the above project. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. | <input type="checkbox"/> |
| 2. I understand that the participation of the school is voluntary and that I am free to withdraw my consent at any time, without giving any reason. | <input type="checkbox"/> |
| 3. I understand that the participation of students in this project is voluntary and that they are free to withdraw at any time, without giving any reason. | <input type="checkbox"/> |
| 4. I agree that the above project can take place in the school. | <input type="checkbox"/> |
| 5. I agree that children in this school can take part in the above project
in loco parentis. | <input type="checkbox"/> |
| 6. I do not agree that the above project can take place in the school | <input type="checkbox"/> |

Name of school

Signature of Head Teacher

Date

Appendix 2: Questionnaires

Questionnaire for Year 7

This survey should only take 10 to 15 minutes to complete. Please answer the questions as honestly as possible. You do not need to give your name and therefore we will not be able to identify you. The results will help Public Health Wales to create campaigns about smoking cigarettes/tobacco and e-cigarettes/vape. Thank you for taking part.

Q1 Are you:

- Male
- Female

Q2 What Primary school did you attend?

Q3 Did you have any lessons about not smoking cigarettes/tobacco and/or e-cigarettes/vaping in Primary school?

- Yes: Go to question 4
- No: Go to question 6

Q4 Who gave the lesson?

- School Teacher
- School Nurse
- Police
- Someone else (please say) _____

Q5 What were the most important things you can remember about these lessons? Please say

Q6 Does anyone you live with smoke cigarettes/tobacco? Please tick as many answers as you like.

- Mum
- Dad
- Sister/Brother
- Grandparent
- I don't know
- Other (please say) _____

Q7 Have any of your friends ever tried smoking a cigarette?

- Yes
- No

Q8 Have you ever tried smoking a cigarette?

- Yes: Go to question 9
- No: Go to question 14

Q9 How often do you smoke cigarettes/tobacco?

- I have only tried smoking cigarettes/tobacco once or twice in my life
- Rarely - I smoke cigarettes/tobacco less than once a month
- Sometimes - I smoke cigarettes/tobacco at least once a week
- Often - I smoke cigarettes/tobacco at least once a day

Q10 Why did you try smoking cigarettes/tobacco? Please tick as many answers as you like.

- One or more of my friends smoke them
- One or more of my family members smoke them
- It makes me look cool
- It makes me feel good
- It helps me lose weight
- I like the smell/taste
- I don't know
- Other (please say) _____

Q11 Where do/did you get your cigarettes/tobacco from? Please tick as many answers as you like.

- I buy/bought them (if so, please say where you buy/bought them from)

- Someone else buys them for me (if so, please say who buys them)

- I share with others (if so, please say who buys them) _____
- Other (if so, please say where you get them from) _____

Q12 If you smoke cigarettes/tobacco, would you like to stop and give them up?

- Yes
- No
- I don't know

Q13 What would help you give up smoking cigarettes/tobacco? Please say.

14 If you don't smoke cigarettes/tobacco, what is the reason for this? Please tick as many answers as you like.

- It's bad for my health
- I don't like the taste/smell
- I can't afford it
- I can't get them
- My friends don't smoke them
- I don't know
- Other (please say) _____

Q15 On a scale of 1 to 10, where 1 is not harmful at all and 10 is extremely harmful, how harmful do you think it is to smoke cigarettes/tobacco? Please use the scale below and circle a number.

Not harmful 1 2 3 4 5 6 7 8 9 10 Extremely harmful

Q16 Does anyone you live with smoke an e-cigarette/vape? Please tick as many answers as you like.

- Mum
- Dad
- Sister/Brother
- Grandparent
- I don't know
- Other (please say) _____

Q17 Have any of your friends ever tried smoking an e-cigarette/vape?

- Yes
- No

Q18 Have you ever tried smoking an e-cigarette/vape?

- Yes: Go to question 19
- No: Go to question 24

Q19 How often do you smoke e-cigarettes/vape?

- I have only tried smoking e-cigarette/vape once or twice in my life
- Rarely - I smoke e-cigarette/vape less than once a month
- Sometimes - I smoke e-cigarette/vape at least once a week
- Often - I smoke e-cigarette/vape at least once a day

Q20 Why did you try smoking e-cigarettes/vape? Please tick as many answers as you like.

- One or more of my friends smoke them
- One or more of my family members smoke them
- It makes me look cool
- It makes me feel good
- It helps me lose weight
- I like the smell/taste
- I don't know
- Other (please say) _____

Q21 Where do/did you get your e-cigarettes/vape from? Please tick as many answers as you like.

- I buy/bought them (if so, please say where you buy/bought them from)

- Someone else buys them for me (if so, please say who buys them)

- I share with others (if so, please say who buys them) _____
- Other (if so, please say where you get them from) _____

Q22 If you smoke e-cigarettes/vape , would you like to stop and give them up?

- Yes
- No
- I don't know

Q23 What would help you give up smoking e-cigarettes/vape? Please say

Q24 If you don't smoke e-cigarette/vape, what is the reason for this? Please tick as many answers as you like.

- It's bad for my health
- I don't like the taste/smell
- I can't afford it
- I can't get them
- My friends don't smoke them
- I don't know
- Other (please say) _____

Q25 On a scale of 1 to 10, where 1 is not harmful at all and 10 is extremely harmful, how harmful do you think it is to smoke e-cigarette/vape ? Please use the scale below and circle a number.

Not harmful 1 2 3 4 5 6 7 8 9 10 Extremely harmful

Q26 Please can you enter your postcode below. If you do not know your postcode just put the area of Cardiff in which you live (for example, 'Radyr', 'Penarth', 'Cathays' etc.).

Q27 Please enter the name of your school

PLEASE NOTE: By giving this information we will not be able to identify the house you live in, just the broad area.

Thank you for completing the questionnaire. If you are worried about yourself or someone else in relation to any of the questions you have answered today, please see the information below.

The Filter Wales info:

Web: www.thefilterwales.org

Tel: 029 2049 0621

Twitter: @thefilterwales

Holiadur i Blwyddyn 7

Ni ddylai'r arolwg hon gymeryd mwy na 10 i 15 munud i'w chwblhau. Wnewch chi ateb y cwestiynau mor onest ag sydd bosib. Nid oes angen i chi roi eich enw a felly ni fyddwn yn gwybod pwy ydych chi. Bydd canlyniadau yr arolwg yn helpu lechyd Cyhoeddus Cymru i greu ymgyrchoedd ynglyn ysmegu sigaretau/tobacco a sigaretau-e/'vaping'. Diolch yn fawr i chi am gymeryd rhan.

C 1. Ydych chi yn:

- Wrywaidd
- Benywaidd

C2. I pa Ysgol Gynradd aethoch chi? _____

C3. Gawsoch chi unrhyw wersi am beidio ysmegu sigaretau/tobacco a/neu sigaretau-e/ 'vaping' yn yr Ysgol Gynradd?

- Do: Ewch i cwestiwn 4
- Naddo: Ewch i cwestiwn 6

C4. Pwy rodd y wers i chi?

- Athro/Athrawes
- Nyrs Ysgol
- Heddlu
- Rhywun arall (dwedwch pwy) _____

C5. Beth yw'r pethau pwysicaf yr ydych chi yn gallu cofio am y gwersi hyn?

C6. Ydi unrhyw un sy'n byw gyda chi yn ysmegu sigaretau/tobacco? Ticiwch gymaint o atebion ag a hoffwch chi.

- Mam
- Dad
- Chwaer/Brawd
- Mamgu/Tadcu
- Dim yn gwybod
- Arall (dwedwch pwy) _____

C7. Ydi rhai o'ch ffrindiau chi erioed wedi ceisio ysmegu sigaret/tobacco?

- Do
- Naddo

C8. Ydych chi erioed wedi ceisio ysmegu sigaret/tobacco?

- Do: Ewch i cwestiwn 9
- Naddo: Ewch i cwestiwn 14

C9. Pa mor aml ydych chi yn ysmegu sigaretau/tobacco?

- Dwi ddim ond wedi ceisio ysmegu sigaretau/tobacco unwaith neu ddwy yn fy mywyd
- Anaml – dwi'n ysmegu sigaretau/tobacco llai nac unwaith y mis
- Weithiau – dwi'n ysmegu sigaretau/tobacco o leiaf unwaith yr wythnos
- Aml – dwi'n ysmegu sigaretau/tobacco o leiaf unwaith y dydd

C10. Pam ddaru chi geisio ysmegu sigaretau/tobacco? Ticiwch gymaint o atebion ag a hoffwch chi.

- Mae un neu mwy o fy ffrindiau yn eu ysmegu
 - Mae un neu mwy o aelodau fy nheulu yn eu ysmegu
 - Mae'n gneud i fi edrych yn 'cool'
 - Mae'n gneud i fi deimlo'n dda
 - Mae'n helpu fi i golli pwysau
 - Dwi'n hoffi yr arogl/blas
 - Dwi ddim yn gwybod
 - Arall (dwedwch)
-

C11. O ble ydych/ddaru chi gael eich sigaretau/tobacco? Ticiwch gymaint o atebion ag a hoffwch chi.

- Dwi'n/Wnes i prynu nhw (os felly, allwch chi ddeud o ble ydych/ddaru chi eu prynu) _____
- Mae rhywun arall yn eu prynu nhw drosto fi (os felly, allwch chi ddeud pwy sydd yn eu prynu) _____
- Dwi'n rhannu efo eraill (os felly, gyda pwy e.e. ffrind, teulu)

- Arall (os felly, allwch chi ddeud o ble chi'n cael nhw) _____

C12. Os ydych yn ysmegu sigaretau/tobacco, hoffech chi stopio a rhoi nhw lan?

- Hoffwn
- Ni hoffwn
- Dwi ddim yn gwybod

C13. Be fyddai'n helpu chi i beidio ysmegu sigaretau/tobacco?

C14. Os ydych chi ddim yn ysmegu sigaretau/tobacco, beth yw'r rheswm dros hyn? Ticiwch gymaint o atebion ag a hoffwch chi.

- Mae'n ddrwg i fy iechyd i
- Dwi ddim yn hoffi y blas/arogl
- Dwi'n methu fforddio fe
- Dwi'n methu cael gafael arnyn nhw
- Nid yw fy ffrindiau yn ysmegu nhw
- Dwi ddim yn gwybod
- Arall (dwedwch) _____

C15. Ar raddfa o 1 i 10, ble mae 1 ddim yn niweidiol o gwbl a 10 yn ofnadwy o niweidiol, faint mor niweidiol ydych chi yn meddwl yw ysmegu sigaretau/tobacco? Defnyddiwch y graddfa isod a cylchu un rhif.

Ddim yn niweidiol 1 2 3 4 5 6 7 8 9 10 Niweidiol iawn

C16. Ydi unrhyw un sy'n byw gyda chi yn ysmegu sigaretau-e/vapio? Ticiwch gymaint o atebion ag a hoffwch chi.

- Mam
- Dad
- Chwaer/Brawd
- Mamgu/Tadcu
- Dim yn gwybod
- Arall (dwedwch pwy) _____

C17. Ydi rhai o'ch ffrindiau chi erioed wedi ceisio ysmegu sigaretau-e/vapio'?

- Do
- Naddo

C18. Ydych chi erioed wedi ceisio ysmegu sigaretau-e/vapio'?

- Do: Ewch i cwestiwn 19
- Naddo: Ewch i cwestiwn 24

C19. Pa mor aml ydych chi yn ysmegu sigaretau-e/vapio'?

- Dwi ddim ond wedi ceisio ysmegu sigaretau-e/vapio' unwaith neu ddwy yn fy mywyd
- Anaml – dwi'n ysmegu sigaretau-e/vapio' llai nac unwaith y mis
- Weithiau – dwi'n ysmegu sigaretau-e/vapio' o leiaf unwaith yr wythnos
- Aml – dwi'n ysmegu sigaretau-e/vapio' o leiaf unwaith y dydd

C20. Pam ddaru chi geisio ysmegu sigaretau-e/'vapio'? Ticiwch gymaint o atebion ag a hoffwch chi.

- Mae un neu mwy o fy ffrindiau yn eu ysmegu
- Mae un neu mwy o aelodau fy nheulu yn eu ysmegu
- Mae'n gneud i fi edrych yn 'cool'
- Mae'n gneud i fi deimlo'n dda
- Mae'n helpu fi i golli pwysau
- Dwi'n hoffi yr arogl/ blas
- Dwi ddim yn gwybod
- Arall (dwedwch) _____

C21. O ble ydych/ddaru chi gael eich sigaretau-e/'vape'? Ticiwch gymaint o atebion ag a hoffwch chi.

- Dwi'n/Wnes i prynu nhw (os felly, allwch chi ddeud o ble ydych/ddaru chi eu prynu _____)
- Mae rhywun arall yn eu prynu nhw drosto fi (os felly, allwch chi ddeud pwy sydd yn eu prynu) _____
- Dwi'n rhannu efo eraill (os felly, gyda pwy e.e. ffrind, teulu)

- Arall (os felly, allwch chi ddeud o ble chi'n cael nhw) _____

C22. Os ydych yn ysmegu sigaretau-e/ 'vapio', hoffech chi stopio a rhoi nhw lan?

- Hoffwn
- Ni hoffwn
- Dwi ddim yn gwybod

C23. Be fyddai'n helpu chi i beidio ysmegu sigaretau-e/ 'vape'?

C24. Os ydych chi ddim yn ysmegu sigaretau-e/'vape', beth yw'r rheswm dros hyn? Ticiwch gymaint o atebion ag a hoffwch chi.

- Mae'n ddrwg i fy iechyd
- Dwi ddim yn hoffi y blas/arogl
- Dwi'n methu fforddio fe
- Dwi'n methu cael gafael arnyn nhw
- Nid yw fy ffrindiau yn ysmegu nhw
- Dwi ddim yn gwybod
- Arall (dwedwch) _____

C25. Ar raddfa o 1 i 10, ble mae 1 ddim yn niweidiol o gwbl a 10 yn ofnadwy o niweidiol, faint mor niweidiol ydych chi yn meddwl yw ysmegu sigaretau-e/'vapio'? Defnyddiwch y graddfa isod a cylchu un rhif.

Ddim yn niweidiol 1 2 3 4 5 6 7 8 9 10 Niweidiol iawn

C26. Beth yw enw eich ysgol?

C27. Os gwelwch yn dda, allwch chi sgwennu eich côd post isod. Os ydych ddim yn gwybod eich côd post, 'sgwennwch enw yr ardal lle chi'n byw (er engraifft, 'Radyr', 'Penarth', 'Cathays', 'Bontfaen' ayb.).

NODER: Drwy roi y gwybodaeth hyn inni, ni fyddwn ni yn gallu dweud pa dŷ ydych chi yn byw ynddo, dim ond yr ardal fras.

Diolch i chi am gwblhau yr holiadur. Os ydych chi yn poeni amdanach chi eich hun neu unrhyw un arall ynglyn a'r cwestiynau 'rydych wedi ateb heddiw, os gwelwch yn dda wnewch chi edrych ar y gwybodaeth isod:

The Filter Wales info:

Web: www.thefilterwales.org

Tel: 029 2049 0621

Twitter: @thefilterwales

Questionnaire for Year 9

This survey should only take 10 to 15 minutes to complete. Please answer the questions as honestly as possible. You do not need to give your name and therefore we will not be able to identify you. The results will help Public Health Wales to create campaigns about smoking cigarettes/tobacco and e-cigarettes/vape. Thank you for taking part.

Q1 Are you:

- Male
- Female

Q2 Have you have any lessons about not smoking cigarettes/tobacco and/or e-cigarettes/vaping in school?

- Yes: Go to question 3
- No: Go to question 5

Q3 Who gave the lesson?

- School Teacher
- School Nurse
- Police
- Someone else (please say) _____

Q4 What were the most important things you can remember about these lessons? Please say

Q5 Does anyone you live with smoke cigarettes/tobacco? Please tick as many answers as you like.

- Mum
- Dad
- Sister/Brother
- Grandparent
- I don't know
- Other (please say) _____

Q6 Have any of your friends ever tried smoking a cigarette?

- Yes
- No

Q7 Have you ever tried smoking a cigarette?

- Yes: Go to question 8
- No: Go to question 13

Q8 How often do you smoke cigarettes/tobacco?

- I have only tried smoking cigarettes/tobacco once or twice in my life
- Rarely - I smoke cigarettes/tobacco less than once a month
- Sometimes - I smoke cigarettes/tobacco at least once a week
- Often - I smoke cigarettes/tobacco at least once a day

Q9 Why did you try smoking cigarettes/tobacco? Please tick as many answers as you like.

- One or more of my friends smoke them
- One or more of my family members smoke them
- It makes me look cool
- It makes me feel good
- It helps me lose weight
- I like the smell/taste
- I don't know
- Other (please say) _____

Q10 Where do/did you get your cigarettes/tobacco from? Please tick as many answers as you like.

- I buy/bought them (if so, please say where you buy/bought them from)

- Someone else buys them for me (if so, please say who buys them)

- I share with others (if so, please say who buys them) _____
- Other (if so, please say where you get them from) _____

Q11 If you smoke cigarettes/tobacco, would you like to stop and give them up?

- Yes
- No
- I don't know

Q12 What would help you give up smoking cigarettes/tobacco? Please say.

Q13 If you don't smoke cigarettes/tobacco, what is the reason for this? Please tick as many answers as you like.

- It's bad for my health
- I don't like the taste/smell
- I can't afford it
- I can't get them
- My friends don't smoke them
- I don't know
- Other (please say) _____

Q14 On a scale of 1 to 10, where 1 is not harmful at all and 10 is extremely harmful, how harmful do you think it is to smoke cigarettes/tobacco? Please use the scale below and circle a number.

Not harmful 1 2 3 4 5 6 7 8 9 10 Extremely harmful

Q15 Does anyone you live with smoke an e-cigarette/vape? Please tick as many answers as you like.

- Mum
- Dad
- Sister/Brother
- Grandparent
- I don't know
- Other (please say) _____

Q16 Have any of your friends ever tried smoking an e-cigarette/vape?

- Yes
- No

Q17 Have you ever tried smoking an e-cigarette/vape?

- Yes: Go to question 18
- No: Go to question 23

Q18 How often do you smoke e-cigarettes/vape?

- I have only tried smoking e-cigarette/vape once or twice in my life
- Rarely - I smoke e-cigarette/vape less than once a month
- Sometimes - I smoke e-cigarette/vape at least once a week
- Often - I smoke e-cigarette/vape at least once a day

Q19 Why did you try smoking e-cigarettes/vape? Please tick as many answers as you like.

- One or more of my friends smoke them
- One or more of my family members smoke them
- It makes me look cool
- It makes me feel good
- It helps me lose weight
- I like the smell/taste
- I don't know
- Other (please say) _____

Q20 Where do/did you get your e-cigarettes/vape from? Please tick as many answers as you like.

- I buy/bought them (if so, please say where you buy/bought them from)

- Someone else buys them for me (if so, please say who buys them)

- I share with others (if so, please say who buys them) _____
- Other (if so, please say where you get them from) _____

Q21 If you smoke e-cigarettes/vape , would you like to stop and give them up?

- Yes
- No
- I don't know

Q22 What would help you give up smoking e-cigarettes/vape? Please say

Q23 If you don't smoke e-cigarette/vape, what is the reason for this? Please tick as many answers as you like.

- It's bad for my health
- I don't like the taste/smell
- I can't afford it
- I can't get them
- My friends don't smoke them
- I don't know
- Other (please say) _____

Q24 On a scale of 1 to 10, where 1 is not harmful at all and 10 is extremely harmful, how harmful do you think it is to smoke e-cigarette/vape ? Please use the scale below and circle a number.

Not harmful 1 2 3 4 5 6 7 8 9 10 Extremely harmful

Q25 Please can you enter your postcode below. If you do not know your postcode just put the area of Cardiff in which you live (for example, 'Radyr', 'Penarth', 'Cathays' etc.).

Q26 Please enter the name of your school

PLEASE NOTE: By giving this information we will not be able to identify the house you live in, just the broad area.

Thank you for completing the questionnaire. If you are worried about yourself or someone else in relation to any of the questions you have answered today, please see the information below.

The Filter Wales info:

Web: www.thefilterwales.org

Tel: 029 2049 0621

Twitter: @thefilterwales

Holiadur i Blwyddyn 9

Ni ddylai'r arolwg hon gymeryd mwy na 10 i 15 munud i'w chwblhau. Wnewch chi ateb y cwestiynau mor onest ag sydd bosib. Nid oes angen i chi roi eich enw a felly ni fyddwn yn gwybod pwy ydych chi. Bydd canlyniadau yr arolwg yn helpu lechyd Cyhoeddus Cymru i greu ymgyrchoedd ynglyn ysmegu sigaretau/tobacco a sigaretau-e/'vaping'. Diolch yn fawr i chi am gymeryd rhan.

C1. Ydych chi yn:

- Wrywaidd
- Benywaidd

C2. Ydych chi wedi cael unrhyw wersi am beidio ysmegu sigaretau/tobacco a/neu sigaretau-e/ 'vaping' yn yr Ysgol?

- Do: Ewch i cwestiwn 3
- Naddo: Ewch i cwestiwn 5

C3. Pwy rodd y wers i chi?

- Athro/Athrawes
- Nyrs Ysgol
- Heddlu
- Rhywun arall (dwedwch pwy) _____

C4. Beth yw'r pethau pwysicaf yr ydych chi yn gallu cofio am y gwersi hyn?

C5. Ydi unrhyw un sy'n byw gyda chi yn ysmegu sigaretau/tobacco? Ticiwch gymaint o atebion ag a hoffwch chi.

- Mam
- Dad
- Chwaer/Brawd
- Mamgu/Tadcu
- Dim yn gwybod
- Arall (dwedwch pwy) _____

C6. Ydi rhai o'ch ffrindiau chi erioed wedi ceisio ysmegu sigaret/tobacco?

- Do
- Naddo

C7. Ydych ci erioed wedi ceisio ysmegu sigaret/tobacco?

- Do: Ewch i cwestiwn 8
- Naddo: Ewch i cwestiwn 13

C8. Pa mor aml ydych chi yn ysmegu sigaretau/tobacco?

- Dwi ddim ond wedi ceisio ysmegu sigaretau/tobacco unwaith neu ddwy yn fy mywyd
- Anaml – dwi'n ysmegu sigaretau/tobacco llai nac unwaith y mis
- Weithiau – dwi'n ysmegu sigaretau/tobacco o leiaf unwaith yr wythnos
- Aml – dwi'n ysmegu sigaretau/tobacco o leiaf unwaith y dydd

C9. Pam ddaru chi geisio ysmegu sigaretau/tobacco? Ticiwch gymaint o atebion ag a hoffwch chi.

- Mae un neu mwy o fy ffrindiau yn eu ysmegu
 - Mae un neu mwy o aelodau fy nheulu yn eu ysmegu
 - Mae'n gneud i fi edrych yn 'cool'
 - Mae'n gneud i fi deimlo'n dda
 - Mae'n helpu fi i golli pwysau
 - Dwi'n hoffi yr arogl/blas
 - Dwi ddim yn gwybod
 - Arall (dwedwch)
-

C10. O ble ydych/ddaru chi gael eich sigaretau/tobacco? Ticiwch gymaint o atebion ag a hoffwch chi.

- Dwi'n/Wnes i prynu nhw (os felly, allwch chi ddeud o ble ydych/ddaru chi eu prynu) _____
- Mae rhywun arall yn eu prynu nhw drosto fi (os felly, allwch chi ddeud pwy sydd yn eu prynu) _____
- Dwi'n rhannu efo eraill (os felly, gyda pwy e.e. ffrind, teulu)

- Arall (os felly, allwch chi ddeud o ble chi'n cael nhw) _____

C11. Os ydych yn ysmegu sigaretau/tobacco, hoffech chi stopio a rhoi nhw lan?

- Hoffwn
- Ni hoffwn
- Dwi ddim yn gwybod

C12. Be fyddai'n helpu chi i beidio ysmegu sigaretau/tobacco?

C13. Os ydych chi ddim yn ysmegu sigaretau/tobacco, beth yw'r rheswm dros hyn? Ticiwch gymaint o atebion ag a hoffwch chi.

- Mae'n ddrwg i fy iechyd i
- Dwi ddim yn hoffi y blas/arogl
- Dwi'n methu fforddio fe
- Dwi'n methu cael gafael arnyn nhw
- Nid yw fy ffrindiau yn ysmegu nhw
- Dwi ddim yn gwybod
- Arall (dwedwch) _____

C14. Ar raddfa o 1 i 10, ble mae 1 ddim yn niweidiol o gwbl a 10 yn ofnadwy o niweidiol, faint mor niweidiol ydych chi yn meddwl yw ysmegu sigaretau/tobacco? Defnyddiwch y graddfa isod a cylchu un rhif.

Ddim yn niweidiol 1 2 3 4 5 6 7 8 9 10 Niweidiol iawn

C15. Ydi unrhyw un sy'n byw gyda chi yn ysmegu sigaretau-e/vapio? Ticiwch gymaint o atebion ag a hoffwch chi.

- Mam
- Dad
- Chwaer/Brawd
- Mamgu/Tadcu
- Dim yn gwybod
- Arall (dwedwch pwy) _____

C16. Ydi rhai o'ch ffrindiau chi erioed wedi ceisio ysmegu sigaretau-e/vapio'?

- Do
- Naddo

C17. Ydych chi erioed wedi ceisio ysmegu sigaretau-e/vapio'?

- Do: Ewch i cwestiwn 18
- Naddo: Ewch i cwestiwn 23

C18. Pa mor aml ydych chi yn ysmegu sigaretau-e/vapio'?

- Dwi ddim ond wedi ceisio ysmegu sigaretau-e/vapio' unwaith neu ddwy yn fy mywyd
- Anaml – dwi'n ysmegu sigaretau-e/vapio' llai nac unwaith y mis
- Weithiau – dwi'n ysmegu sigaretau-e/vapio' o leiaf unwaith yr wythnos
- Aml – dwi'n ysmegu sigaretau-e/vapio' o leiaf unwaith y dydd

C19. Pam ddaru chi geisio ysmegu sigaretau-e/'vapio'? Ticiwch gymaint o atebion ag a hoffwch chi.

- Mae un neu mwy o fy ffrindiau yn eu ysmegu
- Mae un neu mwy o aelodau fy nheulu yn eu ysmegu
- Mae'n gneud i fi edrych yn 'cool'
- Mae'n gneud i fi deimlo'n dda
- Mae'n helpu fi i golli pwysau
- Dwi'n hoffi yr arogl/ blas
- Dwi ddim yn gwybod
- Arall (dwedwch) _____

C20. O ble ydych/ddaru chi gael eich sigaretau-e/'vape'? Ticiwch gymaint o atebion ag a hoffwch chi.

- Dwi'n/Wnes i prynu nhw (os felly, allwch chi ddeud o ble ydych/ddaru chi eu prynu _____)
- Mae rhywun arall yn eu prynu nhw drosto fi (os felly, allwch chi ddeud pwy sydd yn eu prynu) _____
- Dwi'n rhannu efo eraill (os felly, gyda pwy e.e. ffrind, teulu) _____
- Arall (os felly, allwch chi ddeud o ble chi'n cael nhw) _____

C21. Os ydych yn ysmegu sigaretau-e/ 'vapio', hoffech chi stopio a rhoi nhw lan?

- Hoffwn
- Ni hoffwn
- Dwi ddim yn gwybod

C22. Be fyddai'n helpu chi i beidio ysmegu sigaretau-e/ 'vape'?

C23. Os ydych chi ddim yn ysmegu sigaretau-e/'vape', beth yw'r rheswm dros hyn? Ticiwch gymaint o atebion ag a hoffwch chi.

- Mae'n ddrwg i fy ieched
- Dwi ddim yn hoffi y blas/arogl
- Dwi'n methu fforddio fe
- Dwi'n methu cael gafael arnyn nhw
- Nid yw fy ffrindiau yn ysmegu nhw
- Dwi ddim yn gwybod
- Arall (dwedwch) _____

C24. Ar raddfa o 1 i 10, ble mae 1 ddim yn niweidiol o gwbl a 10 yn ofnadwy o niweidiol, faint mor niweidiol ydych chi yn meddwl yw ysmegu sigaretau-e/'vapio'? Defnyddiwch y graddfa isod a cylchu un rhif.

Ddim yn niweidiol 1 2 3 4 5 6 7 8 9 10 Niweidiol iawn

C25. Beth yw enw eich ysgol?

C26. Os gwelwch yn dda, allwch chi sgwennu eich côd post isod. Os ydych ddim yn gwybod eich côd post, 'sgwennwch enw yr ardal lle chi'n byw (er engraifft, 'Radyr', 'Penarth', 'Cathays', 'Bontfaen' ayb.).

NODER: Drwy roi y gwybodaeth hyn inni, ni fyddwn ni yn gallu dweud pa dŷ ydych chi yn byw ynddo, dim ond yr ardal fras.

Diolch i chi am gwblhau yr holiadur. Os ydych chi yn poeni amdanach chi eich hun neu unrhyw un arall ynglyn a'r cwestiynau 'rydych wedi ateb heddiw, os gwelwch yn dda wnewch chi edrych ar y gwybodaeth isod.

The Filter Wales info:

Web: www.thefilterwales.org

Tel: 029 2049 0621

Twitter: @thefilterwales

Appendix 3: Letter of information, consent form and questions for focus groups



Cardiff
Metropolitan
University

Prifysgol
Metropolitan
Caerdydd

Information Sheet for 11 and 13 year olds

Title of Project: Behavioural insight – smoking among young people
Ethics reference number: 7174

Hello

We are looking for volunteers to take part in a group where we can talk about why you think some children smoke cigarettes and e-cigarettes (vaping) and others do not. We do not want to know whether you smoke or not.

Why me?

We are asking all children in years 7 and 9 in your school (as well as other schools in Cardiff and the Vale of Glamorgan) whether you want to discuss smoking in young people.

What will happen?

We will arrange to meet as a group of 8 to 10 children and talk about why you think some children start smoking and others do not. It will be during school time and will take no more than an hour.

Do I have to?

No, you do not. No one is going to make you take part if you don't want to. And if you start and decide you don't want to carry on, that's fine. There's will be no problem, just tell us.

What next?

If you would like to volunteer please let the teacher who gave you this form know.

Have you got any questions?

If you have any questions just ask. You can ask your parent, guardian or teacher to contact us by email or phone. You can also ask us questions on the day.

Thank you for taking the time to read this

Tina

Name Tina Alwyn

☎ 02920 417126

✉ talwyn@cardiffmet.ac.uk

Information Sheet for 16 year olds



Cardiff
Metropolitan
University

Prifysgol
Metropolitan
Caerdydd

Title of Project: Behavioural insight – smoking among young people
Ethics reference number: 7174

Background

Despite numerous education and media campaigns, young people in Wales are at risk of taking up smoking (and using e-cigarettes including vaping). As such, we have been asked by Public Health Wales to carry out a project which will involve conducting discussion groups with children and young people to explore their views regarding why some children take up smoking (and e-cigarettes including vaping) and others do not. The findings of this project will help Public Health Wales develop age appropriate campaigns, programmes and interventions to reduce the uptake of smoking (and using e-cigarettes including vaping).

Your participation in the project

We are looking for volunteers to take part in a discussion group in your school and other schools throughout Cardiff and the Vale of Glamorgan. We would like to explore your views on why some people smoke (including e-cigarettes/vaping) and others do not. We will not ask you about your own smoking experience, rather we want to find out your views about young people smoking in general.

We will work with the Head Teacher to decide the best time to hold the discussion groups to minimise the impact on your school day. The discussion group will be held during school hours and will take approximately 45 minutes. You will not be asked to give your name or any other information that can identify you. The school will not be identified either.

To help us to analyse the discussion about smoking, we will use an audio recorder. If you inadvertently name someone or identify the school in any way, this information will be deleted.

Are there any risks?

We do not think there are any significant risks to you from taking part in the project. If on the day you change your mind and do not want to take part, there will be no pressure on you to do so. If you have any concerns or questions relating to smoking or e-cigarettes, you will be given a leaflet at the end.

What happens next?

If you would like to take part, please read carefully and sign the consent form that comes with this information sheet.

Further information

If you have any questions about the project or how we intend to conduct the study, please contact us.

Name Dr Tina Alwyn
 02920 417126
 talwyn@cardiffmet.ac.uk



CONSENT FORM FOR PARTICIPATION IN DISCUSSION GROUPS

Title of Project: Behavioural insight – smoking among young people
Ethics reference number: 7174
Name of Researcher: Dr Tina Alwyn

Please initial each box if you agree with the statement.

1. I confirm that I have read and understand the information sheet for the above project. I have had the opportunity to consider the information, ask questions (via telephone number in the information sheet) and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

3. I agree to the use of anonymised quotes in publications

4. **I GIVE** my consent to take part in a focus group that will be audiotaped.

5. **I DO NOT** give my consent to take part in the focus groups

Name

Signature

Date

Questions for focus group



Cardiff
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Caerdydd

Title of Project: Behavioural insight – smoking among young people

Ethics reference number: 7174

- Knowledge and awareness of smoking risks and harm including e-cigarettes
- Awareness of health issues and their beliefs regarding how this information applies to them
- Motivation for smoking or not smoking
- The extent of peer pressure
- Parental influences and the role of parents in education
- Views and beliefs of public health and other Government messages
- The role of the school in prevention and stop smoking campaigns
- Social modelling influences (peer pressure, media influences etc.)
- Knowledge of where they can access support, advice and help
- Accessibility (including money spent)

Appendix 4: Letter of information, consent form and interview schedule for key stakeholders

Key Stakeholder Information Sheet



Title of Project: Behavioural insight – smoking among young people
Ethics reference number: 7174

Background

Despite numerous education and media campaigns, survey findings suggest young people in Wales are at risk of taking up smoking (and using e-cigarettes, including vaping). As such, we have been asked by Public Health Wales to carry out a survey to look at the beliefs and attitudes of children and young people to smoking and e-cigarettes (including vaping).

Your participation in the project

We are asking for your views to help us get a clear picture of the current strategies and interventions offered in Cardiff and the Vale of Glamorgan. We want your views as to whether you think the current programmes are effective, the barriers to their uptake and how new approaches and solutions can be developed and taken forward. We are also interested in school policies in relation to smoking and the educational programmes offered to children.

In the next phase students in Years 7 and 8 in all secondary schools in Cardiff and the Vale of Glamorgan will also be invited to take part in this project. Individuals will not be identified.

What happens to the results of the project?

The findings will help Public Health Wales develop an appropriate and age specific campaigns, programmes and interventions to reduce the risk of children taking up smoking (using e-cigarettes including vaping).

What happens next?

Once you have had time to look at the questions we would like to explore with you, and you agree to take part, can you please reply stating you are happy to take part. Once we receive this, we will contact you to arrange an interview at a mutually convenient day and time. This will last approximately 20 to 30 minutes. We will take notes during the interview but these will be kept securely and your name will not appear on them. You will not be identified in the study report as all data will be anonymised. Further, your organisation or agency that you work for will not be named.

Further information

If you have any questions about the project or how we intend to conduct the study, please contact us.

Name Dr Tina Alwyn

☎ 02920 417126

✉ talwyn@cardiffmet.ac.uk

KEY STAKEHOLDER CONSENT FORM



Cardiff
Metropolitan
University

Prifysgol
Metropolitan
Caerdydd

Title of Project: Behavioural insight – smoking among young people

Ethics reference number: 7174

Name of Researcher: Dr Tina Alwyn

Please initial each box if you agree with the statement.

1. I confirm that I have read and understand the information sheet for the above project. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

3. I agree to take part in the above study.

4. I agree to the use of anonymised quotes in publications

Name (please print)

Signature

Date

Questions for stakeholder interviews



Cardiff Metropolitan University | Prifysgol Metropolitan Caerdydd

- What are your perceptions regarding the prevalence of smoking behaviour (cigarettes and e-cigarettes) - In your view, to what extent does this impact on children in Wales?
- Do you believe we have a particular problem for some age groups of children in Wales?
- What are your views and beliefs regarding current government and local policy
- Do you believe that there is enough information from government and public health (and others) to support and develop school policy (e.g. staff smoking on school premises) – is there any support you would like that you currently do not receive?
- What do you know about current campaigns, programmes (including educational programmes) – what are your views regarding these and their suitability for purpose?
- Who do you think should be responsible for delivering current campaigns, programmes (including educational programmes) – are they age appropriate – are there gaps in programmes/campaigns? If so, what do you think should be done?
- In your view, are there any barriers to the uptake of campaigns/programmes?
- To what extent do you believe that parental beliefs and behaviour impacts on children and young people?
- What are your views on current legislation regarding sales of cigarettes and e-cigarettes – is this fit for purpose?

Any other information that is relevant